DEVELOPMENT OF THE WORKPLACE SINGAPORE MENTAL WELLBEING SCALE AND TESTING OF A CONCEPTUAL MODEL IN PREDICTING EMPLOYEE OUTCOMES AT THE SINGAPORE WORKPLACE

A Thesis submitted by

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ABSTRACT

The current study aimed to develop the Workplace Singapore Mental Wellbeing (Workplace SMWEB) scale which identifies the workplace factors that influence employee mental wellbeing in the Singapore workplace context. Three studies were conducted using a mixed-method sequential design. Study 1 involved a qualitative study which subsequently informed the development of Study 2 and Study 3, both of which were quantitative studies. Study 1 explored the perspectives of 31employees and identified 13 factors that contributed to workplace mental wellbeing. Study 2 involved the development of the Workplace SMWEB scale. Based on 318 participants' responses, Study 2 demonstrated that the Workplace SMWEB scale had good structural validity and internal consistency. Study 3 included 303 participants with the aim of establishing and confirming the construct validity of the Workplace SMWEB scale. The final 13 factors are accomplishment, autonomy, learning and professional development, meaningful work, person-organisational fit, work-life balance, co-worker relationship, support from boss, employee recognition, employee engagement, fairness, role clarity, and organisation support. Study 3 also demonstrated that the Workplace SMWEB scale had significant and positive associations with job satisfaction, work performance, and flourishing and significant and negative associations with the negative emotional state of depression, anxiety, and stress and burnout. Taken together, the findings from the three studies indicate that the Workplace SMWEB scale can be used as a valid and reliable instrument for the assessment of workplace mental wellbeing in Singapore. This will inform the development of relevant and effective interventions ensuring that employee mental wellbeing remains the focus for organisations in Singapore which in turn could lead to greater productivity and reduced negative psychological consequences for Singapore workers.

CERTIFICATION OF THESIS

I, Chad C. E. Yip, declare that the PhD Thesis entitled *Development of the Workplace Singapore Mental Wellbeing Scale and Testing of a Conceptual Model in Predicting Employee Outcomes at the Singapore Workplace* is not more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references, and footnotes. The thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Date: 16 September 2022

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Student and supervisors' signatures of endorsement are held at the University.

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ABBREVIATIONS

AVE	Average Variance Extracted
CBI	Copenhagen Burnout Inventory
CFA	Confirmatory Factor Analysis
CFI	Comparative fit Index
CI	Confidence Interval
CR	Composite reliability
IWPQ	Individual Work Performance Questionnaire
MI	Modification Index
ML	Maximum Likelihood
MR	Maximal Reliability
MSV	Maximum Shared Squared Variance
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modelling
SIJS	Short Index of Job Satisfaction
SMWEB	Singapore Mental Wellbeing
SRMR	Standardised Root Mean Square Residual
Workplace SMWEB	Workplace Singapore Mental Wellbeing

CHAPTER 1: INTRODUCTION

This chapter provides an overview of the research described in this dissertation. A brief rationale for the research is first presented. This rationale is further elaborated in the literature review in Chapter 2. The general aim of the research and the research questions are then presented. This is followed by an outline of the research design and an overview of the research samples.

1.1 Research Rationale

Mental wellbeing is a critical component of mental health which is no longer seen as just the absence of mental illness but the extent that an individual can thrive and flourish in life. Mental wellbeing has been a growing concern around the world (WHO, 2007), and the need to focus on employee mental wellbeing in the workplace context has been emphasized as a crucial and necessary step towards promoting positive consequences for the individual as well as for the organisation (Guest, 2017). This research project focused on the factors that contribute to employee mental wellbeing specifically in the Singapore workplace context.

The notion of wellbeing differs across cultures and countries. Societies in different cultural contexts have different expectations, attitudes and behaviours that shape the notion of wellbeing (Christopher, 1999; Tov & Diener, 2009), and linguistic and cultural factors need to be considered to elucidate the processes of wellbeing (Wierzbicka, 2004). For example, Joshanloo and colleagues (2021) delineated four fundamental cultural differences in the conceptualisation of wellbeing. Specifically, one of these differences states that having a sense of autonomy in the pursuit of achieving goals is often balanced against preserving interpersonal harmony in many collectivistic cultures, but this is less so in individualistic cultures where the emphasis is more on the individual in having a sense of autonomy over personal choices and pursuits (Joshanloo et al., 2021). In contrast to the individualistic perspective, wellbeing needs to be seen in the wider social context in collectivist cultures (Rojas & García Vega, 2017). Thus, it follows that approaches to wellbeing need to account

for the differences across cultures integrating non-western and culture-specific concept of mental health (Gopalkrishnan & Babacan, 2015). It is therefore essential for a country to develop and validate a bespoke assessment instrument when its culture differs significantly from those of other countries where the original instruments were developed.

Singapore is a multi-ethnic, multi-religious, and multi-lingual society. It has achieved economic growth and gained substantial material wealth yet scored low in indexes of happiness and life satisfaction when compared to other countries (Vaingankar et al., 2012). To help address this issue, the Singapore Mental Wellbeing (SMWEB) scale was developed to measure positive aspects of mental health in Singapore (Fen et al., 2013). However, this scale was intended for use in general life experiences and not for the workplace context where the Singapore's Health Promotion Board (HPB) found that employee mental wellbeing was lower than that of the general population (HPB, 2012).

Employees' mental wellbeing has implications for both the employee as well as for the organisation. To provide more clarity into employee wellbeing, Danna and Griffin (1999) presented an organising framework that identifies the important components of the nomological network of health and wellbeing in the workplace. Specifically, this framework identifies two sets of consequences arising from employee wellbeing, namely individual consequences including psychological consequences such as anxiety and depression, and organisational consequences such as work performance. This is highly relevant in the Singapore work context in which economic success is still largely determined by work performance, yet stress-related illness such as anxiety and depression due to excessive work remains a significant problem as compared to other countries such as the USA and the UK (Tan, 2021). On the national level, employee mental wellbeing is also essential to sustainable organisational success, positively impacting on the society which propels a nation forward (Cooper et al., 2009; Wipfli et al., 2018).

1.2 Aim and Research Questions

The aim of this dissertation was to ascertain the workplace factors in Singapore that contribute to employee mental wellbeing, that is, to develop a new Workplace Singapore Mental Wellbeing (Workplace SMWEB) scale. Further, by adapting the employee wellbeing framework by Danna and Griffin (1999), the construct validity of the Workplace SMWEB scale will be tested through a conceptual Workplace SMWEB model which in turn would inform the development of workplace interventions to enhance employee mental wellbeing.

Within this framework, four general questions guided the current research. Two questions were qualitative in nature, two were quantitative. The research therefore consisted of a mixed-method sequential exploratory design. The research design is outlined in section 1.3.

The two qualitative research questions were related to the qualitative aspect of Study 1 (outlined in Chapter 3). These questions were related to the views of employees in the Singapore workplace context relating to workplace mental wellbeing. The research questions were:

1. What aspects of mental wellbeing are important in the Singapore workplace?
2. What are the salient organisation factors that influence mental wellbeing in the Singapore workplace?

The two quantitative research questions were related to the quantitative aspect of Study 2 (outlined in Chapter 4) and Study 3 (outlined in Chapter 5). The specific hypotheses related to these research questions are outlined in section 4.3 of Chapter 4 for Study 2 and in section 5.3 of Chapter 5 for Study 3. The research questions were:

3. What is the construct validity and reliability of the newly developed Workplace SMWEB scale?
4. What is the association between the Workplace SMWEB scale and other components of the nomological network of wellbeing in the workplace context?

1.3 Outline of the Research Design

This research consisted of three studies. Study 1 was a qualitative study, which subsequently informed the development of Study 2 and Study 3, both of which were quantitative studies thereby representing the sequential aspect of the research. Firstly, study 1 involved the collection of qualitative data through a series of six focus groups which consisted of 31 participants, explored the factors associated with mental wellbeing unique to the workplace in the Singapore context. Study 1 is presented in chapter 3. Secondly, Study 2 which involved the collection of quantitative data to test the newly developed Workplace Singapore Mental Wellbeing (Workplace SMWEB) scale based on the 13 workplace mental wellbeing factors identified in Study 1 through a combination of parallel analysis (PA) and a series of exploratory factor analyses (EFA). Study 2 is presented in chapter 4. Lastly, study 3 involved the collection of quantitative data to examine the construct validity of the Workplace SMWEB scale and its relationship with job satisfaction, individual outcomes including social-psychological functioning (flourishing), burnout and symptoms of depression, anxiety and stress, and organisation outcomes including work performance through confirmatory factor analysis (CFA). Study 3 is presented in chapter 5.

1.4 Overview of the Research Samples

A total of 31 employees forming six focus groups participated in study 1. A total of 318 employees participated in study 2. A total of 303 employees participated in study 3. Employees in all three studies were recruited across various industries in Singapore. The demographic details of the participants in studies 1, 2 and 3 are presented in chapters 3, 4, and 5 respectively.

CHAPTER 2: LITERATURE REVIEW

The world is in the process of rapid modernisation, as evidenced by the turbulent and uncertain economic conditions (Rosa, 2003; Turok & McGranahan, 2013). The 21st century has brought about drastic changes at the workplace resulting in a significant impact on individual, organisational, and societal health (Cooper, 2009). For example, these changes can include increased competition, lack of job insecurity, major restructurings and long-hours working environments. In order to maintain a competitive advantage in this rapidly changing and evolving workplace across the globe, it has therefore been an increasing priority for employers to focus on employee wellbeing as the key ingredient ensuring the success of the organisation (Kowalski & Loretto, 2017; Porath et al., 2012).

Given the existing research and evidence linking employees' health and wellbeing to their performance and productivity at the workplace, it is therefore of paramount importance to identify the processes and interventions that is likely to lead to an increase in employee wellbeing which in turn may result in an improvement in organisation outcomes such as productivity and staff retention (Black, 2008; Haddon, 2018). The focus on employee wellbeing is essential to sustainable organisational success, positively impacting on the society which propels a nation forward (Cooper et al., 2009; Wipfli et al., 2018).

Despite the importance of wellbeing as a resource to spur commercial growth and impact positively on the society (Guest, 2017), a focus on employee wellbeing has not been adequately emphasised in organisations where individuals need to be nurtured and supported (Cooper, 2009). For example, Litchfield and colleagues (2016) pointed out that there has been little organisational participation to increase productivity through the lens of promoting employee wellbeing, given that it is clear that healthy functioning workers contribute positively to the community and reduce the use of precious resources. Some of the reasons for this lack of attention and promotion of employee wellbeing by organisations may be attributed to the lack of knowledge of what constitutes a worker with good wellbeing from

the employer's perspective (Pescud et al., 2015) and of the processes linking organisational factors and employee wellbeing outcomes (Kowalski & Loretto, 2017). Thus, an organisation which emphasizes the mental health of its employees and places employee wellbeing as its core focus is likely to maintain a competitive advantage over its competitor (Kowalski & Loretto, 2017).

Nielsen and Miraglia (2017) pointed out that there are many ways to intervene in employee wellbeing intervention, and interventions would need to take into consideration contextual factors and process mechanisms at play in order to be effective. In line with the recommendations by these authors, the current research attempts to elucidate the mechanism promoting workplace mental wellbeing by identifying factors that determine employee wellbeing, as well as predict employee outcomes within the Singapore workplace context.

2.1 Employee Wellbeing Framework

In a move to provide more clarity into the conceptualisation of health and wellbeing for employees, Danna and Griffin (1999) presented an organising framework aimed at guiding future research and theory. This framework identifies the important components of the nomological network of health and wellbeing in the workplace with "implications of workplace dimensions that interact with individual level factors affecting workers' overall experiences of work and life" (p. 379). At the core of the framework sits the broad construct of wellbeing which can consist of both life satisfaction in domains such as family life and work satisfaction in domains such as relationship with colleagues (Danna & Griffin, 1999). Life satisfaction, alongside positive affect and negative affect, forms the structure for subjective wellbeing (Pavot & Diener, 2008), and work satisfaction can be considered as an equivalent construct to life satisfaction (Fisher, 2014). In organisation research, emphasis can be placed on more general work-related experiences such as work satisfaction as well as more specific aspects such as relationships with colleagues. The broader construct of employee wellbeing is important, as Juniper, Bellamy and White (2011) noted that wellbeing is more

than just benefitting the organisation, rather, it must also be perceived as relevant and beneficial to the employees themselves. Health, being a subset of wellbeing, can include both mental and psychological indicators and physical indicators relevant to the workplace context (Danna & Griffin, 1999).

Three sets of antecedent factors act to influence the wellbeing of employees in the framework (Danna & Griffin, 1999); the first set is concerned with hazards in the work settings which can be detrimental to the health and wellbeing of employees, such as health and safety risks. Conversely, the absence of such risks suggests that the health and wellbeing of employees would be positively influenced (Simone, 2014). The second set refers to the individual traits or characteristics such as having a sense of control which can exert influence over wellbeing within the work setting, while the third set refers to occupational stress which can positively or negative influence employee wellbeing. Cooper and Marshall (1978) conceptualized six sources of occupational stress, namely, factors intrinsic to work, role in organisation, career development, organisational structure and climate, relationships at work and work and home interface.

The framework further identifies two sets of outcomes as a result of employee health and wellbeing (Danna & Griffin, 1999). Of direct relevance and benefit to the employees themselves, the first set includes physical, psychological, and behavioural outcomes. On the other hand, the second set of outcomes are more likely to benefit the organisation itself such as productivity and healthcare costs. Lastly, Danna and Griffin emphasized the importance of intervention focusing on improving both individual and organisational outcomes by intervening at any or all of the three sets of components specified in the framework, that is, antecedent factors, health and wellbeing, and the consequential factors. For example, intervention directed at the antecedent factors within the organisational context could be to improve on relationships between colleagues by way of effective communication. An outline of this framework is depicted in Figure 2.1.

Figure 2.1

A Framework for Organizing and Directing Future Theory. Research, and Practice

Regarding Health and Well-Being in the Workplace by Danna and Griffin (1999)

Antecedents

Consequences

Work setting

- Health hazards
- Safety hazards

Individual Consequences
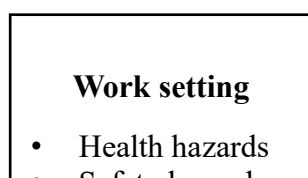
- Physical consequences
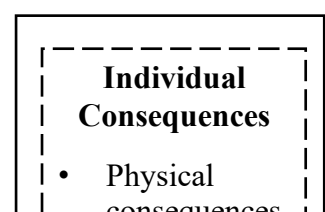
The current research was undertaken by adapting the employee wellbeing framework developed by Danna and Griffin (1999) with a focus on individual and organisational factors that contribute to employee wellbeing which in turn would lead to improved individual and organisational outcomes. It is hoped that this may be the way forward to ensure the economic growth of a nation as employees with high wellbeing are likely to have a stronger capacity to contribute positively to the organisation as well as the society.

2.2 Mental Health

Mental health, as defined by the World Health Organisation (WHO), is "a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2004). This underscores two important points. First, mental health is not just a state whereby an individual is free from any mental disorders, and second, positive mental health is the core of wellbeing of any individual in order for him or her to function effectively in all areas of life such as emotional, physical and social aspects, to cope with stress and thrive in the workplace, and to subsequently demonstrate positive growth which in turn benefits the society as a whole (Guest, 2017).

Mental health is both a psychological and social issue (Duan et al., 2016). It is an important element of an individual's overall health and wellbeing, yet, it is also the least recognised by many countries due to reasons such as lack of awareness and understanding, ineffective mental health policies and intervention, budget constraint, and discrimination and stigma (Ngui et al., 2010). A systematic review and meta-analysis conducted by Steel and colleagues (2014) found that one in five persons suffered from a common mental disorder within a 12-month period in the 59 countries surveyed, and the total lifetime prevalence of common mental disorder was estimated at 29.2% in 39 countries. This poses a great challenge for both developed countries and developing countries where the incidence of mental health challenges continues to rise, and mental health policy and services research are necessary to identify effective methods to alleviate this problem (Whiteford et al., 2013). In Singapore where stigma, misconceptions and negative attitudes toward mental illnesses are still relatively common, a significant treatment gap has been similarly highlighted in which only 31.7% of people with mental illness sought help in 2009 (Pang et al., 2017).

In line with the definition of mental health by WHO and the promotion of positive human functioning, it is imperative to emphasize the significance and necessity of wellbeing in every country. Research has shown that having high psychological wellbeing mitigates the

effects and symptoms of poor mental health. For example, Keyes (2007) found that individuals who flourished in terms of having good mental wellbeing displayed less symptoms of depression and are therefore more mentally healthy, which led the author to advocate for the promotion of good mental health. Indeed, mental health and mental illness should not be seen as opposite ends of the continuum but instead, should be viewed as a complete state with individuals' degree of flourishing as an important criterion for positive mental health (Keyes, 2005; 2007). Several studies have also shown that positive psychological interventions can be promoted in populations with a mental illness to enhance their wellbeing (Boiler et al., 2013; Macaskill, 2012; Sin & Lyubomirsky, 2009), and people with mental disorders can experience happiness and continue to function in life (Bergsma et al., 2011).

More recently, the focus has shifted to better management of mental illness through the promotion of mental health including building resilience at the workplace (Thomas et al., 2016), and it is evident that mental health promotion brings about economic benefits for the society and country (Zechmeister et al., 2008). In order to understand and improve wellbeing, there is a need for it to be addressed at multiple levels within a system including the individual, organisational, community and country level (Huppert, 2009). Having positive mental health for any employee at the workplace, is crucial for any organisation as well as for the country considering its economic, social and personal impact (Raya & Panneerselvam, 2013), and it is the aim of the current research to address mental welling within the organisational context.

2.3 Economic Growth and Wellbeing

It is important to note that from a historical perspective, increasing income and material progress have often been associated with improvement in people's lives, and economic growth became the way to achieve better living conditions for the people (Mikucka & Sarracino, 2014). However, this notion has been consistently challenged by other

researchers that economic growth in the long run does not necessarily and automatically translate into an increase in people's wellbeing (Bunge, 2012; Easterlin, 2017; Mikucka & Sarracino, 2014). Haque (2004) argued that a substantial part of economic growth in modern market economies measured in terms of Gross National Product (GDP) are derived from activities and goods and services which have little to do with enhancing people's wellbeing. Rapid economic expansion has also come at a cultural cost as seen in many countries in Southeast Asia where Western norms and ideals have been adopted at the expense of local identity and needs; for example, the concept of anomie was raised around 30 years ago when political leaders in Singapore were concerned that the pace of society change such as towards being more individualism, had made it difficult for many citizens to make sense of their new surroundings thereby threatening the more traditional values of family ties and collective good (Hill & Lian, 1995). Further, it was pointed out that the founding father of Singapore, Lee Kuan Yee, believed that Confucian values such as family ties contributed to the economic success of South Korea, Taiwan, Hong Kong and Singapore, and it is therefore important to continue to uphold and promote these values (Hill & Lian, 1995). A country which is involved in designing and implementing policies and programs, thus has to make a deliberate effort to focus on human progress and development taking into consideration the local norms and cultural context (Bjonnes, 2009). This ensures that interventions and activities leading to greater wellbeing and happiness are relevant to the specific community.

To further elaborate, Yeung (2011) noted that the consumer culture has proliferated in many cities in Southeast Asia including Singapore in the last decade owing to rapid economic development. If left unchecked, this can have disastrous consequences as the relentless pursuit of wealth might result in the neglect of other important aspects of human life such as mental wellbeing specific to these countries. In the Singapore context, Chan (2012) argued that integrative policies are necessary so that people specifically stand to gain from benefits including wellbeing, which needs to be derived from the country's GDP and economic

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growth. In addition, Chan encouraged more studies to be conducted to conceptualise wellbeing in the local context such as the inclusion of multiple dimensions of wellbeing that are relevant to the people in the local context. It is important to revisit the meaning of wellbeing with a greater emphasis on sustainability so that the society can become more sustainable; human needs can no longer be ignored at the expense of material gains, and the identification of factors that allow individuals and society to thrive and flourish is critical (Brown & Vergragt, 2016). Countries would need to move beyond income and pay more attention to measures of wellbeing including its meaning and purpose for their citizens apart from their GDP (VanderWeele, 2017). The focus on employee wellbeing is therefore as important as economic growth if long term sustainability for a nation is to be achieved.

2.4 Importance of Thriving

To better understand how wellbeing can be enhanced through the lens of positive psychology, it will be necessary to first consider the importance of thriving in humans which has garnered serious attention over the last few decades. Traditionally, psychology had been a science about healing others within the context of disease model of human functioning (Seligman & Csikszentmihalyi, 2000). In fact, many empirical studies conducted across social and biomedical sciences including psychology, have mainly focused on diseases and alleviation of symptoms, and investigation into the notion of wellbeing were done in limited contexts and outcomes such as through the measurement of positive and negative affect (VanderWeele, 2017). Although the idea of positive human functioning and thriving can be traced back to religious and philosophical discourse thousands of years ago, it was not until more recently that Seligman and Csikszentmihalyi (2000) predicted "a psychology of positive human functioning will arise that achieves a scientific understanding and effective interventions to build thriving in individuals, families, and communities" (p.13). This rise in positive psychology signals a shift from treating mental illness and emotional disturbances in

individuals toward the recognition and promotion of the positive aspects and strengths in them so human potentials can be further realised.

According to Keyes (2002), individuals flourish when they experience positive emotions and have good psychological and social wellbeing; on the other hand, they languish when they experience low levels of wellbeing and a lack of meaning and progress in life. Keyes highlighted the importance of further research in the context of individuals who flourish to gain insights and understanding into promoting wellbeing and reducing incidence of mental illnesses. Indeed, when individuals thrive and make progress in their lives, they negate languish and the experience of low wellbeing (Spreitzer et al., 2005).

In the broad psychological sense, thriving refers to the dynamic process in which an individual achieves higher psychological functioning and personal growth as a result of their ability to overcome adversity events (Carver, 1998; O'Leary & Ickovics, 1995). Apart from thriving in the face, or after adversity, Feeney and Collins (2014) further provided a different context through which individuals can thrive in their lives; "in the absence of adversity, individuals thrive in this context when they are able to fully participate in opportunities for fulfilment and personal growth through work, play, socializing, learning, discovery, creating, pursuing hobbies, and making meaningful contribution to community and society" (p. 4). As argued by Spreitzer et al. (2005), thriving in the latter context is important as firstly, it serves as an adaptive process in which individuals use their personal experiences to help guide them through situations by altering their external environments including work environments to promote their own personal growth; secondly, having a sense of thriving promotes positive overall health including mental and physical health thereby jumpstarting a healthy cycle of human growth in a positive direction. In fact, the implications of human thriving are far reaching for the society ranging from health and personal fulfilment to youth and elderly support (Bundick et al., 2010; Lerner, 2004). As such, the development and implementation

of practical interventions for the communities stemming from a better understanding of thriving and its process is warranted for optimal human development (Bundick et al., 2010).

Moreover, given that a significant amount of time is spent at the workplace with the focus on human capital playing an important role in the economic and environmental dimensions, the issue of sustainability for humans become even more compelling (Pfeffer, 2010; Spreitzer et al., 2012). The importance of thriving at work is underscored. The ability for employees to thrive at work becomes a crucial mechanism to ensure the growth and sustainability of organisations (Abid, 2016; Spreitzer & Porath, 2012; Spreitzer, et al., 2012). The experience of thriving at work can in turn actively contribute to the health and wellbeing of employees which consequently also generates positive benefits for the organisation (Paterson et al., 2014; Spreitzer et al., 2012) and subsequently for the nation.

2.5 Wellbeing in Life

Wellbeing is an important concept for thriving and human flourishing. As wellbeing is widely investigated, numerous concepts and definitions have been provided by different researchers. In fact, the concept of wellbeing has been very difficult to ascertain with no universal definition (Charlemagne-Badal et al., 2015; Christopher, 1999; Dodge et al., 2012). For example, Selwyn and Wood (2015) explained that some terms such as happiness and quality of life have been used synonymously with wellbeing, and some of the domains of wellbeing do not represent holistically what the concept of wellbeing really is. Notwithstanding, the two main views that have dominated the field in clarifying the concept of wellbeing are the hedonic approach and the eudaimonic approach. The hedonic view focuses on maximising happiness and pleasure and avoiding pain (Deci & Ryan, 2006; Ryan & Deci, 2001). Subjective wellbeing, which is a broad and widely researched construct, falls under the hedonic view that refers to the two components, the affective and the cognitive, that make up what makes a good life (Diener et al., 1999). The affective component refers to frequencies of positive affect or pleasant emotions as well as the frequencies of negative

affect or unpleasant emotions that an individual experiences thereby suggesting a higher or lower level of subjective wellbeing. In addition to the affective component, Diener and colleagues (1999) further identified the cognitive component that specifies to the extent an individual evaluates his or her own life satisfaction in different life domains such as work, family and health thereby reflecting the subjective nature of wellbeing. On the other hand, the eudaimonic component refers to personal growth and realising one's potential, meaning and purpose in life and living a good life with good virtues and outcomes (Ryan & Deci, 2001; Waterman, 1993).

Ryff and Keyes (1995) asserted that subjective wellbeing in terms of pleasure or happiness does not necessarily lead to overall wellbeing as for example, one could lead a meaningless life but nonetheless be happy, and it is therefore necessary to consider other psychological aspects in addition to those in subjective wellbeing. Psychological wellbeing is thus proposed and presented with six operationalised different domains based on theories from developmental and humanistic psychology: self-acceptance, positive relationships, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989; Ryff & Singer, 2008). These dimensions are regarded as essential to having the qualities of a good life and therefore considered to be eudaimonic. Hence, the key difference is that the hedonic approach focuses on feelings of subjective pleasure whereas the eudaimonic approach focuses on positive psychological functioning.

The two different perspectives about wellbeing have engendered a considerable amount of debate between researchers as to whether they are conceptually and empirically distinct approaches. Notwithstanding, there has also been considerable evidence that suggests that they are highly related. For example, Kashdan and colleagues (2008) contended that the concepts of hedonic and eudaimonic wellbeing have more in common than differences given the evidence that shows that eudaimonic behaviours predict hedonic pleasure and making a distinction between them is likely to hinder further insightful research into wellbeing as a

holistic concept. Further, in terms of whether hedonic or eudaimonic actions have a greater effect on overall wellbeing, Steger and colleagues (2008) found that eudaimonic actions are more strongly associated with overall wellbeing as well as resulted in lengthier period of overall wellbeing as compared to hedonic actions. On the other hand, King and colleagues (2006)'s findings from their six studies concluded that the experience of positive affect or feelings can prime for as well as increase the experience of meaning in life thereby highlighting the importance of happiness from the hedonic viewpoint.

In light of the debate, Waterman (2008) suggested that, although research on eudaimonic wellbeing is still in its early stages as compared to hedonic wellbeing, both types of wellbeing are inter-related but distinct concepts which produce different sets of outcomes, and researchers need to pay attention to both when looking at overall wellbeing. Indeed, to examine whether psychological wellbeing and subjective wellbeing are more similar with or more distinct from one another, Chen and colleagues (2012) conducted a study using the bifactor model that allows for the investigation of the common factors to both as well as the specific factors pertaining to each. The authors found that both forms of wellbeing are strongly correlated at the general construct level but once the common factors are excluded, individual factors specific to either form of wellbeing are distinct. The authors thus concluded that that both forms of wellbeing, that is, psychological and subjective wellbeing, are valid and are reconcilable, subject to the level of analysis.

Ryan and colleagues (2008) elucidated the concept of eudaimonic wellbeing based on the Self-Determination Theory. This theory proposes that the basic human psychological needs of autonomy, competence and relatedness are fulfilled by living a life in line with the eudaimonic view of pursing intrinsically valued goals; this in turn leads to wellbeing that is long lasting with outcomes suggestive of a good life such as meaning, health and vitality. Further, Ryan and colleagues (2008) argued for the necessity of living a life in accordance with a eudaimonia lifestyle as this is likely to create a more caring and socially responsible

society away from consumerism ubiquitous in today's world; it is therefore imperative that a conducive environment supported by sound policies and structure be created to facilitate the fulfilment of these psychological needs and look beyond hedonic happiness.

Humans are social beings and the importance of social relationships is well-documented. Baumeister and Leary (1995) in their review for example, provided strong evidence that due to the fundamental need to belong, human beings have evolved to connect and interact meaningfully with one another and to provide care for as well as receive care from one another; consequently, the quality of the social relationship with one another would have an impact on several outcomes including health and wellbeing, thought processes patterns, emotional reactions and behavioural patterns. Social wellbeing has therefore been proposed as another important component of wellbeing in addition to eudaimonic and hedonic wellbeing. Keyes (1998) conducted two studies which operationalized and validated the five dimensions of social well-being: coherence, integration, actualization, contribution, and acceptance, thereby confirming the theoretical and practical importance of social relationships in wellbeing. Further, through an analysis conducted by Gallagher, Lopez, and Preacher (2009), the authors found empirical evidence to support the integration of social, eudaimonic, and hedonic wellbeing into a hierarchical structure of wellbeing, which suggests that each of the three components of wellbeing is valid and can be further investigated as a route to wellbeing.

Seligman (2011) proposed a wellbeing theory with wellbeing as a construct consisting of five measurable dimensions: Positive emotion, Engagement, Relationships, Meaning, and Accomplishment. This theory expands and extends beyond the notion of happiness and life satisfaction and includes components from all three types of wellbeing as pointed out, that is hedonic, eudaimonic and social wellbeing. Seligman argued that the five dimensions of the wellbeing theory enable one to flourish in life in different areas of life including work life beyond the traditional measurement of success in monetary terms.

To address how wellbeing can be captured more meaningfully and how people across different nations can flourish and improve on their lives in terms of increasing positive emotions and functioning, Huppert and So (2013) provided an analysis of responses from participants in 23 European countries and put forward a conceptual framework of wellbeing delineating 10 dimensions: competence, emotional stability, engagement, meaning, optimism, positive emotion, positive relationships, resilience, self-esteem, and vitality. The authors indicated that their findings are in line with past research and suggest the presence of both hedonic and eudaimonic components of wellbeing, and it will be necessary to view and measure wellbeing from a multi-dimensional perspective. Despite the fact that the research is conducted with participants from only European countries, the authors recognised and emphasized the role that other factors might come into play to influence the conceptualisation of wellbeing such as cultural values, socio-economic conditions and polices; the promotion of wellbeing therefore lies in a deeper understanding of these factors. In line with the recommendation by the authors, the current research aims to elucidate these factors within the Singapore context.

2.6 Mental Health in Singapore as a Culturally Dependent Concept

The notion of mental health differs widely across cultures and countries. There is no one way of viewing mental health; rather, the cultural and social context in which an individual resides in unequivocally shapes the attitudes, perceptions and beliefs toward mental illness, subsequently influencing the diagnosis, prevention and intervention pathways of the illness (Gopalkrishnan, 2018; Gopalkrishnan & Babacan, 2015; Subudhi, 2015). For example, mental health care, , over 150 years ago before mental institutions gained acceptance, was provided by family members together with religious persons in religious places such as temples, and this phenomenon persists into the modern era particularly countries in Asia (Deva, 1999). While the claim of being able to see spirits and talk to spirits may in one society be seen as schizophrenia that requires internment, these psychotic

symptoms are also likely to be seen as abilities or giftedness passed on from one generation to the next in some communities in Africa, which underscored the importance of sociocultural influences rather than the conventional theoretical frameworks in its classification and treatment (Niehaus et al., 2004). This strongly suggests that improving mental health in Asia requires a more holistic examination of multiple relevant determinants such as historical, cultural and religious factors pertaining to that country in the hope that culturally appropriate evidence-based interventions can be implemented. As argued by Viswanath and Chaturvedi (2012) in their review, other cultural, traditional, and folk methods for understanding and management of mental illnesses need to be seriously taken into consideration by mental health professionals. Moreover, many of the perceived norms in viewing mental health issues in highly developed countries may be irrelevant – in fact, they can be pernicious to mental health care in many countries in Asia where for example, familial and traditional forms of care are often the alternatives (Meshvara, 2002); for example, mental health issues in highly developed countries are viewed from the psychiatry perspective which emphasizes on the medical model, yet, care is often carried out through the traditional belief systems such as offering prayers and seeking spiritual treatment in many Asian cultures . By simply adopting the norms from high developed countries therefore runs the risk of overlooking this aspect of the traditional care system which in turn is likely to be detrimental to mental health care in many parts of Asia.

Subudhi (2015) further highlighted that "culture is a learnt process which changes over time" (p. 133), and subsequently influences the individual's beliefs and behavioural practices. As pointed out by Hill and Lian (1995), the impact of rapid economic growth and western ideals over the last few decades can be felt in many countries including Southeast Asia, and this may have altered the cultural landscape. Approaches that account for differences across cultures and integrate western and community-based cultural notions of

mental health are necessary (Gopalkrishnan & Babacan, 2015), and it is crucial to view the notion of mental health in these countries from their unique and evolving cultural position.

Alsagoff (2010) described culture as a dynamic and active process in which people in the society make sense of their daily lives collectively through common ways of living and speaking. This culture is created from a shared disposition and history of the society which in turn informs national identity. This is in contrast with the traditional notion of culture where it is seen as fixed and static associated with a particular ethnicity or race (Alsagoff, 2010). The culture in Singapore represents this dynamic notion of culture.

Singapore is a multi-ethnic, multi-religious and multi-lingual society in Southeast Asia, and had a total population of 5.6 million in 2017. Amongst the resident population, the largest ethnic groups are Chinese (74.3%), followed by Malays (13.4%), Indians (9.1%), and other ethnic groups (3.2%) (Yearbook of Statistics Singapore, 2017). Singapore was a fishing village before it was colonized by the Britain in 1819 and later gained independence in 1965 from Malaysia. Many of Singapore's laws are still inherited from British and British-Indian laws. There is also considerable freedom and plurality in the practice of numerous religions such as Buddhism, Christianity, Hinduism, Islam, and Taoism (Tambyah & Tan, 2013). The national language is Malay, but the other official languages of English, Mandarin and Tamil are widely spoken by the population. English, however, is the medium for education and business, and is the first language taught in schools. As a result of these historical and cultural demographics, Singapore possesses a unique combination of values influenced by both eastern and western cultures (Leong et al., 2014).

Due to this unique shared disposition and history of people who make up the population of Singapore, Singapore therefore has distinct culture different from other societies and countries as its population form a common national identity through the interaction of difference ethnic groups, as well as the combination of influences from eastern and western values. The Singaporean identity is established over a period of at least one

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hundred years, and is recognised by its unique arts such as XinYao, food such as Chilli Crab), and language (Singlish) to name a few, these cultural attributes coexist with values and beliefs inherited from other South and East Asian countries as well as it's colonial past.

Singapore has achieved substantial economic growth over the last five decades and now has one of the highest GDP per capita in the world (Tambyah & Tan, 2013). Despite the amassment of material wealth along with a high standard of living, Singapore scored low in terms of happiness and life satisfaction when compared to other countries (Vaingankar et al., 2012). This is consistent with previous research as economic growth and material success do not necessarily and undoubtedly result in an increase in wellbeing of individuals (Bunge, 2012; Easterlin, 2017; Mikucka & Sarracino, 2014). Indeed, the wellbeing of the people can be raised only if the income generated also assists in improving wellbeing of individuals and identifying the precise factors that contribute to wellbeing (Tov & Au, 2013). For example, a record profit made by a company does not translate into higher wellbeing for the employees if these employees were made to work overtime multiple times a week.

In addition, Singapore, despite being ranked as one of the most efficient healthcare system in the world in terms of life expectancy, relative per capita cost of health care and absolute per capita cost of health care (Lim, 2017), mental health has been a low priority until recently in the last few years. This is mainly due to the high level of stigma attached to mental illnesses and the dire shortage of mental health professionals such as clinical psychologists and medical social workers (Chong, 2007). In fact, lack of awareness in mental health issues are prevalent not just amongst the general public, but also the healthcare and general health professionals as well as spiritual leaders (Tonsing, 2017).

In the first population-based survey of mental disorders in Singapore conducted in 2010, Chong and colleagues (2012) found that in 2010, 12% of the adult population met lifetime criteria for mental illnesses such as affective, anxiety or alcohol use disorders. The authors further reported that a significant treatment gap existed, that is, the percentage of

individuals who required help but did not seek treatment was 83.7% for individuals with a mental disorder despite Singapore being an economically developed country. The authors indicated that this might be due to cultural influences inherent in the local context such as public attitude and stigma. In order to ascertain the progress in treatment gaps since the first survey, a second population-based survey of mental disorders was conducted in 2016. Subramaniam et al. (2019) showed that there was an increase in lifetime prevalence of mental illness to 13.9%, an increase from 12% in 2010. The study also found that there was only a slight decrease to 78.6% for individuals with a mental disorder who required help but did not seek treatment. Moreover, as meritocracy is highly valued in Singapore, the authors hypothesized that individuals who were more educated were less likely to seek treatment; in a competitive Singapore society, these individuals did not want to be viewed as being "weak" and did not want to face the repercussions at educational and work settings such as the loss of future prospects if they were to disclose their mental health status. Thus, in terms of improving the treatment gaps at the Singapore workplace, the authors highlighted the need to implement mental health initiatives and targeted interventions taking into account the local cultural context. For example, this could be done by looking at ways of improving or enhancing predictors or factors that impact on mental health and wellbeing without needing to bring concepts of mental illnesses into the narratives.

These findings regarding the mental health status in Singapore supported the earlier findings by Diener and Seligman (2004) who argued that mental health of the population is likely to remain the same or even dropped drastically as the country becomes more economically developed and wealthier, and specific steps such as government and organisational policies have to be taken to address the mental health and wellbeing of the population. The significant impact of mental health and the recognition of the importance of mental wellbeing have prompted the Ministry of Health in Singapore back in 2005 to task a Committee of policy makers and mental health professionals to deliver a number of

recommendations including building resilience to mental illness, working towards early detection, reducing stigma, engaging the primary care physicians and building up a network of support in the community, rectifying the shortfall in mental health workers, encouraging research, and lastly, developing a monitoring and evaluation system (Chong, 2007). Launched in 2007, the National Mental Health Blueprint further specifically highlighted the importance of promoting mental wellbeing in the Singapore population including at the workplace, to increase the quality of life of its citizens as well as increase productivity for the nation. The current research is therefore in line with the Singapore government's plan and the recommendations by Subramaniam and colleagues (2019) to enhance the mental health framework by adding on to the pool of evidence-based knowledge and solutions to improve mental wellbeing at the workplace.

2.6.1 The Singapore Mental Wellbeing Scale

As emphasized, mental wellbeing is a crucial and indispensable component of mental health. Mental health for each person is influenced by individual factors and experiences, social interaction, societal structures and resources, and cultural values such as experiences in everyday life, in families and schools, on the streets, and at work (Lahtinen et al., 1999). The mental health of every individual in turn affects the life in each of these domains and therefore the overall health of the population. In terms of functioning, individuals with higher levels of mental wellbeing are not only able to form closer and fulfilling relationships and to be productive, but also less likely to develop a mental illness (Slade, 2010). A focus on mental wellbeing is therefore a decisive factor for an individual to function optimally in all areas of life (Hatch et al., 2010).

As mental health is a culturally dependent concept, the conceptualisation and manifestation of mental wellbeing is similarly subject to cultural differences and influences (Fen et al., 2013; Vaingankar et al., 2012). More specifically, cultural differences exist in the conceptualization and expression of wellbeing (Christopher, 1999; Taris & Schaufeli, 2015;

Vaingankar et al., 2012), as they reflect what a particular cultural group perceives as healthy functioning (Camfield, 2006). Different cultural groups have their own set of expected attitudes and behaviours of living that help them to develop healthy functioning (Tov & Diener, 2009), yet past research on subjective wellbeing has been focused on Western countries which led to the development of measures that may be relevant only in these countries (Camfield, 2004). Thus, Tennant et al., (2007) emphasized the need to include the cultural norms of the population and develop measurements based on these norms, as any measurement of wellbeing must consider the cultural, social and behavioural contexts for it to be valid and reliable in any given country.

Past research has supported the role that cultural differences play in influencing wellbeing. In a study by Suh and colleagues (1998) to compare the role that emotions and normative beliefs play in forming life satisfaction judgments between 41 individualist and 40 collectivist nations including Singapore, the authors found that individualists and collectivists habitually utilised distinctive pieces of information; specifically, the authors found a much stronger correlation between emotions and life satisfaction in individualistic nations as compared to collectivistic nations. In addition, the authors also found that at the individual level, emotions had a much greater influence on life satisfaction judgments in individualistic cultures than in collectivistic cultures, and cultural norms played an equally important role alongside emotions when collectivists made life satisfaction judgments. The authors thus highlighted one of the important implications of the study in that the conception of wellbeing is more dependent on cultural norms in collectivistic oriented countries that emphasize on positive relationships with others, as compared to individualistic oriented countries that emphasize on the individual needs of the self.

Similarly, a study to evaluate the contribution of collective self-esteem in predicting life satisfaction was conducted by Zhang (2005). By surveying 1347 participants across three generations in China, Zhang found that collective self-esteem explained a significant amount

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of variance in predicting both general life satisfaction and life domain satisfaction even after controlling for individual self-esteem, personality traits and demographic variables. As compared to the Western cultures where individual self-esteem is more pronounced with greater emphasis on personal attributes, collective self-esteem is therefore expected to have a stronger effect on collective cultures such as those in China where in contrast, a greater emphasis is placed on identifying and belonging to a certain social group (Zhang, 2005). Thus, in the context of cultural differences, Zhang underscored the importance of collective esteem as an important factor in helping people cope and achieve high levels of wellbeing with past research also supporting that collective self-esteem is correlated with mental health status such as life satisfaction and distress.

Despite the cultural differences noted in regard to collective self-esteem in the above-mentioned study, Du and colleagues (2017)'s research into self-esteem and subjective wellbeing within the cultural context provided a deeper understanding into the nature of self-esteem. In their study, the authors accentuated an under-researched type of relational self-esteem, in addition to the individual self-esteem and collective self-esteem. Relational self-esteem points to self-esteem which is derived from relationships with important persons such as family and friends, in contrast with individual self-esteem which is derived from personal attributes and with collective self-esteem which is derived from belonging to larger social group. The findings from the study by Du and colleagues (2017) conducted through four cross-sectional studies and one longitudinal study (N = 847) with college students in Macau, China showed that relational self-esteem but not collective self-esteem, was correlated with increased life satisfaction, positive affect, meaning in life, happiness, and subjective vitality after controlling for individual self-esteem. In line with previous findings, Du and colleagues concluded that cultures in East Asia are likely to depend on the quality of the relationships with significant others in deriving feelings of happiness and positivity and satisfaction with their lives as compared with Western cultures that depend more on personal attributes;

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interestingly however, contrary to previous findings, collective self-esteem was not found to be associated with subjective wellbeing if individuals do not regard identification with the larger social group as important as identification with important relationships with significant others. Further research would need to be conducted in areas outside of the college settings such as in work settings where colleagues including superiors and subordinates are likely to constitute important interpersonal relationships in one's work life.

Hence, concepts of wellbeing cannot be assumed to be universal, as linguistic and cultural factors need to be taken into consideration to elucidate the processes of wellbeing (Wierzbicka, 2004). Moreover, existing instruments to measure wellbeing do not address the multidimensional nature of wellbeing to date, and they are mostly developed in Western countries with norms that differ in terms of their conceptualisation and definition of wellbeing as compared to their Asian counterparts (Vaingankar et al., 2012). To address this issue, the Singapore Mental Wellbeing (SMWEB) Scale was conceptualised and constructed with a total number of 3400 participants in four separate studies to measure positive aspects of mental health in a multi-ethnic resident population in Singapore. The SMWEB Scale is a screening tool of a single construct with five meaningful dimensions that reflect Singaporeans' understanding of wellbeing: Asian Self-Esteem (ASE) refers to "the acceptance of the self and the belief that the self is a dynamic process that is continuously evolving through growth and learning"; Social Intelligence (SI) refers to "the knowledge and competence in developing good social relationships and interdependence with others"; Emotional Intelligence (EI) refers to "the intelligence of being able to recognize and manage one's own emotions to achieve happiness and peace"; Resilience (RI) refers to "the psychological processes that enable the individual to withstand negative impact in life and to thrive in the face of difficulty"; Cognitive Efficacy (CE) refers to "the cognitive skills and competence the individual possesses that enables the individual to perceive the world in a realistic way and to be able to make effective decisions in order to manage one's life events"

(Fen et al., 2013, p. 597). These five dimensions were identified based on the sequential use of in-depth interviews, surveys, and focus group discussions to identify the components that make up the concept of mental wellbeing in Singapore.

As espoused by Fen and colleagues (2013), the definition of mental wellbeing in a particular culture is shaped by its values and cultural and socio-environmental context, and these five dimensions of the SMWEB scale reflect Singaporeans' understanding of mental wellbeing. The SMWEB scale demonstrated high internal reliability ($\alpha = .962$) and strong construct validity where the SMWEB scale and the Warwick Mental Wellbeing (WMWEB) scale displayed shared variance of around 77% (r =.88, p < .000) indicating that the SWMEB scale measures a hugely similar construct of the WMWEB scale. Through a series of factor analysis using the dimensions of a short form of the SMWEB and the depression and anxiety dimensions of the General Health Questionnaire (GHQ), Fen and colleagues also found that a two-factor model of mental wellbeing and mental disorder had very good fit, which revealed that mental wellbeing and mental disorders are two distinct factors representing two different underlying psychological processes. This reinforces the notion that the absence of mental disorders itself is insufficient for a positive mental health, and that having a positive mental wellbeing is necessary.

Further, success, as measured by culturally sanctioned common goal pursuit, is important for any nation in order to establish sound economic development and political stability (Tov & Diener, 2009). In Singapore, having a good education and high levels of living standards are important national and culturally sanctioned measures of success due to economic and social transformation since its independence in 1965 (Goh & Tan, 2008). The notion of wellbeing is dynamic in that it also encompasses economic dimensions such as financial success in addition to psychological dimensions in one's socio-cultural context (Kun et al., 2017). As the SMWEB Scale was also found to correlate significantly with educational achievement and personal income, it should therefore also predict success in life

in Singapore by way of ascertaining positive mental functions (Fen et al., 2013). The results from the study by Fen and colleagues provided support for the SMWEB Scale as a measure of a culturally sanctioned construct of positive psychological growth, that is, positive mental wellbeing, in Singapore.

2.7 Wellbeing at Work

Work occupies a significant portion of a person's life and apart from the home environment, a working person spends most of his or her time at the workplace. In fact, a quarter of a life is spent at work on average and work is an important element in one's life; it is therefore important that an employee experiences positive emotions and functions effectively as part of his or her wellbeing (Keeman et al., 2017). Indeed, life is enriched by work in various ways; work means more than just making money, rather, it fulfils a variety of needs including personal and family needs (Wong & Yuen, 2012). In the economic context, work is a source of income needed to support families. In the social and psychological contexts, work provides group identification and affiliation and a sense of meaning and purpose (Burke et al., 2009), and meaning in life is also further enhanced by individuals experiencing meaning at their work (Steger & Dik, 2009). Work can positively enhance a person's mental health in areas such as job security, social interaction and work skills (Rao & Ramesh, 2015), and the workplace can also be an area for targeted interventions in which mental health problems can be prevented (Mykletun & Harvey, 2012)

Whilst there are many benefits to working, working life has its downside and can be a risk factor affecting mental health (Harvey et al., 2017; OECD, 2015). For example, many employees do not necessarily leave work behind after working hours, since work as well as experiences from work often accompanies them back to home. In fact, high work stress often leads to higher stress associated with home life (Fan et al., 2015). The situation is further exacerbated by technological advances and increasing flexibility which also enable employees to work at multiple locations at different times, which may not actually decrease

work stress (Lott, 2015). The workplace and workplace attributes such as human resource policies and support remain highly relevant unless one's work is completely home-based.

Further, rapid modernisation and the changing nature of the workplace also mean that employees are putting in longer hours at work. Some countries particularly in Asia, are more susceptible to the impact of the changing nature of workplaces. Although working hours have been shown to be declining slightly in many western countries, this is not the case in many Asian countries where working hours are in fact getting longer due to the rapid economic expansion (Eguchi et al., 2016; Lee et al., 2007). In fact, karoshi, or death due to overwork, is especially a growing problem in Eastern Asian countries including mainland China, Japan, South Korea and Taiwan (Cheng et al., 2012; Li, Yang et al., 2014; Park et al., 2012). For example, Eguchi and colleagues (2016) cited that data from the International Labour Organization (ILP) showed that in 2013, the percentage of workers who had worked over 50 hours or more per week were 34% in Hong Kong and China, 35% in South Korea and 23% in Japan. In contrast, the percentage was just 14% to 17% in Australia, New Zealand, and the United States and less than 13% in nine other industrialized nations. In Singapore, Lim (2010) reported that the average employee clocked in a total of 46.3 hours in 2008, and this figure is considered in the extremely high average range as compared to Europe where the highest weekly working hours came in at only 41.7 hours. Fast forward to 2019, the statistics showed that the working hours of the average Singaporean employee had only fallen slightly to 44.7 hours (Manpower Research and Statistics Department, 2019) which is still considered very high.

Long working hours have been found to be associated with a diverse range of occupational health problems (Johnson & Lipscomb, 2006; Wong et al., 2019). Although a lot of research has supported the hypothesis that working long hours are associated with lower levels of employee wellbeing such as decreased mental health status and higher levels of anxiety and depression symptoms (Afonso et al., 2017), work-life

imbalance and job dissatisfaction (Hsu et al., 2019), and negative impact on family life (Akhtar et al., 2012), some other research has suggested that long working hours alone do not account for the negative impact on employee wellbeing. For example, a study by Hughes and Parkes (2007) found that longer working hours are not necessarily detrimental to wellbeing as factors such as flexibility and control over work hours moderated the relationship and reduced its negative impact on employees. In fact, Tsutsumi (2019) asserted that reducing working hours alone is insufficient to prevent overwork as this may result in increased work intensity which is equally unhealthy and more effective ways can include creating safer psychological environment for employees and having more defined work and family balance.

On the other hand, Ganster and colleagues (2016) conducted a critical review of the vast literature that investigates the effects of working hours on wellbeing and did not find any strong direct causation between work hours on either physical or mental wellbeing outcomes. The authors expounded that the lack of long-term studies of the effects of working hours as well as the lack of investigation into the relationship between working hours and wellbeing further placed limits on the findings of previous studies. Thus, they concluded that the effects of long working hours have to be seen in the light of several factors unique to the particular working population including cultural norms where in Japan for example, working long hours is considered to be acceptable compared to most other European cultures. This suggests that when conceptualising the factors that contribute to employee wellbeing, multiple factors have to be taken into consideration rather than adopting simplistic single factor association. Thus, an investigation of what constitutes employee wellbeing in Singapore is important as it is likely to mitigate the effects of long working hours put in by Singaporean employees.

Employee mental health and wellbeing have implications for both the employee as well as for the organisation. An individual with poor mental health is susceptible to a wide range of physical sickness such as headaches, high blood pressure and heart problems (Dyrbye et al., 2006; Rajgopal, 2010), psychological difficulties such as mood problems

(Keyes, 2005; Seow et al., 2016), and behavioural problems such as substance use and impulsivity (Yau et al., 2013). Moreover, poor mental health may also result in cognitive problems such as attention and memory (Maharaj et al., 2019; Marazziti et al., 2010). In the workplace context, an employee with low wellbeing not only experiences physical, psychological and behavioural consequences, but is also less productive, makes poorer decisions, and subsequently contributes less to the organisation (Danna & Griffin, 1999; Haddon, 2018; Keeman et al., 2017). Employees with low wellbeing eventually contributes to decreased overall performance and productivity (Kowalski & Loretto, 2017). Conversely, an employee with high wellbeing brings numerous positive benefits for the organisation. These can include better work performance and productivity from the employees (Cotton & Hart, 2003; Litchfield et al., 2016; Baptiste, 2008), lowered healthcare burden for organisations (Page & Vella-Brodrick, 2008), promotion of flourishing in employees (Hone et al., 2015), and reduced employee stress (Keeman et al., 2017). As such, having high wellbeing, not just the absence of mental disorders, is of great importance for every employee in the workforce, especially given that the neglect on mental health can be more salient at the workplace for various attested reasons such as stigma, discrimination, and reduced opportunities for promotion (Wheat et al., 2010).

When an employee's wellbeing is optimal, they will be able to perform optimally at the workplace. At the same time, the workplace also needs to be able to provide the growth and positive factors to promote and support their wellbeing as the reciprocal relationship between mental wellbeing and the type of support that the workplace provides is clear. As mental wellbeing also directly affects how employees think and feel about their job and organisation (Tov & Chan, 2012), it is critical that employers focus on employee mental wellbeing as a way for the organisations to grow. From a healthy organisation concept, Panneerselvam and Raya (2013) argued that as employees are the most important resource for any organisation, their wellbeing being should be the focus for the organisation to thrive

and remain competitive in today's challenging economy. Indeed, working individuals with better wellbeing are more likely to improve on productivity and spur economic growth (Tov & Au, 2013), which in turn can be re-invested into employee wellbeing.

2.8 The Unique Singapore Workforce

The Singapore's workforce is one of the most unique in the world as it is inherently diverse due to its multi-ethnic society. It embodies Western modernity while retaining its Asian values and as such, it also highly influences organisational practices (Yeo & Pang, 2017). For example, Yeo and Pang investigated how organisational communication is influenced by cultural values in Singapore and found that only some traits similar to those found in collectivistic cultures were reflected, thus showing the uniqueness and diversity of the Singapore culture. Using the seven dimensions of Gundykunst (1998)'s individualistic and collectivistic perspectives on communication, they found that only self-disclosure and persuasive strategies reflected more on individualistic scores while reducing uncertainty, abiding by cultural communication rules, maintaining the face of other, observing turn-taking and reducing conflicts reflected more of the common rules embedded within a specific cultural context. This in turn suggests that both employers and employees working in Singapore need to be cognizant of local cultural knowledge in order to communicate and problem solve effectively, thus reflecting the unique identity of the Singapore workplace.

As different factors such as being positive, communication, management of difficulties and conflicts, socio-emotional skills, and values have been shown to influence wellbeing at the workplace (Biggio & Cortese, 2013), the notion of wellbeing at the Singapore workplace is likely to differ from those of any other country. In a large-scale study, Kau and colleagues (2006) sought to understand the values and lifestyles of 1500 Singapore residents and revealed that Singaporeans are fairly tradition in that they liked to stick to the traditional ways of doing things including celebrating festivals and being religious; affiliation with religions therefore could be seen as a way of promoting wellbeing

amongst Singaporeans. In fact, at the workplace, this can already be witnessed as traditional ways of worship such as having an alter for praying to oriental deities are still prevalent in some offices in Singapore especially in construction sites, factories, and Singapore Bus Services depots where it is believed that the workers would be protected from harm. As pointed out by Subudhi (2015) that culture is likely to evolve over time, it will be necessary to investigate how these traditional practices carry forward to the present day and to consider its relevance in the modern Singapore workplace, which comprises one of the aims of the current research to enhance understanding in this area.

2.8.1 Mental Wellbeing in the Singapore Workforce

In the Singapore workforce, the prevalence of mental illness and comorbid mental-physical disorders is 2.5% and 2.4% respectively and accounts for three times the risk of productivity loss in this population as compared to healthy employees (Chong et al., 2012). In addition, a survey conducted by Jobscentral in Singapore in 2012 found that over 80% of working adults reported increased stress level in the last six months, as many employees not only value career as one of the top priorities in their lives, employers also demand higher productivity faced with increasing manpower costs (Soh, 2012). Further surveys conducted by Singapore's Health Promotion Board (HPB) found that the mental wellbeing scores of working Singaporeans are lower than the general population by 13 per cent, yet only 40 per cent of 12000 small-and-medium enterprises (SMEs) expressed interest in investing in the mental wellbeing of their employees due to reasons such as lack of knowledge and resources (HPB, 2012). One of the biggest challenges for Singapore companies is that mental health and stress issues are increasingly having a greater impact on employees' productivity. More recently, the Aon's Asia Pacific (APAC) Benefits Strategy study in 2017 found that in Singapore, 72% of employers see mental issues a concern, yet only 51% have emotional and psychological wellness programmes in place. Moreover, only 62% of companies have plans to implement such programs in the future, which is six percentage points lower than the Asia

Pacific average. This underscores that the status quo has been maintained in the last few years with regard to addressing mental wellbeing at the Singapore workplace, which is a cause for concern given that it directly impacts on productivity.

To exacerbate the issue, Grawitch and colleagues (2014) reported that although a substantial amount of research has emphasized on the importance of promoting employees' wellbeing, little has been done to provide clarity to the process or mechanism. For example, many workplace interventions are simply individually based and do not take into account how they can be integrated into an organisation's unique practices and processes. This brings into question if the programs currently in place for companies to promote employees' wellbeing are cross culturally robust enough. As argued by LaMontagne and colleagues (2014), there appears to be a lack of effectiveness in workplace mental health intervention as well as lack of focus on the positive wellbeing of employees.

In Singapore, Ho (1997) conducted a study to investigate the effectiveness of corporate wellness programmes and found that these programmes had a positive effect on employees' attitude towards their organisations, job satisfaction and satisfaction with additional benefits provided by the organisations which subsequently resulted in a reduction of stress. However, ways to increase employee wellbeing and other specific important employee outcomes such as positive emotions and productivity were not investigated. A reduction in stress also may not necessarily result in increased outcomes for the organisation in the long run (LaMontagne et al., 2007). Further, the study was limited to only fitness regimes provided by the wellness programmes and as indicated by the author, multiple aspects such as leadership, workplace support, role objectives and family involvement need to be considered in a holistic wellness programme. The current research will seek to validate the existing model of mental wellbeing that underpins the Singapore Mental Wellbeing Scale as well as identify the organisational factors that might impact on the levels of mental wellbeing.

2.9 Evidence for the validity of the Singapore Mental Wellbeing Scale

Notwithstanding that the development of the SMWEB scale has brought clarity into the definitions of wellbeing in the Singapore context, there has been no further research on its application or utility to date. The SMWEB scale was developed primarily as a measurement of positive psychological functions of general life experiences of individuals in Singapore. At the workplace however, work life can present a different set of experiences as well as challenges for the individuals. For example, in trying to understand mental wellbeing at the workplace so as to inform better development and implementation of workplace mental health policies and programmes, Rajgopal (2010) identified and explained six domains that can potentially affect an individual's mental wellbeing specifically at the workplace using the Work Stress Scale (WSS): relationship problems with superiors, bureaucratic constraints, work-family conflict, relationship problems with colleagues, performance pressure and poor job prospects. These domains relate directly to the experience of work and therefore lie outside of the general life experiences not captured by general mental wellbeing scales including the SMWEB.

In addition, changes in the workplace such as technological advances in recent years have drastically changed the landscape of work rendering it less physically demanding but more mentally and emotionally demanding, and other significant risk factors such as time pressure, bullying and organisation change have also been identified to be the causes of stress at work affecting mental wellbeing (WHO, 2010). While acknowledging that there are still many industries like construction, farming, and transportation which require the use of physical abilities, the general shift away from physical work to more information and technology-based work driven by a knowledge economy in this developed world suggests that the a more holistic view of wellbeing including the mental health of employees can no longer be ignored. In fact, jobs in the present day require employees to possess multiple skillsets such as having good social relationships and having greater resilience to stress

(Keeman et al., 2017), which makes measuring wellbeing in the workplace context more relevant than ever towards achieving a healthy and productive workplace.

Furthermore, several mental and cognitive skills such as creativity, relationship and emotional skills, autonomy and exchange of knowledge are closely associated to the psychological wellbeing of employees, and increasing these skills not only increases the wellbeing of employees but also productivity and efficiency within the company (European Network for Workplace Health Promotion, 2010). For example, an employee is likely to be able to get more support at work if they can use relationship skills to form closer bonds with his or her colleagues which is likely to lead to better performance. This is supported by an analysis conducted by Heckman and colleagues (2006) in which they found that both cognitive and noncognitive skills have an impact on the ability of an individual to acquire skills and subsequently perform at work, and tapping on these skills can raise the productivity and directly affect the wages of employees.

The SMWEB scale is intended to only consider and capture dimensions of wellbeing from an individual's perspective in general life settings, yet, at the workplace, organisational factors that impact on wellbeing need to be considered within the context of understanding the mental challenges that employees face in the Singapore modern workplace. Marchand and colleagues (2014) highlighted that little research is conducted to include workplace conditions and contexts in capturing employee mental health determinants, and this can subsequently have an impact on workplace interventions as wellbeing needs to be considered from an individual as well as organisational level. A meta-analysis conducted by Harvey and colleagues (2017) elucidated the important relationship between workplace characteristics and employee mental health; specifically, the authors identified 12 workplace risk factors that were shown to be related to common mental health issues: high job demand, low job control, low workplace social support, effort-reward imbalance, low organisational procedural justice, low organisational relational justice, organisational change, job insecurity, temporary

employment status, atypical working hours, bullying, and role stress. This emphasized the important role that workplace characteristics play in determining and improving employee wellbeing in addition to individual characteristics.

Moreover, Biggio and Cortese (2013) argued that employee wellbeing is the result of a synergistic interaction between individual factors and workplace factors. For example, at the organisational level, employee welfare policies can only be implemented from the management, yet at the same time, individual characteristics and behaviour such as effective communication have to emanate the individuals, both of which consequently help to engender workplace employee wellbeing. A mentally healthy individual needs to be engaged with his or her environment (Warr, 1990), and his or her own mental processes play an important role in contributing to the level of happiness within this environment (Warr, 2007). A mentally healthy workplace allows for an employee to reach his or her potential in the presence of conducive workplace factors, which in turn would result in an increase in employee wellbeing. Thus, there is a need to develop a mental wellbeing model which covers both the individual factors as well as organisational factors for the workplace which will subsequently help to define employee wellbeing in the Singapore workplace context.

The notion of wellbeing at work is broad and multidimensional (Fisher, 2014; Grant et al., 2007; Page & Vella-Brodrick, 2009), and it is important to consider multiple factors in understanding employee wellbeing (Grawitch et al., 2006). In the conceptualisation and development of workplace wellbeing measurement, Bartels and colleagues (2019) contended that most researchers tend to reuse general wellbeing measurements in the workplace context with the assumption that the concepts of wellbeing are common to both settings, that is, general and workplace; although some of these concepts may overlap, some may not and do not capture the experiences at work related to wellbeing. For example, the authors pointed out that some researchers simply added the work context such as "at work" to the question but this may not adequately represent the work context either. The social context needs to be

taken into consideration for a valid measure of a workplace wellbeing scale (Keyes, 1998; Ryff, 1989). This underscores that any measurements that purport to assess workplace wellbeing would need to be relevant as well as validated in the workplace context.

The measurement of employee wellbeing in the literature has often been restricted to a few dimensions such as job satisfaction, work attitudes, and affect rather than adopting a multidimensional approach (Pradhan & Hati, 2019), and most existing measurements are based on western cultures that do not directly address other aspects and norms inherent in Asian societies such as local cultural norms and values. In an attempt to fill this knowledge gap, Zheng and colleagues (2015) developed a new employee wellbeing scale specifically for use in the Chinese context based on the theoretical employee wellbeing model proposed by Page and Vella-Brodrick (2009). Through a series of qualitative and quantitative studies, the authors established the reliability and validity of the new scale comprising of life wellbeing, workplace wellbeing and psychological wellbeing which are relevant for use in the Chinese culture. In terms of employee outcomes, the scale also correlated significantly with affective organizational commitment and job performance. However, several differences unique to the Chinese culture as compared to the western counterparts were found in the new scale. Specifically, Zheng and colleagues pointed out that the new scale does not contain any negative emotion as individuals tend to focus on positive emotions rather than negative ones in the Chinese culture; the Chinese notion of independence also differs from the western notion in that the collectivist culture in China places emphasis on harmonious relationships with one another which is an important factor in contributing to having a life purpose. Overall, the study highlighted the importance of incorporating theoretical wellbeing concepts from the West and enriching the development of a new wellbeing scale in the local context so that cultural influences can be accounted for.

In Singapore, research into employee wellbeing continues to lag behind many other Western countries, and there is no suitable scale that is suitable or relevant in the Singapore

context where a unique combination of western and eastern values exits. Hence, the current research aims to develop a mental wellbeing scale suitable for use at the Singapore workplace based on based on the original SMWEB scale, theoretical wellbeing concepts from the West and local cultural influences.

2.10 Relationship Between Dimensions of the SMWEB Scale and the Singapore
   Workplace

The five dimensions of the SMWEB scale were selected based on past literature on the construct of mental wellbeing and analysis of the in-depth interviews, surveys and focus group discussions that reflected Singaporeans' understanding of mental wellbeing (Fen et al., 2013). Although these individual dimensions or factors were primarily intended for use in general life experiences, their potential relevance to and interaction with the workplace context needs to be considered.

2.10.1 Resilience. Various theoretical frameworks have been proposed to explain how employees deal with stressful events at the workplace. Particularly, the concept of resilience is increasingly being recognised as one of the most important key components in buffering stress, adversity and challenge (Masten, 2014). In their integrative model of resilience, Britt and colleagues (2016) made the stark distinction between capacity for resilience and the demonstration of resilience - capacity for resilience addresses the personal, familial, organizational, and community factors that increase the likelihood of positive adaptation when faced with adversity, whilst demonstration of resilience documents the positive adaption that the employee has shown including good job performance, high wellbeing, positive relationships with others and low incidence of psychological problems.

Taking a more holistic approach, Kuntz and colleagues (2016) posited that resilience building is a shared responsibility between the employees and employer, and that the scope of conceptualising resilience be extended beyond responding to significant adversity, that is, non-crisis situations, so that employee resilience can be demonstrated in both stable and

adverse situations. Increasing employee wellbeing is a way that enhances resilience amongst

employees in the organisation (Kuntz et al., 2016), as well as help them to be more

productive (Seeman, 2000). At the same time, people who are resilient are also able to use

positive emotions to cope with stressors (Tugade & Fredrickson, 2004; Gloria & Steinhardt,

2016). This likely allows them to maintain a high level of wellbeing, which is especially

important in a highly stressed workplace environment such as in Singapore. Moreover, being

a small country, Singapore is sensitive to rising challenges such as technological disruptions

and tough business environment, employees therefore need to be resilient in order to confront

unexpected changes and successfully adapt to various demanding roles, tasks, and situations

(Shin et al., 2012).

  2.10.2 Emotional Intelligence. The concept of linking emotion and intelligence as

defined by Salovey and Mayer (1990), is "the ability to monitor one's own and others'

feelings and emotions, to discriminate among them and to use this information to guide one's

thinking and actions" (p. 189). Emotional intelligence involves problem-solving and making

sound decisions using both thoughts and feelings. Having the skills associated with emotional

intelligence not only helps individuals manage their unpleasant emotions such as anxiety and

depression, it also helps promote pleasant ones which can result in an increase in their mental

wellbeing (Brackett et al., 2011). Moreover, emotional intelligence is especially relevant in

today's organisations given their fast changing and unpredictable environment. In fact, a

number of abilities and skills other than cognitive intelligence, such as interpersonal skills,

are also needed to face the challenges at the workplace (Narayan & Narashiman, 2014).

Emotional intelligence plays a crucial role by which employees can interact effectively with

their colleagues as well as use effective strategies to manage conflicts and stress as they arise

which can result in increased job performance (Ashkanasy & Daus, 2005). For example, an

employee with high emotional intelligence is more likely to understand his or her colleagues'

emotions and are also able to express his or her emotions in a healthy and acceptable way

thereby enhancing work relationships and performance. It is also assuring to note that emotional intelligence can be developed over an individual's life span and be enhanced through training (Ashkanasy & Daus, 2002), and this can effectively guide workplace mental wellbeing initiatives and programmes.

2.10.3 Cognitive Efficacy. The cognitive abilities of the employees play an important role in maintaining the demanding environment of the modern workforce (Hunt & Madhyastha, 2012), and a strong and robust relationship between cognitive skills and employment market outcomes is well demonstrated (Nikoloski & Ajwad, 2014). For example, effective problem-solving and decision-making skills are critical for one to perform one's role at the workplace, and these skills draw upon one's knowledge require the continuing development of thinking skills. In fact, people with high cognitive abilities perform their job better as they take in more information and learn fast (Hunter, 1986).

It is well documented that having good mental health have a direct impact on cognitive functioning. There is also evidence that having high cognitive ability can buffer against negative psychological effects (Bridger & Daly, 2018) and help an individual better regulate his or her emotions in the face of stressors (Schmeichel & Tang, 2015). Specifically, cognitive ability is likely to moderate the association between stress and depression, and higher cognitive ability is therefore also likely to buffer the association between stressful life events and depression (Riglin et al., 2015). Thus, cognitive efficacy not only helps to improve job performance, but also improve psychological wellbeing which in turns also helps improve job performance.

2.10.4 Self-esteem. Individual self-esteem describes the extent to which one views oneself whether positively or negatively, and this has important implication on how one functions in life. For example, having a positive self-esteem has been associated with positive outcomes across multiple psychological domains (Kling et al., 1999), and self-esteem has been found to be a predictor rather than a consequence of success and wellbeing in the

domains of work, health, and relationship (Kuster et al., 2013). Rosenberg, Schooler, Schoenbach and Rosenberg (1995) made the distinction between global self-esteem and specific self-esteem; the former refers to attitudes toward an object as a whole while the latter refers to attitudes toward a specific aspect of that object. For example, as applied to work settings, an employee may have certain attitudes toward the organisation as a whole but also other attitudes toward the relationship with colleagues and boss. Global self-esteem is associated with psychological wellbeing whereas specific self-esteem is associated with performance (Rosenberg et al., 1995). Of relevance to the current research, the self-esteem dimension in the SMWEB scale relates to life as a whole and a focus on more specific aspects of employee wellbeing relates to factors within the organisational context. As previously mentioned, individual self-esteem is also to be distinguished from relational self-esteem and collective self-esteem.

Regardless of how self-esteem is measured at the workplace, Ferris and colleagues (2010) examined the conditions under which self-esteem shows moderating effects on job performance. The authors suggested that self-esteem is most sensitive to particular domains in one's life, that is, self-esteem is contingent upon some domains such as work, and it follows that one's behaviours in those domains are likely to have bigger implications for the self. In organisations, self-esteem contingencies therefore need to be considered other than self-esteem level when self-esteem is contingent upon workplace performance, that is, when employees based their self-esteem their performance at the workplace. Improving self-esteem levels is also more likely to usher in a host of other benefits such as employee satisfaction and wellbeing in addition to workplace performance (Ferris et al., 2010).

2.10.5 Social Intelligence. The core component of social intelligence is the ability to engage, connect with others and develop good social relationships. A study conducted by Grieve and Mahar (2013) to investigate the psychometric properties of the English version of Tromsø Social Intelligence Scale (Silvera et al., 2001) for example, provides evidence that

social intelligence was strongly and significantly related to political skill, emotional intelligence and empathy and therefore can be conceptualised as a construct on its own. Research has shown the positive association between social intelligence and employees' outcomes (Goleman, 2006; Lathesh & Vidya, 2018). At the workplace, employees who are socially intelligent can work collaborative as a team especially in today's multigenerational workforce, as well as help build relationships and business networks that will benefit the organisations in the long run (Njoroge & Yazdanifard, 2014). Moreover, social intelligence as well as emotional intelligence competencies have been found to be universal across diverse cultures, and their constructs have cross-cultural validity and reliability (Emmerling & Boyatzis, 2012). This provides further support that having healthy relationships within and outside the workplace can lead to better employees' outcomes including work and life outcomes.

2.11 Workplace Wellbeing Components

There is no universal agreement on amongst researchers as to what wellbeing components constitute employee wellbeing, as researchers are often guided by their interests and areas they wish to examine (Judge & Kammeyer-Mueller, 2011). Nonetheless, the authors reasoned that the most suitable approach would depend on "when, where, and under which conditions is each approach the most useful toward understanding organizational behavior" (p.162). Workplace wellbeing is not only multidimensional as pointed out, but also dynamic and subjective (Juniper, 2010; Zheng et al., 2015). Warr (1994, 1999) for example, made a distinction between context-free wellbeing and workplace-specific wellbeing; the former referring to general feelings about life and the latter referring to feelings in relation to the workplace. Yet, both types of wellbeing have bidirectional influence on one another (Warr, 1999), and psychological experiences from both work and non-work domains, seen as intertwined in one's life, are important considerations in the conceptualisation of employee wellbeing (Ilies et al., 2007; Zheng et al., 2015).

Wellbeing can be traditionally conceptualised in terms of having both hedonic and eudemonic components (Aked et al., 2008; Huppert & So, 2013). Workplace wellbeing on the other hand, can extend further and spread across multiple domains, including cognitive evaluations with affect, hedonic wellbeing, eudaimonic wellbeing, and social wellbeing (Fisher, 2014), given the larger sphere of wellbeing containing both work and non-work domains. Taking this holistic approach of including both work and non-work domains and therefore using general wellbeing measures and work-related measures, Page and Vella-Brodrick (2009) proposed that employee wellbeing should consists of three components, namely subjective wellbeing (life satisfaction and dispositional affect), workplace wellbeing (job satisfaction and work-related affect) and psychological wellbeing (self-acceptance, positive relations with others, environmental mastery, autonomy, personal growth and purpose in life); in fact, this employee wellbeing model has been validated by Zheng and colleagues (2015) as previously-mentioned on a Chinese population sample with the exception that the term "subjective wellbeing" being changed to "life wellbeing" to better reflect happiness in life.

Further, Sirgy (2012) provided eight definitional terms that comprise employee wellbeing, namely, meaningful work, affective response to the work environment, ratio of job uplifts to job hassles, need satisfaction, satisfaction in work life, a component of the broader concept of employee well-being, job-specific well-being and context-free well-being, and the European Commission definition of quality of work. Of relevance to the current research which investigates employee mental wellbeing in relation to his or her workplace, affective response to the work environment highlights the important relationship between the employee and organisational factors; for example, how much recognition an employee perceives (affective response) would also largely depend on how much emphasis the organisation places on employee recognition (work environment).

Recognising the importance that any approach to wellbeing at work needs to take into account both the people and the environment, Warr (2007) introduced the vitamin analogy by which 12 workplace factors or characteristics were delineated that can enhance the level of wellbeing for the employee, which is analogous to how the intake of vitamins can enhance the physical health of a person. Specifically, they are opportunity for personal control, opportunity for skill use, externally generated goals, variety, environmental clarity, contact with others, availability of money, physical security, valued social position, supportive supervision, career outlook and equity. However, Warr also pointed out that just like how some excessive vitamins can be detrimental to the body, an excessive degree in some of the factors can also be detrimental to the wellbeing of employee. For example, excessive opportunity for personal control or autonomy, can result in an oversight of appropriate guidance or supervision required for good work performance. Other factors such as money or salary, though not harmful in excess, is not likely to result in further increase in wellbeing or happiness once it reaches a plateau.

Workplace factors can also refer to the systems or norms affecting the organisation as a whole and consist of both risk and protective factors including but not limited to organisational changes, organisational support, recognising and rewarding work, organisational justice, organisational climate, psychosocial safety climate, physical environment and stigma in the workplace (Harvey et al., 2017). Specifically, the way an organisation functions through its system can have important implications on the health and wellbeing of employees, and eventually, the effectiveness of the organisation itself (Wilson et al., 2004). In a study designed to examine employees' understanding of workplace health and wellbeing, Dickson-Swift and colleagues (2014) conducted a qualitative study with 42 participants of varying management levels, across three organisations, a government organisation, a private, and a national public company; the authors found that organisational aspects, including management support, workplace flexibility, communication, personal

relationships, rewards, and physical spaces, are important factors contributing to the mental and emotional wellbeing of employees. More specifically, the authors brought to attention the significance of organisational culture that can led to improvement in employee wellbeing, in addition to individual effort. For example, simple strategies such as having encouraging managers praise their staff for a job which has been done well can be effective in ensuring that the employee feels recognised and valued who in turn, are likely to work harder and contribute more to the organisation. Thus, this study shows the important dynamic relationship between the individual and organizational factors that lead to employee wellbeing. However, as the study was conducted in Australia, further study is needed to investigate if different or additional factors exist in a different cultural context such as in Singapore.

2.11.1 Workplace Wellbeing Components in the Singapore Context

Hill and colleagues (2004) reported that the majority of research in work and family has been conducted in developed Western countries which share similar culture valuing individualism; employees are also better supported by government and organisational policies aimed at promoting work and family interface. Given the unique cultural context in Singapore, the workplace and family life environment are therefore likely to present a different set of factors as compared to other countries (Sandberg et al., 2012), such as the presence of Confucian values and traditional and festive communal activities (Kuah, 1990) and government's push for greater family values (Chan et al., 2000). For example, apart from having small spaces for traditional ways of worship in many offices, some companies with Chinese Singaporean workers continue to celebrate festivals such as the seventh month ghost festival, all of which underpin the belief that the health of the workers and the company is also dependent on spiritual factors. Other ethnic groups in Singapore also have similar religious or spiritual practices; Malay Singaporean workers observe the fasting period during Hari Ray, Hindu Singaporean workers worship their Hindu deities, and Catholics in a

Catholic School office may have prayers before the work day starts. Despite these differences, different ethnic groups appreciate and respect one another and created a uniquely Singaporean culture which is manifested in the way organisations are managed. Many companies participate in one another's traditional festivities such as exchanging Mandarin oranges during Chinese New Year and wishing one another good luck regardless of race and religion. Another example that is prevalent in smaller companies is the "family culture" within the organisation in that the boss values each and every member of the employee like a family member and shows concern openly whereby a sense of belonging and togetherness is created in a caring work environment (Low, 2011).

Identifying the workplace or organisational factors unique to the Singapore workplace is therefore needed to examine how Singapore work contexts enable positive employee outcomes. In a study conducted by Wyatt and Wah (2001) in Singapore using a structured questionnaire derived and adapted from an earlier QWL study (Miller, 1978a), the authors found four factors that contributed to employees' perceptions of quality of work life and therefore wellbeing, including supportive management, personal growth and autonomy, favourable work environment, nature of the job, stimulating opportunities and co-workers. In addition, the results of the study suggested several features unique to the Singapore workplace environment. Firstly, the Singaporean participants showed a preference for autonomy as well as active participation from others at the workplace, which according to the authors, is surprising given that previous research has suggested that a country with Asian values like Singapore is more likely to be subjected to power distance. Wyatt and Wah attributed this to the increasing level of education and living standards which changed the perceptions and expectations of workplace. Secondly, the results showed that the Singaporean participants valued continuous learning and the ability to apply what was learnt at the workplace, which again runs contrary to the more negative attitude as expected as Singaporean workers continue to receive high level of education.

There is also evidence that some Confucian values continue to remain strong in Singapore. Chan and colleagues (2000) investigated the sources of work stress using self-administered questionnaires from six professional Singaporean groups and found that Singaporean employees indicated interpersonal conflicts with superiors as highly stressful due to the Confucian value of placing emphasis on interpersonal harmony even after the effect of ethnicity was accounted for. Work-family conflict was also cited as one of the major sources of stress due to the strong family values as well as the need to be successful at work inherent in Singapore society; consequently, employees struggled and faced mounting stress when firm commitments to both work and family became irreconcilable (Chan et al., 2000). On the other hand, the study also found that positive personality traits including having a sense of control and a sense of self-esteem helped improve employee mental wellbeing; in fact, as interpersonal harmony is a value strongly emphasised in Singapore, good relationships with colleagues were also found to contribute positively to the work experience and therefore resulted in improved employee wellbeing.

Wong and Yuen (2012) underscored the subtle differences in the meaning of "relationship" as a common concept applicable to both the West and the East; having good interpersonal relationships are important in an individualist Western society because the personal emotional needs of the individuals are met; on the other hand, having good interpersonal relationships in a collectivist Eastern society means more than satisfying personal emotional needs alone; it is more concerned about preserving interpersonal harmony within the group members so that it puts members in a more advantageous position. In the workplace for example, having a good relationship with the boss or people of higher status is likely to give you better chances at getting a promotion or obtaining more benefits. It is therefore common to find items such as "equitable opportunity" and "fair competition" in self-constructed work values scales in Mainland China, as instruments developed in Western

societies may have unintentionally overlooked such subtle differences when they are being applied in the Eastern societies (Wong & Yuen, 2012).

Further research conducted by Haslett and Leidel (2015) has demonstrated the presence of significant cultural differences in work values with students from China and students from the USA. Specifically, the study found that the Chinese students perceived indirect conflict as a source of stress while the USA students perceived direct conflict as a source of stress. While not conducted within a work environment, the results of the study highlighted the influence of culture as an important interacting factor on workplace stressors. Liu and colleagues (2007) reported that interpersonal harmony is an important consideration valued by the Chinese in a collectivist society where they tend to avoid direct conflict; consequently, interpersonal conflicts which disrupt this harmony, that is, indirect conflicts, are likely to be a job stressor; on the other hand, the Americans in an individualistic society tend to be more direct and explicit in their interaction and would therefore view direct conflicts rather than indirect conflicts as a job stressor. Another finding reported by Liu and colleagues in their study with Chinese and American employees also found that a significantly greater number of Americans as compared to the number of Chinese indicated that the lack of job control as a source of stress. This again may be attributed to the higher level of autonomy that individualist Americans are expected to have and therefore resulting in a perceived lack of job control as stressful.

Taken together, the above-mentioned studies are in line with previously discussed notion that local cultural context is always evolving and changing in Singapore. This has been the case over the course of several decades as Singapore continues to develop and define its unique position due to socio-cultural and economic transformation; despite this transformation, a combination of Eastern and Western values at the workplace is to likely to be retained as evidenced in previous findings and therefore, wellbeing components are also likely to be more distinct than other countries and cultures. For example, the previously-

mentioned studies in the Singapore context highlighted the presence of Eastern values as indicated by the participants' need to maintain interpersonal harmony, as well as the presence of Western values as indicated by the participant's need to have a sense of job control. Of relevance to the current research however, both of these studies utilized self-administered structured questionnaires which might have narrowed the scope of the study to the pre-defined factors, and there is yet a qualitative study to elicit perspectives from Singaporean employees as to what might constitute mental wellbeing at the workplace. The 20-year gap since the findings of the studies warrants further investigation in the current context.

2.12 Employee Mental Wellbeing Outcomes

As previously mentioned, employee mental wellbeing has important implications for both the employee and organisation. From the definition of WHO regarding mental health, the ability to cope with stresses in life as well as the ability to work productively are important considerations in the work context. Cox (1992) for example, emphasized the need for practitioners and researchers to look into both employee wellbeing and outcomes including psychological health and organisational outcomes including performance within the organisational health framework. This suggests that it is important to link job performance to wellbeing taking into account the spill-over effects between individual outcomes (nonwork-related) and organisational outcomes (work-related) when examining the totality of a person's occupational health. Indeed, Hart and Cooper (2001) maintained that employees who experience high wellbeing and are happy are of little use to the organisation unless they are also productive; conversely, productive employees who experience low wellbeing and are unhappy are not going to be sustainable on the long run for the organisation. Of relevance to the current research, many organisations in Singapore push for higher productivity with little knowledge and regard to employee wellbeing in terms of positive psychological health as previously mentioned within the workplace context, it is therefore necessary to investigate

both employee mental wellbeing and organisational outcomes as in order for employees and organisations to thrive.

By adapting the employee wellbeing framework proposed by Danna and Griffin (1999) as previously presented, the current research aims to establish an employee mental wellbeing model in the Singapore workplace context based on the original SMWEB scale which was only intended to measure individual characteristics (antecedents) within the general life context. The current research will ascertain the organisational factors (antecedents) within a more specific context, that is, the workplace context in Singapore, that contribute to employee mental wellbeing which will be captured by mental or psychological indicators. This will be conducted through Study 1. The current research will also be testing new workplace Singapore mental wellbeing model in predicting organisation outcomes (consequences) in terms of productivity/performance. This will be investigated in Study 2 and Study 3. The current research conceptual working model of the Workplace Singapore Mental Wellbeing Model in predicting organisational consequences is depicted in Figure 2.2.

Figure 2.2

Conceptual working framework of the Workplace Singapore Mental Wellbeing

Model in predicting employee outcomes
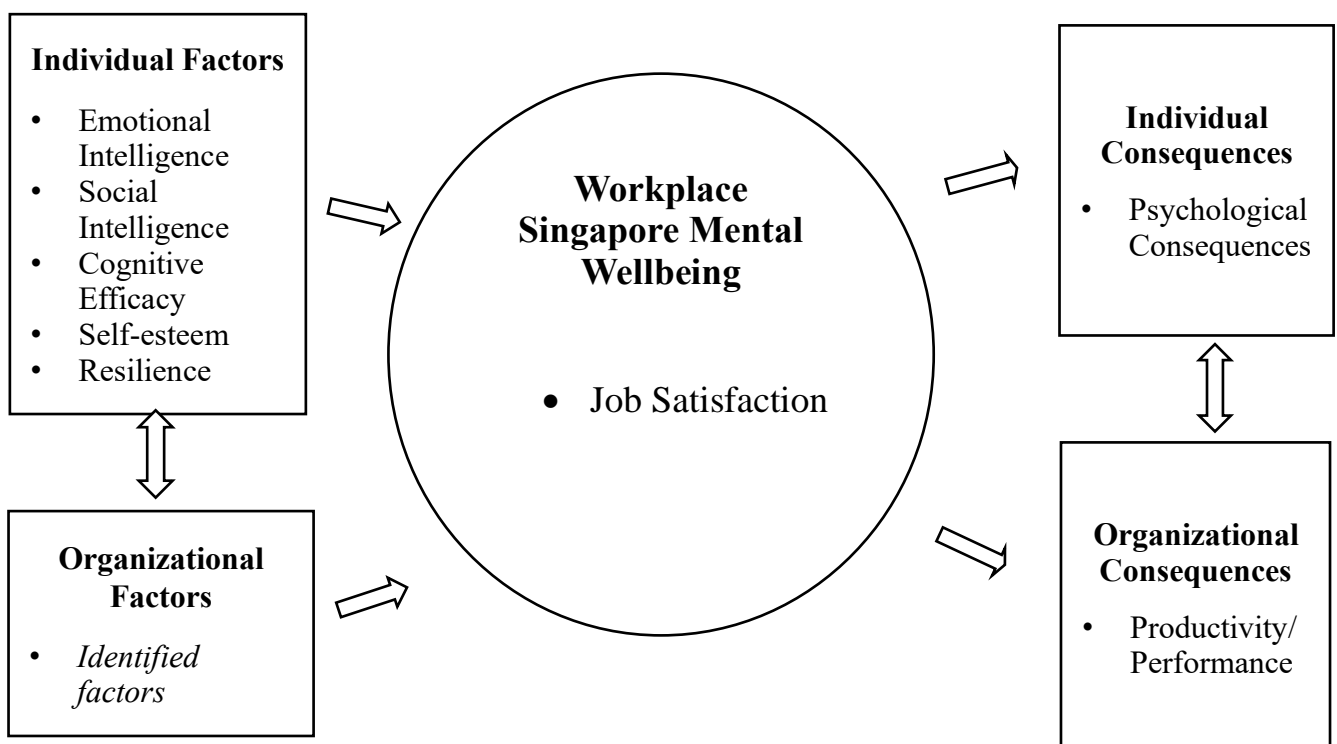
CHAPTER 3: STUDY 1

3.1 Introduction to Study 1

As outlined in chapter 1, this chapter presents Study 1, the qualitative aspect of the research program which overall consisted of a mixed-method sequential exploratory design as described by Creswell and colleagues (2003). This design involved an initial phase of qualitative data collection that was followed by quantitative data collection. The findings from the qualitative analysis of Study 1 were the basis for the conceptual Workplace Singapore Mental Wellbeing Model which was later examined to validate the new Singapore Workplace Mental Wellbeing (Workplace SMWEB) scale based on the employee wellbeing framework developed by Danna and Griffin (1999) as outlined in Chapter 2. The qualitative and quantitative data were analysed separately. The quantitative studies consisting of Study 2 and Study 3 are reported in Chapter 4 and Chapter 5 respectively.

3.2 Rational for Study 1

As outlined in Chapter 2, the Singapore Mental Wellbeing (SMWEB) Scale was not developed specifically for use in the Singapore workplace which presents a different set of challenges. Specifically, the scale was conceptualised and constructed to ascertain aspects of mental health that are important and relevant for the general population in Singapore. These aspects of mental wellbeing captured the individual's positive psychological functioning (Asian Self-esteem, Social Intelligence, Emotional Intelligence, Resilience and Cognitive Efficacy) as part of general life experiences in Singapore. At the workplace however, work life can present a different set of experiences as well as challenges for the individuals, and new aspects of mental wellbeing within the organisational context would need to be identified. Thus, there was a need to develop a new mental wellbeing model which would cover both the individual factors as well as organisational factors for the workplace which in turn would help to define employee wellbeing in the Singapore workplace context and inform

targeted interventions. The qualitative aspect of the research design discussed in this Chapter

is depicted Figure 3.1.

Figure 3.1

Qualitative Aspect of Study 1 of the Conceptual Workplace Singapore Wellbeing

Model in Predicting Employee Outcomes.

Individual Factors as identified in the SMWEB Scale

- Asian Self-Esteem
- Social Intelligence
- Emotional Intelligence
- Resilience
Cognitive Efficacy

Organisational Factors

- Factors to be identified in Study 1 through focus groups (Qualitative aspect)

Workplace Singapore Mental Wellbeing

- Job Satisfaction

Individual Consequences

- Psychological Consequences

Organisational Consequences

- Productivity/ Performance

The purpose of Study 1 is to elicit the perspectives from Singaporean employees in relation to mental wellbeing at the workplace. The research questions guiding this study included:

1. What aspects of mental wellbeing are important in the Singapore workplace?
2. What are the salient organisation factors that influence mental wellbeing in the Singapore workplace?

3.3 Research Design

    3.3.1 Qualitative design. Study 1 was conducted to answer the above-mentioned research questions using a qualitative paradigm. Barker and colleagues (2016) explained the importance of the use of qualitative methods in research study. Of relevance to the current study, firstly, qualitative methods allowed for a more complex concept and phenomenon, that is, workplace mental wellbeing, to be examined in greater details and depth as compared to quantitative methods; secondly, they were suitable for an exploratory study and allowed for a more flexible approach where research participants were given the opportunity to respond in their own ways as well as their own words; thirdly, a specific chosen group of participants could be given "a voice" and have their views or opinions heard, which otherwise would be under-represented in other research studies; lastly, interesting or unexpected findings might be uncovered as the data collection procedures were less rigid as compared to quantitative studies.

    Just as important, Gough and Madill (2012) argued that qualitative research is essentially about human experiences in which the researcher's own experiences including attitudes, beliefs, feelings, and understandings are being drawn upon thereby unavoidably influencing the collection and interpretation of the data. In addition to the subjective understanding of the research participants, the subjectivity of the researcher needs to be embraced rather than eliminated or minimised as this in turn would enrich the research process and outcomes. In fact, it is essential that the researcher shows reflexivity whereby they are able to reflect on how their role and background such as cultural background, can

influence the interpretation of data and help guide the direction of the research (Creswell & Creswell, 2015). Elliot and colleagues (1999) explained that qualitative research is conducted so as to meaningfully and usefully answer research questions that are different from those of quantitative research; the phenomena being studied is based on developing an understanding from the perspectives of the research participants as well as from the interpretation of the researcher. Moreover, qualitative research pertains to how individuals or groups make sense of their world and experience events in their lives, and it allows for the exploration of new areas and provision of rich data from a small groups of research participants (Willig, 2013).

Qualitative research helps narrow the knowledge gap between what occurs in research and what works in daily lives (Greenhalgh, 2002), and the combination of both qualitative and quantitative research helps guide the development of culturally relevant theories and research tools so that effective and relevant interventions can be subsequently developed for the individuals (Sandelowski, 2004). Thus, by utilising qualitative research, the current study examined how participants, specifically Singaporean employees, experienced and made sense of their workplace in terms of mental wellbeing through the subjective and reflexive lens of the researcher. Subsequently, quantitative research was utilised to test the conceptual Singapore Workplace Mental Wellbeing Model in examining employee and organisational outcomes as discussed in the Chapter 4 and Chapter 5.

3.3.2 Thematic Analysis. Thematic analysis is one of the most widely used methods in its own right in qualitative research, and it is suitable for use in a diverse range of epistemologies and research questions including realist, phenomenological or social constructionist questions (Braun & Clarke, 2006; Nowell, Norris et al., 2017). Specifically, it is a way to present data in vivid details including recognising, organising, analysing, and summarising patterns of meaning or themes within the data. As a research outcome, thematic analysis highlights the most significant patterns of meaning which can include affective,

cognitive, and symbolic components (Joffe, 2012). Thematic analysis also offers a high level of theoretical flexibility as it is not tied to any pre-existing theoretical or epistemological position or framework (Braun & Clarke, 2006). As such, it can be adapted to the needs of different studies, yet at the same time, be used to present data in a rich and detailed manner.

Moreover, thematic analysis is highly relevant for use with both social phenomenology and social representations theory, both of which importantly consider the wider social contexts that influence how individuals or groups create meanings of their existence, although there is no need for the researcher to endorse any particular theory when using thematic analysis (Willig, 2013). Thematic analysis is also useful for organising and managing large volume of data sets through a systematic and highly structured approach culminating in rich and detailed psychological interpretations across these data sets (Brooks et al., 2015). However, it is important to note that although thematic analysis itself does not prescribe them; the theoretical and epistemological commitments emanating from the researcher cannot be avoided but need to be acknowledged in order for the data to be imbued with meaning (Braun & Clarke, 2006; Willig, 2013).

When using thematic analysis, Braun and Clarke (2006) emphasised that the researcher must carefully consider a number of choices. To begin, the researcher must decide on what counts as a theme which needs to fulfil the role of acquiring "something important about the data in relation to the research question" (Braun & Clarke, 2006, p. 10). The researcher must decide what is going to determine a theme based on criteria guided by the research question (Willig, 2013), and significant patterns of meaning would need to be underscored (Joffe, 2012). Importantly, the researcher's judgment as well as flexibility in the process of identifying and deciding on what counts as themes or patterns within data is crucial (Braun & Clarke, 2006).

Two main approaches, the inductive method and the deductive method, are delineated in defining themes (Braun & Clarke, 2006; Joffe, 2012). The inductive approach means that

the themes are directly extracted with the raw data itself (Patton, 2015), and the researcher works from the bottom up interpreting the data to form themes, patterns or categories that are more abstract in nature (Creswell & Creswell, 2015). It is not guided by the researcher's theoretical position and the process of coding is free from any pre-existing framework; the themes identified may also have little resemblance with the specific questions asked of the participants. On the other hand, the deductive approach means that the themes identified are extracted based on the researcher's specific interest which often results in a heavier focus on some areas but overall less rich description of the data (Braun & Clarke, 2006). The researcher looks at the data from the top down to find evidence in support for specific themes, and it is further noted that while the interpretation of data can begin inductively, deductive thinking plays an equally important role in qualitative analysis (Creswell & Creswell, 2015). Similarly, Joffe (2012) proposed that a researcher engages both the inductive and deductive methods where theory-informed preconceptions can be combined with openness to accept any new concepts that may emerge.

Another choice that the researcher needs to make involves deciding if the themes to be identified are at a semantic (explicit) level or latent (implicit) level. Thematic analysis fundamentally focuses on one or the other (Braun & Clarke, 2006), but also allows for both levels to be drawn on (Joffe, 2012). At the semantic level, the researcher looks at the explicit or surface content of what the participants have verbalised; it is emphasised that there should be a "progression from description, where the data have simply been organised to show patterns in semantic content and summarised, to interpretation, where there is an attempt to theorise the significance of the patterns and their broader meanings and implications, often in relation to previous literature" (Braun & Clarke, 2006, p.13). On the other hand, with analysis at the latent level, the researcher looks deeper into the content of the data uncovering meanings in what the participants have verbalised thereby identifying "underlying ideas,

assumptions, and conceptualisations and ideologies that are theorised as shaping or informing the semantic content of the data" (p.13).

Taken together, Joffe (2012) highlighted that good quality qualitative research incorporates using both inductive and deductive methods and focusing on both semantic and latent levels of analysis. In qualitative research, the researcher attempts to illuminate a complex phenomenon under investigation in order to develop an explanatory framework or model which consists of multiple factors interacting in multiple ways (Creswell & Creswell, 2015; Willig, 2013). Thematic analysis is well-suited to investigating an area that may be under-researched with the views of participants not normally listened to (Braun & Clarke, 2006). Together with its clear methodological structure and flexible approach in identifying concepts pertaining to the research question, the use of thematic analysis was therefore deemed appropriate for the current study.

Braun and Clarke (2006) provided a six-phase step-by-step process for conducting thematic analysis. The first phase involves having the verbal data transcribed into written form for analysis, after which, the researcher needs to be thoroughly familiar with all aspects of the data in terms of the breadth and depth of the content. This has to be done by repeated readings of the data. The second phase involves identifying and generating an initial list of codes from the data that may be of interest. It will be necessary to give full and equal attention to each data item for analysis. It is important to ensure that all data extracts are coded for as many themes or patterns as possible. Phase three involves focusing the analysis on a broader level and arranging and collating the codes into potential themes. The use of visual representations would be helpful in aiding the arrangement of the different codes into themes. Phase four involves reviewing and refining the themes, and this consists of two steps; step one requires that all the coded data go together coherently to form the themes or patterns, after which, step two requires that each of the theme links coherently with the entire data set. Although coding is an ongoing process, it is important to note that it ceases when no

additional useful information is obtained. Phase five involves relooking and refining the themes until they fit well with the "main story" that the data presents in relation to the research question. At this stage, the themes would need to be concise and clearly defined. Lastly, phase six involves the analysis and write-up of the final report with vivid examples to capture the important points and illustrate the "main story" of the research. It will be important to provide an analysis beyond just the description of the data. This six-phase process is provided in Table 3.1.

Table 3.1

Six-phase Process of Thematic Analysis by Braun and Clarke (2006)

Phase	Description of Process
1. Familiarising self with the data.	Repeated readings of transcribed data ensuring familiarisation.
2. Generating initial codes.	Coding for interesting and relevant aspects of the data across the whole set.
3. Searching for themes.	Analysing and reviewing of codes and organise and collate them into potential themes.
4. Reviewing themes.	Reviewing and refining the themes ensuring they link coherently together in relation to the research question.
5. Defining and naming themes.	Refining the themes and the final thematic map ensuring it tells the story that it is intended to.
6. Producing the report.	Writing up of the report with clear illustrations of the themes and analysis in relation to the research question.

3.3.3 Focus Groups. The use of focus groups can be seen as group interviews in which data is extracted from participants who interact and respond to one another in the group, and it is a recognised data collection technique in qualitative psychological research (Willig, 2013). Krueger and Casey (2015) stated that the goal of focus groups is to obtain data in the form of opinions from individuals across a number of groups, pertaining to the

research question, after which, the data is then compared across the groups. Willig (2013) highlighted that the use of focus groups leverages on a number of key elements that allow for the generation of rich data. For example, the conversations that occur during the focus groups between participants provide the researcher a significant amount of information including the participants' attitudes, viewpoints, and meanings in relation to the research topic of interest. As such, focus groups as compared to one-on-one interviews, provide a more natural setting where interaction within a social group takes place thereby offering high ecological validity in the data generated (Willig, 2013). Ecological validity, which involves looking at the relationship between the findings of the research and its application to real life settings, is seen to be most relevant to qualitative research. On the other hand, construct validity, internal validity, and external validity are relevant and more appropriate for quantitative research (Braun & Clarke, 2013).

As further pointed out by Lune and Berg (2017), the meanings and responses elicited during the discussions in focus groups are not only socially constructed as compared to individually constructed one-on-on interviews, but also reflect the participants' interests rather than the researcher's interest, all of which help to enhance the validity of the data generated. Moreover, focus group discussions enable an issue or area of interest to be understood in greater depths and details, and they also allow participants to contribute with minimal effort to the discussions, yet at the same, allow them to feel heard and understood (Bader & Rossi, 2002). As conversations in focus groups are innately social in structure where every participant has to conform to the social norms just like in the real world, the use of focus groups in research thus allows knowledge and insights to be obtained on a particular phenomenon in real life (Cyr, 2019). Braun and Clarke (2013) further highlighted that the use of focus groups is a very good method of obtaining a diverse range of viewpoints on a topic, exploring under-researched areas and eliciting the opinions of underrepresented social groups.

In recent years, the use of computer and internet-mediated communications to obtain data in both qualitative and quantitative research has become increasingly relevant given the vast improvement in technology that enhances sound and vision (Evans et al., 2008), as well as the ease of scheduling and the lower cost involved for recruiting participants especially in focus group research (Bloor et al., 2001). The digital platforms are able to connect participants from different geographical locations who may otherwise find it difficult to travel to participate in-person (Krueger & Casey, 2015; Morgan et al., 2008); at the same time, the digital platforms such as the use of Skype also help manage logistic issues such as time and space for the researcher (Willig, 2013). Moreover, the data generated digitally is likely to have high ecological validity as compared to face-to-face interaction as both environments are highly familiar and perceived to be safe for the participants (Willig, 2013). Although some disadvantages associated with using digital platforms such as slow internet bandwidth which might interfere with the flow of information (Kollock & Smith, 1996) and the lack of visual facial cues when only the input of words were utilized (Evans et al., 2008), these issues have been largely resolved with today's advancement in internet and mobile technology (Pathan, 2018). Thus, the use of focus groups via an online digital platform for the current study to elicit the perspectives from Singaporean employees in relation to mental wellbeing at the workplace was suitable.

3.3.4 Participants. A total of 31 employees from different industries participated in the six focus groups. Willig (2013) suggested that there should not have more than six to eight participants in each focus group so that every participant has the opportunity to fully participate in the discussion; moreover, transcribing a focus group of more than six participants may also result in reduced accuracy of the transcribed data. For the current study, the size of the six focus groups conducted ranged from four to seven participants. A number totalling 30 or more participants conducted through a series of a few small focus groups is appropriate for a full study as indicated by Lune and Berg (2017), and the number

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also allows for the comparisons of data between groups (Morgan et al., 2008). Although it was expected that a minimum group size to conduct the focus group was five to ensure a certain level of interaction between participants Crabtree & Miller, 1999), one participant did not show up at the very last minute which resulted in one focus group being conducted with four participants. However, this was not expected to significantly affect the dynamics of the interaction in the group as all four participants were actively involved in the discussion.

The aim of the study was to elicit perspectives from Singaporean employees to identify factors in relation to their mental wellbeing at the workplace. In total, 21 females and 10 males with an age range of 29 to 63 took part in the focus group study. These employees worked in various industries in Singapore. Participant number, gender, and employee categories in each of the focus groups are presented in Table 3.2.

Table 3.2

Demographic Table of Focus Group Participants

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	Participants		
	_____		
Focus Group	n	Gender	Industries
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One (FG1)	5	3 females, 2 males	Administrative, Customer Service, Healthcare
Two (FG2)	7	5 females, 2 males	Design, Finance, Manufacturing, Marketing, Music, Travel
Three (FG3)	5	3 females, 2 males	Administrative, Healthcare, Management, Retail
Four (FG4)	4	3 females, 1 male	Construction, Executive (Government), Healthcare (Government), Law,
Five (FG5)	5	3 females, 2 males	Education, Healthcare
Six (FG6)	5	3 females, 1 male	Accounting, Administrative, Healthcare, Logistics

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3.3.5. Procedure. Participants for the focus groups were recruited directly through personal contacts via email and/or telephone, word-of-mouth, as well as through recommendations and snowballing by the participants such as their colleagues or peers. These participants were engaged in various work roles and came from various industries in Singapore as presented in Table 3.2. Participation was voluntary and outside of their office hours; as such, consent from their respective companies or workplaces was not required. These 31 employees who forwarded an expression of interest either through emails or mobile messages were subsequently contacted to establish availability so that a focus group on specific dates could be arranged online via the University of Southern Queensland (USQ)

zoom platform. All six focus groups were conducted by the researcher within a three-month period. Each of the six focus groups lasted between one hour to one and a half hours.

Informed consent was obtained from the participants prior to the commencement of the discussion in each focus group. The researcher provided an overview of the study purpose as well as the definition of mental wellbeing in relation to the workplace. The researcher confirmed with the participants that they had read and understood the information sheet provided to them. The participants were informed of the confidential nature of the discussion and that the focus group session would be audio-recorded to ensure that all information could be accurately captured and transcribed later. The participants were also reminded that no names would be identified in any way during the transcription process. A copy of the focus group participant information sheet and consent form is provided in Appendix A.

To ensure that the focus group discussion could run smoothly, the researcher outlined and provided to the participants a set of ground rules (Lune & Berg, 2017; Willig, 2013). Specifically, the ground rules delineated firstly, the need for the participants to turn their mobile phones into silent mode and secondly, the need to respect one another's opinion and wait for one participant to finish sharing before another speaks. The researcher explained the overview of the discussion process, confidentiality and emphasized that every one's point of views was equally important with no right or wrong responses. The researcher provided an opportunity for the participants to ask any question before the commencement of the discussion.

3.3.6 Data Collection. Qualitative interviews allow for insights to be gained for a phenomenon under study as participants are given the opportunity to think and respond from different perspectives (Folkestad, 2008). Thus, a semi-structured interview schedule was deemed to be the most appropriate which would allow for participants to respond using their own words and meanings (Willig, 2013). Several questions were developed to guide the focus group discussions to identify factors that contributed to mental wellbeing at the

workplace. Although not all the questions were of interest to this particular study, the content of the discussions generated by the questions was of interest. The audio recordings for the six focus group discussions, retrieved from the recorded interview sessions via the USQ Zoom platform, were submitted to a professional business for transcription. The confidentiality of the recordings was strictly emphasized with all the names of the participants de-identified. A copy of the focus group script and discussion guide questions is provided in Appendix B. Ethical approval was given by USQ Human Research Ethics Committee on the 13th of November 2019. The ethics approval form is attached in Appendix C.

3.4 Data Analysis.

The analysis of the transcribed data followed the fix phases of thematic analysis delineated by Braun and Clarke (2006) as presented earlier and seen in Table 3.1. Using a largely inductive process within a critical realist paradigm where knowledge is accessed through a subjective and socially constructed lens such as history and cultural background (Braun & Clarke, 2013), semantic and/or explicit themes within the data were identified. The thematic analysis allowed for the identification of repeated patterns of meaning or themes across the six focus group data sets without adherence to a specific theoretical position. The analysis of the data did not look beyond what the participants in the focus groups had said in order to identify ideas, conceptualization or ideologies that might have altered or informed the semantic content of the data, such as the use of grounded theory with a more constructionist approach (Braun & Clarke, 2006).

However, as previously discussed, the researcher needed to acknowledge his own theoretical commitment for the data to be imbued with meanings, and the interpretations of the data were implicitly shaped by theory and past research pertaining to psychological wellbeing, workplace wellbeing factors and the conceptual Workplace Singapore Mental Wellbeing Model in predicting employee and organizational outcomes. The themes identified were clear and explicit with the data extracts containing many of the actual titles of the

themes. A review of research literature was conducted to help interpret and refine the data to ensure clarity of the more theoretical extracted themes where the actual title of the theme did not come from the data extracts (Bazeley & Jackson, 2013). Further, as a theme can be viewed from different perspectives, negative or disconfirming ideas or information from the data extracts that were contrary to the themes were also included in the analysis so as to increase credibility of the account (Creswell & Plano Clark, 2011).

The first phase of analysis consisted of checking the data files and transcripts for any mistakes after having the data transcribed into written form by the professional transcription service. This was followed by repeated readings of each of the focus group data set to ensure complete familiarization of the data. The second phase consisted of generating and listing initial interesting codes from the transcripts. Braun and Clarke's (2013) emphasized that it is important to "produce insights into the meaning of the data that go beyond the obvious or surface-level content of the data, to notice patterns or meanings that link to broader psychological, social or theoretical concerns." (p. 201, 204). Thus, as the initial coding process proceeded across the six focus group data sets, key patterns related to factors that contributed to workplace mental wellbeing became more noticeable, and similarities as well as differences across the data sets also became more apparent. The third phase consisted of analyzing, reviewing, and clustering the codes according to their similarity from which themes were eventually created. The themes were named in accordance with the perceived meaning and representation of the codes. As emphasized by Braun and Clark (2006; 2013), the analysis of the data was a recursive process moving back and forth throughout the six-phase process. As the process moved into phase four, three overarching themes and 13 themes were eventually identified. Constant revisiting of the transcripts and codes was done to ensure all meaningful patterns across the data sets were analyzed. Phase five consisted of further reviewing all the themes by a final re-read of all the data items across the entire data sets to ensure that the themes identified captured the meaning of the whole data set in relation

to the research question, that is, factors that contributed to mental wellbeing at the Singapore workplace. The final phase six consisted of the writeup including the analyses and results which are described below.

3.4.1 Credibility of the Thematic Analytic Process

Braun and Clarke (2013) addressed several criteria as well as issues with regards to conducting qualitative research of good quality. Specifically, the authors highlighted that reliability is not a suitable criterion for evaluating qualitative research; qualitative methods acknowledge the context-specific nature of reality, with interpretations and meanings generated by the active researcher who inevitably influences the research process. Thus, procedures for evaluating qualitative work such as obtaining the inter-rater reliability of qualitative coding is less appropriate. Rather, reliability in qualitative research should be conceived as "trustworthiness" by following a set of guidelines as described below.

Moreover, the idea of "transferability" as it applies to the current research study, is one of the earliest but important criterion for conducting quality qualitative research (Braun & Clarke, 2013). More specifically, Lincoln and Guba (1985) define "transferability" as the degree to which the results of a piece of qualitative study can be generalised to other groups of people and contexts. Braun and Clarke (2013) explained that the onus of this transferability, that is, to other groups of people and contexts, lies with the reader as the reader needs to come to a decision as to whether the criteria for such a transfer are met pertaining to his or her circumstance. In helping the reader reach such a conclusion, the responsibility of the researcher is to ensure that the qualitative research study needs to be described in detailed including the specific contexts, participants, settings, and circumstances.

In order to increase the "trustworthiness" of the current research study, 15-point criteria check as proposed by Braun and Clarke (2013) has been adhered to. A summary of this 15-point checklist is provided below in Table 3.3.

Table 3.3

A 15-point Criteria Checklist for Good Thematic Analysis by Braun and Clarke (2013)

Process	No.	Criteria
Transcription	1	Data transcribed, and transcripts checked for accuracy.
Coding	2	Equal attention is given to each data item.
	3	Coding process is thorough, inclusive, and comprehensive.
	4	Relevant extracts are collated for each theme.
	5	Themes checked against one another and with original data set.
	6	Themes generated are coherent, consistent, and distinctive.
Analysis	7	Data are analysed and interpreted, not just paraphrased.
	8	Data and analysis concur with one another.
	9	Analysis provides a convincing and coherent overall story.
	10	A balance of analytic narrative and illustrative extracts is provided.
Overall	11	Adequate time is given to complete all phases of analysis. explained.
	13	There is a good fit between described method and reported analysis.
	14	Language and concepts used are in line with epistemological position of the analysis.
	15	The research is "active" in the whole research process as themes do not just "emerge".

In addition, the current research study also adhered to the general framework consisting of four core principles, "sensitivity to context", "commitment and rigour", "transparency and coherence" and "impact and important" developed by Yardley (2000, 2008) to guide quality qualitative research. As explained by Braun and Clarke (2013), Yardley's principles are open and flexible and are applicable to conducting qualitative research in diverse orientations. These four core principles and their application in the current research study are summarised below in Table 3.4.

Table 3.4

The application of the four core qualitative research principles by Yardley (2000, 2008) to the current research study

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1. Sensitivity to context

The researcher showed sensitivity to context through several ways. Firstly, the researcher critically reviewed existing literature and investigation methods relating to topic being studied, that is, workplace mental wellbeing. Secondly, the researcher was sensitive to context in which the study was conducted, that is, participants in the Singapore workplace context, as well as participants' perspectives. Thirdly, the researcher adhered to the ethical guidelines including being sensitive to participants' viewpoints as well as to the interpretation of the data ensuring the researcher's own perspectives and position were not imposed. This ensured that all participants were respected especially given that Singapore is a multiracial and multicultural country.

2. Commitment and rigour

The researcher demonstrated commitment and rigour by paying attention to each stage of the analysis process based on well-established guidelines (qualitative research and

thematic analysis guidelines) including literature review, data collection, methodology, analysis and interpretation of data and report writing.

3. Transparency and coherence

The researcher demonstrated transparency and coherence in two ways. Firstly, each stage of the research process was documented and provided in detail, and sound analysis, interpretations and reporting were made ensuring a good fit between the research question and underlying epistemological assumptions. Secondly, the use of reflexivity towards the research process was continuously emphasized. As previously mentioned, the importance of reflexivity was an important aspect of qualitative research as a way of to enrich the research process and outcomes (Willig, 2013).

4. Impact and importance

The researcher demonstrated the impact and importance of the current research study through gaining greater understanding and insights into the research topic of interesting, that is, workplace wellbeing in the Singapore context, and how the results of the study could be applied to workplaces and inform interventions for positive change towards greater employee wellbeing and productivity.

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3.5 Findings and Discussions

The analysis of the data identified 13 themes, which have been grouped into three overarching themes which in turn help define workplace factors contributing to employee mental wellbeing. The overarching theme of workplace experience consists of autonomy, accomplishment, role clarity, person-organisation fit, learning and professional development, meaningful work and work-life balance. The overarching theme of workplace relationships consists of support from boss and co-worker Relationships. The overarching theme of

organisational culture consists of fairness, organisational support and transparency. A visual

representation of these themes is presented in Figure 3.2 as shown below.

Figure 3.2

A Visual Representation of the Overall Thematic Analysis
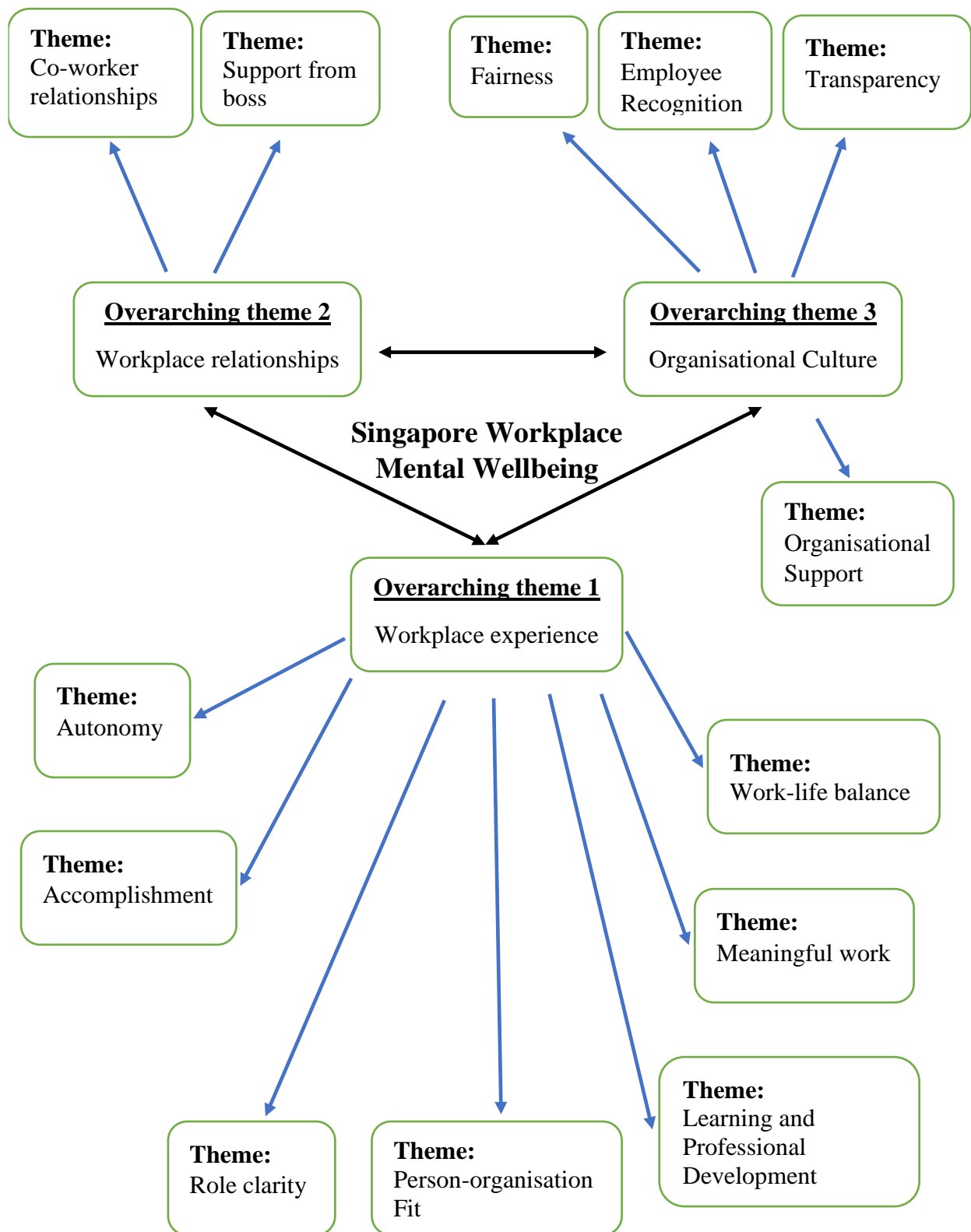
Overarching Theme 1: Workplace Experience

  Autonomy. Having autonomy at work is an important dimension of mental wellbeing at the workplace. Autonomy is concerned with the amount of flexibility, freedom, and independence that employees have in organising and deciding the way their work is to be carried out (Avinandan & Neeru, 2006). Self-Determination Theory as proposed by Deci and Ryan (1985), states that the experience of having autonomy, alongside relatedness, and feeling competence, are needed to foster intrinsic motivation in order to enhance growth and wellbeing. In a particular social context such as at the workplace, an experience consisting of factors including support for autonomy, competence, and relatedness can have a significant impact on learning, achievement, employee motivation, wellness, and productivity (Ryan & Deci, 2017). Specifically, in relation to autonomy, employees perform better as they are likely to internalise their own work efforts resulting in increased self-motivation when managers are autonomy-supportive at the workplace. As P1FG5 put it:

  "Autonomy, like what P2 has mentioned is very important to me. The autonomy to make decisions that are within whatever that I need to do. I'm not being questioned all the time as to why I make certain decisions, but that I'm being trusted by my bosses that I have the organization or client's interest at heart."

This extract suggests that employees need to be given an appropriate level of autonomy to make decisions which should be rightly assumed to be beneficial to the organisation, in contrast to be micromanaged. For example, P3FG3 commented:

  "If I'm always being scrutinized by my supervisors… if I go to work I might get scrutinized again, and that could give me anxiety."

  Moreover, the consequences of not having adequate autonomy at work is described by P5FG5:

  "If the workplace is very rigid and inflexible and the boss is very top-down, I think someone said earlier about finding the rules very micromanaging…then it gets very

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suffocating and difficult to work."

These extracts demonstrate that in addition to the lack of autonomy, the unnecessary scrutiny and micromanagement style implemented by supervisors can result in an undesirable psychological consequence of developing negative emotions such as anxiety and "feeling trapped". This suggests that having autonomy at work not only contributes to mental wellbeing at work, but the lack of it is likely to contribute to negative psychological consequences.

In addition, P3FG4 brought to attention the issue of the "illusion" of autonomy whereby the boss gave the false impression that there was an autonomy of choice, but this was clearly not the case as it turned out, as commented:

"They will give you another way of talking and then you wouldn't even have a choice. In a way, you thought you have a choice but when the time you go over there you're like, 'oh'."

The "oh" at the end of this extracted suggests the disappointment at the loss of autonomy as well as disappointment with the unwelcome surprise that the reality was not what was promised in the first place. Consequently, this is also likely to result in an erosion of trust in the boss and the organisation. In another extract provided by P2FG6, she expressed the need to experience more autonomy in that she could be trusted to do her job which consequently also allowed her to grow professionally as she would be in better control of her own work and could decide what needed to be done for herself.

P2FG6:*"...bosses who don't micromanage...and flexibility in terms of the boss trusting you to do the work that you are meant to do...when they allocate you the project, they don't have to check on every single part of the project but they trust that when you finish one part, you will submit it on time and they don't have to keep following up...yes more autonomy and not feeling stifled."*

The experience of autonomy was found to be positively associated with numerous wellbeing outcomes such as self-esteem and self-actualization (Deci & Ryan, 2000). In the workplace context, the experience of job autonomy as a key ingredient in psychological wellbeing and workplace wellbeing has similarly been well-documented (Ryan & Deci, 2017). Specifically, employees are more likely to be satisfied with the jobs and more trusting of their organisations (Deci et al., 1989) and experience greater wellbeing (Baard et al., 2004; Deci et al., 2001; Lynch et al., 2005) when their managers are autonomy supportive are the workplace. Further, Deci and Ryan (2008) argued that the basic psychological needs for relatedness, competence, and autonomy are universal across different cultures with research supporting that the satisfaction of the autonomy need enhances psychological wellbeing in both Western and Eastern cultures. Indeed, the previous study conducted by Wyatt and Wah (2001) in Singapore found that autonomy was an important factor in the employees' perceptions of quality of work life and wellbeing despite Singapore being more likely to be subjected to power distance due to its Asian values as previously discussed. The current study adds support to Wyatt and Wah's study and found that autonomy is again valued by Singaporean employees as an important factor in contributing to workplace mental wellbeing.

Role Clarity. The importance of role clarity at work has been raised across the focus groups by the participants. Role clarity refers to the degree to which employees receive sufficient information as well as understand the information so as to be able to complete the tasks asked of them and perform their role (Nansubuga & Munene, 2013). Participants highlighted the need for clear expectations to be laid out for the employee so that the job can be performed with confidence thereby helping to reduce feelings of uncertainty and confusion associated with the job, as commented by P1FG3:

"...the emotional, the mental safety...I think sometimes you don't feel safe because you are not very clear of the expectations from the superior as well, or the instructions provided for a particular project may not also be articulated clearly. There's a lot of

guessing game here, 'what is it that you want, is this what you want? Will you look down on

me if I were to clarify more?' and there's a lot of guesswork, which is not helpful at all."

In this extract, P1FG3 expressed the lack of confidence and the lack of emotional and mental

safety in executing the tasks asked of her due to the unclear expectations and instructions.

She also appeared to experience a sense of frustration as she had to constantly guess if she

was doing the job right, and she further feared if she would be reprimanded if she were to ask

more questions. Echoing the same sentiment in the words of P5FG3:

"I think clear communication, expectation from the bosses, your fellow colleagues, clear

roles and responsibilities are important. Taking ownership of who's responsible for what is

very important, I think."

It was important for P5FG3 that role clarity in the form of clear communication amongst

every person in the organisation not just from the boss or from the job description, but also

from the colleagues he was working with. In the words of P1FG3, she brought to attention the

positive outcomes resulting from clear expectations and instructions, as commented:

"I think that's the reason why I feel that with clearer expectations from the superiors

and clearer instructions, then exactly you accomplish what is it that you're supposed to do. I

think then that gives you the satisfaction at work too, and that defines who you are in the long

run too."

In this extract, P1FG3 mentioned that role clarity allows her to perform her role and

accomplish her tasks well which in turn gives a stronger sense of identity at work. She was

able to feel that she contributed to the organisation with an increased sense of

accomplishment and job satisfaction. On the other hand, the lack of role clarity can have

negative consequences as highlighted by P1FG4:

"They expect you know. What's your expectation? What's your expectation or your

so-called protocol from your department? You don't explain to people, but you just say it. Of

course, issues are bound to happen."

P1FG4's comment brought to attention the difficulties encountered by the employee when he was just "expected" to know, yet expectations were not clearly defined and explained. This is likely to result in mistakes made at work which in turn is also likely to affect the mental state of the employee as illustrated in this comment by P3FG6:

"…he did not tell me this kind of things so it makes me very confused, and instructions keep changing…everybody is not sure, so everybody is guessing doing it this way would be better…so the initial three weeks I was quite stressed…I think instructions by the manager must be very clear…"

This extract shows the emotional state of P3FG6 as feeling confused which then led to a mental state of feeling stressed. To make matters worse, people around her including her colleagues appeared similarly confused whether they were doing things right due to the lack of clarity surrounding the job scope.

Role clarity has been widely acknowledged as an important factor in contributing to a reduction in work stress thereby enhancing employee mental wellbeing (Ganster & Schaubroeck, 1991). Role clarity helps employees understand exactly what they need to do thereby increasing the perceptions of competence (Wynne & Stringer, 1997) and avoiding unnecessary workload (Choo, 2017). Although a lack of role clarity exists in every job and role to some degree which can indirectly help to enhance an employee's learning and problem-solving skills (Savelsbergh et al., 2012), a high degree of a lack of role clarity can generate an unhealthy level of stress and frustration at the job (Schaubroeck et al., 2006) thereby decreasing job performance (Gilboa et al., 2008). Role clarity also plays a part in helping employees to better align with the organization's expectations and values (Saks et al., 2007) and provide them with feelings of comfort (Meyer & Allen, 1991). Further, as highlighted by P3FG6 regarding clear instructions, it is important to note that role clarity involves having a direct communication channel whereby job expectations and task

directions are clearly explained and provided by the managers, thus ensuring that employees can commit to their roles unambiguously (Hassan, 2013),

Work-Life Balance. The theme of work-life balance has been consistently emphasized across all six focus groups. Work-life balance can be defined as how employees fulfil their multiple roles effectively in both the work and non-work domains which are also in line with their immediate priorities in life (Kalliath & Brough, 2008); it is important to note that this definition is also inclusive of employees who do not have traditional family duties such as being a parent, but instead choose to pursue other personal interests such as social activities, health, and having pets. This was in fact highlighted by P1FG2:

"There are more and more people who actually choose to be single and not have families or have animals or have partners of the same gender. They are different. Families come in all shapes and sizes."

Moreover, having a balanced work-life balanced can also mean different things to different people according to the life stages that they are undergoing (Chandra, 2012). Nonetheless, having a work-life balance is important for all employees as it is about having the opportunity to be able to do the things that matter in one's life apart from work (Kossek et al., 2014). Participants recognised and agreed on the importance of having work-life balance and some even argued for the need to be given flexible work arrangements so that family needs can simultaneously be well taken care of. As P5FG6 commented:

"For me, mental wellbeing at work means able to have a good work-life balance in terms of able to go home on time and the work that I'm given…flexibility work-time should be something that should be done to encourage the work-life balance…I value other things more than work, much more than work. I value family a lot. I spend time with my children, husband as well. Because I valued it a lot more, it was very important to be to know that the work I do or the place I work at has a very good work-life balance…"

The importance of spending time with family especially the immediate family members for those who are married with children, is being emphasized here. The option of having flexibility in terms of work schedule suggests that needs from family can arise at any time and priority should be given to family needs. This is supported by a study conducted in Singapore that the having the flexibility in deciding when and where work is being done is likely to improve work-life balance which in turn improve employee mental health as well as wellbeing in other areas such as family relationships (Galovan et al., 2010). Looking beyond family needs, P2FG1 commented:

"For me its work-life balance. You need to have a decent amount of hours at work that you contribute to the company but usually, good and proper timing for your health and your family and your loved ones…"

In this extract, P2FG1 recognised that having a work-life balance is not only important so that more time can be spent with family, but also important so that that time be spent on other significant people in life which can include friends. Moreover, she highlighted the need to spend time taking care of health such as exercising, and this might not be possible if most of the time is spent at working. Thus, work is an important component in life, yet, care must be taken so that life does not consist of just work.

The above extracts highlight two important issues. Firstly, having a work-life balance prevents the build-up of stress which may result in burnout; secondly, having a work-life balance allows employees to have more time to themselves which may including more time spent with families, health, and other social activities, all of which contribute to mental wellbeing. In the words of P1FG6 from another perspective:

"…having a better work-life balance gives us better control and also helps to reduce stress and most importantly I think, prevents burnout in workplace…because the whole idea of bringing work home is actually very tiring, you still have to work after working hours and sometimes you go past until 11, 12 o'clock…"

In this extract, P1FG6 made it very clear that not having work-life balance can result in undesirable emotional consequences of feeling stressed and burnout. It also serves to highlight the physical and mental fatigue that he experienced.

Importantly, P2FG3 pointed out that the onus of having a work-life balance lies in the employee being able to make a choice as she commented:

"It's like every time you're saying about work-life balance but actually work is never ending. It's up to you to put a stop to work and then continue on the next day because there's always a next day…"

This highlights another important issue. Having a work-balance is a personal responsibility as well as an organisational responsibility. As P2FG3 puts it, there will always be work but it is how an employee consciously chooses to achieve a work-life balance that plays a part in ensuring that his or her mental wellbeing is not compromised. In fact, this has been highlighted in the quantitative study by Wyatt and Wah (2001) who found that Singaporean employees placed a significant emphasis on family and social life and therefore tended to avoid shift work for example. As previously mentioned, employees in Singapore clock in one of the highest working hours in the world and it may be therefore necessary to evaluate the need for personal responsibility in one's own mental wellbeing. Moreover, as delineated by Fen and colleagues (2013), personal income alongside educational achievement are culturally accepted measures of success in Singapore and working long hours is likely to be a result of the pursuit of job promotion and higher personal income (Lim, 2010). Indeed, rapid economic growth has resulted in long working hours in many Asian countries, and in a collectivistic country such as Singapore, employees are more likely to comply with what the bosses tell them to do including receiving higher workload (Le et al., 2020). Employees who can achieve a work-life balance are likely to have improved wellbeing (Zheng et al., 2015), and the above-mentioned extracts highlighted the need to achieve the work-life balance necessary for mental wellbeing.

Learning and Professional Development. Another theme that has been discussed by the participants as one of the factors contributing to mental wellbeing at the workplace is professional development. Professional development, as explained by Hayes (2010), is a form of learning experience related to the job or role that an employee is engaged in. Specifically, participation in professional development enables an employee to learn and apply new knowledge and skills which can then lead to improved job performance. Workplace learning, which can also consist of both formal and informal learning (Marsick & Watkins, 1990), has also been found to be associated with several positive employee outcomes such as self-confidence, job satisfaction (Huo & Boxall, 2020) and wellbeing (Michalos, 2008).
In the words of P6FG1:

"I want to work somewhere where there's a decent learning curve, where they contribute, and I improve myself."
and P4GF6:

"At least for me it's a concept of larger than self kind of a concept. Then I think what helps is also this concept of learning and growth in my work, so if I keep learning, I keep growing, I feel I'm developing"
These two extracts suggest that it is important for P6FG1 and P1FG5 to experience learning and professional growth at work so they can continue to develop their potential and perform to the best of their ability in their role.

The experience of learning generates numerous positive changes for the employees such as enhancing their skills and competence which help them to manage their work demands more effectively (Holman & Wall, 2002). This in turn, helps employees generate higher levels of work engagement, since work engagement contributes positively to employee health and wellbeing and organisational outcomes (Halbesleben, 2010; Salanova et al., 2010). Moreover, when asked what made an employee feel good at work, P5FG2 responded:

"I am still learning at work… I'm always learning from the seniors."

This suggests the experience of learning from individuals at the supervisory level has a significant impact on wellbeing; it may be that the relationship between the employee and the senior is more heavily emphasized in an employees-supervisor relationship owing to the higher degree of power distance found in collectivistic cultures (Huo & Boxall, 2020) such as Singapore. As employees actively and voluntarily seek learning and professional development, it is also vital that organisations provide such opportunities as commented by P4FG3:

"Like learning opportunity, the growth in the company, the progression path…their first priorities are more on the learning opportunity and also what the companies can offer them in terms of the progression path…",

and P3FG5:

"In my case, it's being able to attend workshops, to professional development type seminars to improve on my skills…I think that's very important for me to constantly be improving my skill set…so that you're constantly evolving and you're not staying stagnant. Having that opportunity to do that is very important."

In these two extracts, it is clear that P4FG3 and P3FG5 recognised the importance of having stimulating opportunities for learning and growth in the organisation. In fact, workplaces that provide more learning opportunities for the employees thereby stimulating growth and career progression are related to increased level of job satisfaction and wellbeing for the employees (Felstead et al., 2015). Moreover, the organisational context, which aims to provide and support learning opportunities for employees to fulfil their learning needs are also important for wellbeing (Watson et al., 2018). In the following comment by P1FG5, the direct support from his boss is equally important toward learning and professional growth:

"For me, it's about growing professionally at work, the work that is given to me is challenging sufficiently so that I feel that I'm developing and growing. On top of that is getting the support from my bosses to be able to perform in my work. They are guiding me,

not just throw me to the deep end, but they guide me sufficiently enough to achieve whatever is required."

Again, in line with the previous quantitative study by Wyatt and Wah (2001) which found that Singaporean employees highly valued stimulating opportunities and it was very important for them to receive ongoing learning as well as the opportunity to fully utilise their abilities and apply what they have learned. These opportunities are important factors that contribute to employee wellbeing at the Singapore workplace (Wyatt & Wah, 2001), and it has also been found that they are just as equally important and valued in the present focus group study.

Meaningful Work. The theme of meaningful work captures an important dimension in contributing to workplace mental wellbeing. It is not possible to live a good life without experiencing meaningfulness (Wolf, 1997), and the ability to acquire meaning from one's experiences in life plays a vital role in determining one's psychological wellbeing (King et al., 2006; Ryff & Singer, 1998). Although individuals can experience wellbeing at the global (life) and domain (work) levels (Steger & Dik, 2009), meaningful work specifically refers to how employees can derive meaning from the work (domain level) they do thereby increasing their level of wellbeing. Meaningful work can be viewed as how important and intrinsically worthwhile an individual perceives their work to be and if the work is consistent with their values (Rosso et al., 2010). In the words of P2FG4:

"…there's one other element which is meaningful work…key factor for wellbeing so I can have a good cause. I have good colleagues, we all have coffee, but then there's nothing very meaningful to do. Meaning for what is translated into fulfilment, satisfaction, work satisfaction, stuff like that."

P2FG4 indicated that it is important that the work itself is meaningful that would provide her with a sense of fulfilment and satisfaction; she further added that although it would be nice to socialise with good colleagues such as having coffee together, this activity itself is not

sufficient for having wellbeing at work. Moreover, a lack of meaningful work perceived by the employees is likely to have negative organisational outcomes including employee retention issue as forthrightly pointed out by P4GF4:

"For myself I must find meaning in the work. If I find that I don't find that my work is meaningful anymore, then that's when I think I should move on."

In addition, people want to gain more from work by finding meaning in the work they do rather than just simply earning a salary (Sverko & Vizek-Vidovic, 1995). As commented by P5FG5, the meaningful work involves being able to make a difference in other people's lives and contribute to the society with money being less of a consideration as long as the salary is fair.

"I think another thing that will contribute to my wellbeing at work will be the sense that I'm actually contributing, the sense that I am actually making an impact to whoever I'm working with…but if I'm paid a lot but I don't feel as if I'm making a contribution or a change or a difference in somebody's life, then I think I'll feel very bothered by it…I can say that making a difference is very important to me while monetary-wise, as long as it's comparable, it doesn't have to be a lot. I think I'm quite okay with that."

Sharing the same view, P4FG6 expressed that it was important for him do be involved in meaningful work in which he could engage in something meaningful for him personally and have a positive impact on others.

"For me I think mental wellbeing at work, I see different parts of it. Number one to me, it needs to be meaningful work, so to me it usually means that if it's something that I care about in life, that I feel that if I do it has an impact either directly or indirectly onto what I care about. The second part will probably be being able to make a difference to something other than myself, so impact others, make others' lives a bit better."

Indeed, Steger and colleagues (2012) defined meaningful work as comprising of three components with a focus on the eudaimonic viewpoint; first, the employee has a personal

encounter of experiencing positive meaning in the work that is carried out. Second, the employee uses work as a means to create meaning for himself or herself. Third, the employee believes that the work he or she does contributes to the greater good. This definition of meaningful work has been consistently reflected in the above-mentioned extracts. The importance of experiencing meaningful work has been underscored. For example, Arnold and colleagues (2007) found that people who experience meaningful work also experience greater wellbeing including psychological wellbeing and better mental health. Greater job satisfaction has also been found when employees report that what they do at work as meaningful (Kamdron, 2005) and when they perceive that their work contributes to a greater cause (Sparks & Schenk, 2001). As Singapore places high emphasis on personal income as measures of success as previously mentioned, the current findings suggest that Singaporean employees also place great emphasis on the importance and value of having meaningful work which enhance can help to enhance wellbeing as illustrated in the following extract by P1FG3:

"I think to be able to do something that is meaningful, being able to contribute to the society, to the organisation. I think that makes a person feel good about themselves…"

Further, it has been argued and empirically supported that meaning in life can be predicted from the satisfaction of the psychological needs for autonomy, competence, and relatedness from the self-determination theory perspective (Martela et al., 2017; Weinstein et al., 2012). Specifically in the workplace context, employees are more likely to find their work meaningful when they also feel autonomous in completing work tasks, feel competent in accomplishing these tasks and feel connected to their work colleagues; this also holds true across different cultures underscoring the important dimension of meaningful work for the employee regardless of background (Martela & Riekki, 2018).

Accomplishment. Accomplishment, also commonly referred to as achievement, can be objectively quantified and sought after even if it does not bring about a sense of meaning

for the individual (Lovett & Lovett, 2016); for example, this can include extrinsic rewards and successes where strong performance is often the focus in Western societies (Butler & Kern, 2016). Moreover, accomplishment can also be quantified subjectively which involves having self-efficacy and utilizing different skillsets necessary in the completion of tasks and achieving goals, which results in the strengthening of the wellbeing dimension (Butler & Kern, 2016). It is the latter, that is, subjective feelings of accomplishment that is the focus of the current study and which has been found to be an important factor in contributing to workplace mental wellbeing. In the words of P6FG2:

"I think for me it's the sense of accomplishment like we are working towards what the company wants to achieve, it provides alignment for us. If we are working towards the vision that is stated in the company's profile or at least being communicated across and we can keep progress in that direction…"

It is clear that in this extract, having a sense of accomplishment in the form of taking on responsibilities in line with the company's direction is important for P6FG2. Similarly, P5FG3 talked about achieving measurable goals in stages from short medium to long-term goals that helped drive and motivate her at work and at the same time, increase positive emotions for her, as commented:

"I think feeling good if we're talking about objectives, then I think having a short-term goal, to be able to achieve a short-term goal, measure against it, I think there's improvement in achieving the goal. I think that's good so that when the goal is being achieved, there's always a milestone, then you gain traction, again you gain momentum at work, people come together and celebrate together. I think that's a good measurement, having attainable goal within short-term and then of course having many short-term goals will lead you to intermediate-term goal and the long-term goals as well. I think that's what drives.

In the extract below provided by P5FG6, it is evident that from her example given that she described her sense of accomplishment and "feel good" feeling as a journey of having mastery and working towards achieving a goal, which in turn gave her a sense of meaning:

P5FG6: *"...it is something that you like to do, you feel like everyone finds meaning in a different way. If I feel like I am helping the company, then I feel good about it...well, I give example, so just like trying to, we have a new acquisition and we're just trying to integrate a new entity and seeing that's slowly coming together, I enjoyed that part of it."*

In the following extract, P1FG3 highlighted the important role that work played in her life. Specifically, she spoke of being able to accomplish something at work resulting in a stronger sense of identity as she was able to better identify with the organisation. Yet, she described the resulting feeling as more than just feeling good but was unable to elaborate further. This suggests that having a sense of accomplishment goes beyond the hedonic viewpoint of "feeling good" and is likely to include the eudaimonic viewpoint of positive psychological functioning consisting of having meaning and purpose and realising one's potential in life.

P1FG3*: Yes. I think work, to a certain extent, defines our identity is from at work or just one of the components. I think, as I was saying, then if it is meaningful and you know you're contributing, you have accomplished something, I think then that helps in the definition as well, your work identity...I think it is more than just feeling good, but I'm not sure whether you equate feeling accomplished being able to contribute as just a good feeling or there's more to it, actually."*

On the other hand, a lack of a sense of accomplishment, as P1FG5 explained, is likely to result in a decline in mental wellbeing, emphasizing the need to experience a sense of accomplishment toward his own personal growth.

"If let's say I'm given very routine work, then I think I will feel really bored after a while. I think that will affect my wellbeing. Challenging work doesn't mean something that is

so difficult for me to achieve, but something that is at the next level, so that I feel like there's a sense of achievement, a sense of accomplishment in growing to my next level."

Indeed, competence, forms one of the three tenets in underpinning human thriving through the satisfaction of the core human psychological needs in the Self-Determination Theory as proposed by Deci and Ryan (1985). Having a sense of accomplishment which involves the ability to perform and complete tasks in their role including working toward and achieving goals, master, and efficacy, is important at the workplace (Butler & Kern, 2016). Thus, the above-mentioned extracts suggest that experiencing a subjective sense of accomplishment at the Singapore workplace, is crucial for mental wellbeing, alongside the pursuit of economic growth and success in Singapore. This may stem from changing needs and expectations of Singaporean employees where high level of education and standards of living are already achieved in the way of having an objective sense of accomplishment. Beyond material success, Singaporean employees are likely to find it important to fulfil their subjective sense of accomplishment as highlighted by the participants.

Overarching Theme 2: Workplace Relationships

Co-worker Relationships. Co-worker relationships represent one of the most significant factors in contributing to the workplace mental wellbeing. Having a good relationship with colleagues is important from a basic human need perspective that humans are social beings with a fundamental need to interact, connect, and belong (Baumeister & Leary, 1995). It is also important from a social wellbeing perspective and that having positive relationships with others enhances positive mental health, and it has also been found that increasing educational level is also likely to contribute to increased social wellbeing (Keyes, 1998). In the Singapore context where there is a generally a high level of educational level amongst employees, social wellbeing remains the focus at the workplace where employees are able to tap into the usefulness of having positive co-worker relationships. In the words of P4FG4:

"I think to be able to talk to your colleagues, to be able to feel comfortable with them…but to be able to have a few colleagues to talk to, feels close with… I think being humans, I think at least the human-to-human interaction is quite important. So, if I really hate my colleagues, it's like I'm alone in a big organization, then it's quite pointless to stay on that..."

In this extract, P4FG4 described her fundamental need as a human the need to trust in and connect with others in a way that can provide her with emotional comfort at her organisation. At the same time, she also raised the fear of feeling alone and alienated if she does not get along with her colleagues. In the view of another participant P4FG1, she placed the emphasis of having a positive relationship with others above other factors at the workplace environment, as she commented:

"I think one of the things that really contribute is good interpersonal relationships with everyone around you and everyone you interact with because they are eight hours of your life on a daily basis. I think relationships can really make or break any environment regardless of skill level, skill set and position."

Emphasizing the importance of building meaningful relationships with others, P1FG2 suggested that time and opportunities are needed at the workplace to develop such a relationship before an employee can make a contribution to the organisation. As such, it will be crucial for the organisation to focus on helping employee foster close bonds with one another in the initial phase of joining a new organisation.

P1FG2*: "Almost every one of us would experience that. When you first join a new company, a new role, most of the time you won't know the people there. The first 100 days, the first six months sometimes. It could take as long as six months to be able to feel confident enough that you are bringing value to the organization and that you are able to develop meaningful relationships at work. I think the first three to six months is pretty crucial to be able to feel - that's probably the most sensitive period."*

Echoing the same sentiment, P2FG2 commented that time is needed to build a relationship within the workplace.

"...it's great to have that relationship with the boss and your colleagues but it's something that takes time to develop. It's not like when you join the workplace immediately you will develop that relationship..."

This close relationship between colleagues is also important in the form of validation especially in times of stress and when the organisational management style is less than ideal. As expressed by P2FG3, she described the bonding between colleagues as an emotional safety net in which feelings are validated and strengths are forged amongst one another.

P2FG3: *"... even though we had a bad superior or management, I think the colleagues is also much important also because I think it's like a safety net for your opinions and decisions in work...I think our colleagues is also a contributing factor for us to feel safe at work...It creates that bond. Even though work feels draggy, it's like, "I'm not in this alone. My feelings are valid." My mental wellbeing, let's say if I'm feeling very stressed, is valid because this one person is having the same effect on everybody in the department."*

This sentiment is similar echoed by P2FG4 where he described sharing the work burden together.

P2FG4: *"If my colleagues are nice, we can face the hardship together, but if my colleagues are not nice, my hardship I can only face it on my own. Hence, the well-being is not being improved on, so to speak."*

Further, having a good and close co-worker relationship makes it easier for one to approach and assist one another in solving problems encountered at work thereby alleviating a significant amount of work stress. It is also important, as commented by P4FG1, that colleagues can be honest with one another, and a high level of trust between one another is necessary.

P4FG1: *"Chances are the problem you are facing could have already been faced by someone else so they might have a solution for something that you are stressing about which means the stress is gone again. If you don't share the difficulty you're facing, someone else has probably a very simple solution to what- but you're too deep, you need to see it so sometimes the interpersonal relationship helps because you're more likely to share and more honest. The more honest you are, the easier it becomes then you solve the problem instead of masking it."*

The theme of co-worker relationship epitomizes the fundamental human need to form social bonds. People come together and form interpersonal bonds and friendships from a range of experiences including having shared both pleasant and unpleasant circumstances together or just having the opportunity to interact frequently (Baumeister & Leary, 1995). This was evidenced in the above-mentioned discussion put forward by the focus group participants such as facing the "hardship" together at the workplace. Relatedness, as espoused by Ryan and Deci (2017) as being socially connected, alongside autonomy and competence, all of which comprise the basic human psychological needs, is especially pertinent at the workplace in which colleagues feel cared for one another as members of the same group. Satisfaction of the need of relatedness thus helps to contribute to workplace mental wellbeing. The need to form close interpersonal relationships at the workplace in Singapore, as found in the earlier quantitative study by Wyatt and Wah (2001), is again supported in the current study, where greater emphasis is placed on interpersonal harmony within the group members, that is, co-workers in a collectivistic culture in Singapore.

Support from Boss. Having a good relationship with the boss, in addition to having good relationships with colleagues, completes the overarching need for humans to connect with one another as social beings. The findings indicate that participants place just as much emphasis on the relationship with the boss if not more, as compared to the relationship with colleagues. However, there are differences in the way relationships with colleagues and

relationships with the boss play out in the workplace context; having a good relationship with the boss entails receiving various forms of support from them in a way that would help them perform to the best of their abilities at work thereby enhancing their wellbeing. These forms of support can include both professional support and emotional support, as illustrated in the following extracts below. In the words of P1FG2:

"I was totally fine with a toxic environment when my boss was there because he was an awesome boss. He was very nurturing. Always had my back. I think P4 or one of you, can't remember who mentioned that you can't get everyone to be perfect but if you have a good boss, to me, one person was enough."

In this extract, P1FG2 spoke of her boss as one who was very nurturing toward her and was caring for her on a deeper emotional level regardless of how unhealthy the workplace environment can be. To her, one person, that is, her boss, was sufficient for her mental wellbeing at work. Sharing a similar view, P1FG4 spoke of the importance of having a boss who can journey with her at the workplace in the way of being encouraging and supportive, which in turn would help her manage her stress level.

P1FG4: *"Yes, your boss is very important… if you have a boss that is non-supportive or always negative about things that you do, or non-encouraging or non-supportive, I think that's where that will trigger that stress level in a workplace even though despite you having good colleagues, this and that. I think that's important because you get support from them but at the end of the day, I think your bosses is most important that whoever you report to."*

Thus, the boss plays a crucial role in maintaining a good level of mental wellbeing, as also commented by P5FG5:

"Also having a boss who's encouraging, at the same time able to help me to explore new things that I want to explore, giving me some room to make mistakes as well without being punitive, that'll be helpful. I think that will probably increase my mental wellbeing and make me grow at work."

In this extract, P5FG5 spoke of having a boss who is both nurturing allowing him to learn from mistakes and is professionally inclined in helping him explore new areas and grow at work. As echoed by P4FG3:

"Motivation is, more or less, whether from your superior where he gives opportunities and he sees your strength and help to develop your strength in the working environment or even if he sees your weakness, he will help you to overcome your weakness, to maybe giving some departments trainings and help you to grow in the company."

In this extract, P4GF3 indicated that the support from the boss comes in a way of being able to motivate her at work; the boss is not just one who she reports to, but one knows how to capitalise on her strengths, overcome her weakness and provide the opportunity for her to advance professionally at work. Thus, the boss is seen as one who is expected to not only to know how to perform their job well so as to guide their employee in their role, but also as one who possesses a different skillset, that is, to be able to help employee develop their potential to the fullest and bring out the best in them at work.

It was also important for the boss to be approachable and for both the boss and employee to be able to share and communicate honestly with each other about any challenges or difficulties faced without any repercussion. As commented by P1FG6, the absence of office politics at her workplace lies in the way that every person at the workplace was able to express honest opinions about one another including with the boss. In fact, the smaller organisation that P1FG6 was working at is suggestive of the "family culture" in Singapore in which the boss values each and every member of the employee like a family member and shows concern openly whereby a sense of belonging and togetherness is created in a caring work environment (Low, 2011).

P1FG6: *"Having a boss that is approachable is also good for the mental wellbeing…if I don't know something I shouldn't be afraid to ask my boss, that, 'Oh. I don't know this thing, certain thing,' my boss is not sarcastic towards me or saying that, 'Well, if*

you don't know, you go and figure it out yourself,' something like that… but of course relations between the colleagues, between the bosses are the most important because we don't just work alone, we work with people. Politics- if those can really tie down, like right now, the company, I'm working in, there is completely no politics at all. Everyone is very upfront with each other. If we don't like certain things, we just say it out and there is no hard feelings."

On the contrary, P1FG5 spoke of how her wellbeing at work would be affected if the boss displayed characteristics as commented:

"The thing I was thinking about was how the boss is like. I was thinking about bad bosses, like a controlling boss, a boss who only cares about himself, a boss who's unfair among the different colleagues. I think these will be things that show how the boss is. I think if he's not supportive, if he's controlling, if he only cares about himself, I think it will definitely rock my wellbeing."

In this extract, the boss was described as one who micromanages, is unsupportive, is unfair and shows little concern for the welfare of their employees. In fact, narcissism traits which are concerned with a personality disposition toward inflated self-views, self-focus and self-love are found to be to have a detrimental impact on employees' emotional state and work performance (Ellen et al., 2017). In addition, the comments by P1FG5 suggested a sense of dissatisfaction with the boss, which according to Kopp and coleagues (2008), has been shown to be associated with increased mental health risks and lower wellbeing for the employees.

There are many ways to define a leader, and a leader can be described as any person who can exert an influence over another person or a team toward achieving a goal (Bryman, 1996), and this person can be the boss. Although it is often challenging to ascertain what makes a good leader (Pastorino & Doyle-Portillo, 2019), Sivanathan and colleagues (2004) highlighted the importance of enhancing employee wellbeing through having a positive leader. Specifically, of relevance to the current study, the authors delineated three

characteristics from a leader which are crucial. First, the leader is able to motivate and help employees to develop their potential and perform at their best thereby increasing their self-efficacy. Second, the leader is able to intellectually stimulate and help employees explore improved ways of doing things thereby also increasing their self-efficacy. Third, the leader is able to connect with employees by way of listening, caring and empathizing with them. Further, the way a leader behaves also plays a role as a work stressor (Burke, 2010). Thus, as discussed in the above extracts, the support received from the leader, that is, the boss, who exhibited these characteristics is vital in enhancing employee wellbeing and having an improved wellbeing for the employee would in turn lead to improved work performance for the organisation (Russell, 2008).

Overarching Theme 3: Organisational Culture

  Fairness. Fairness is one of the most basic concerns in society. The perceptions of fairness, according to Brotheridge (2003), refers to how employees perceive fairness at the workplace in terms of how equal they are being treated in two main areas, namely, distributive, and procedural fairness. Distributive fairness refers to the equal distribution of outcome related resources such as work, privileges and responsibilities, whereas procedural fairness refers to the extent to which the decision-making process is fair, open, informative and respectful. (Prilleltensky, 2011). In the current study, participants highlighted the need for fairness at the workplace which would help contribute to mental wellbeing. In the words of P3FG3:

  "I think one of the ways that can affect my mental wellbeing, which is related to workplace is a lack of fair defined rules within the company such that people are always wondering, 'Did I do it right? Did I do it wrong? et cetera."

In this extract, P3FG3 spoke about how the perceived lack of rules relating to fairness resulted in feelings of uncertainty and self-doubt in the work that she performed and possibly even in herself as she internalised such feelings thereby affecting her mental wellbeing. In the

following extract, P2FG6 spoke about the unfair allocation of work which could be even seen as a subtle form of bullying as she was given more work without any discussion with her as she commented "without arrowing you" due to her perceived lower position at the workplace.

P2FG6: *"I think maybe just unnecessary pressure from management in terms of - or maybe unfair allocation of work just because maybe you're not a senior staff so maybe they give you more work. They ask you to do more things without arrowing you."*

Unfairness in the form of favouritism has also been highlighted. In the words of P1FG2:

P1FG2*"Well, in companies that are very old-school thinking, they're not progressive, they're not keeping up with the times. Not keeping on times with their business methods and the way they conduct businesses, but also in other issues, being fair to males and females and not playing favouritism. There are still companies that do not reward on merit but reward on PR skills. I think those are some of the factors and that companies are aware of such issues when it's important. You see, US companies getting more aware of such issues, but I don't think in Asia, this has been raised yet and I don't think we're close in Singapore."*

In this extract, P1FG2 raised several important issues. First, favouritism is exhibited in the form of gender bias where one gender was given access to unfair privileges as compared to a different gender. Second, rewards for employee were based on how well the employee gets along with the management team. Third, P1FG2 made a comparison between Asia and the US indicating a difference the way organisations are run. In Singapore, organisations appear to be lagging behind Western countries in terms of providing fair and equal treatment to every employee. Although Singapore has been heavily influenced by Western business cultures, a combination of Eastern and Western values is likely to be retained as previously discussed; it appears that "guanxi", a personal relationship that brings two people closer together (Chen & Tjosvold, 2007) is at play here. For example, a person with a better "guanxi" could be better taken care of as compared to others (Yang, 2013), and in the workplace context as P1FG2 stated, "guanxi" allowed a particular employee to be rewarded

unfairly which was not based on merit. Another example of unfair practices at the workplace in which "guanxi" was at play was provided by P4FG2:

"One of my colleagues, she made sure she built a really good relationship with HR, was able to decide or influence the decision on sponsoring her for an MBA in Switzerland. She made it in such a way that she really took up a lot of time of the HR person, built a rapport with this person outside and at work as well. She got to go on to a two-year or a one year, fully sponsored MBA program in Switzerland. This is something that is open to the entire organization as in the entire company, but no one knew about it. Then people started asking where she went and they started asking HR, 'Why didn't we know about it?' It wasn't openly shared, and I think that caused a lot of resentment in the organization. Eventually your performance drops. The company, the Singapore HQ anyway had to downsize because people aren't happy, people are leaving as a result…"

In this extract, it is clear that other employees perceived such unfair privileges given to a particular employee who knew how to capitalise on "guanxi", triggering in a huge decline in morale within the organisation and work performance, which subsequently resulted in a high turnover rate.

Employees view fairness in the organisation seriously because perceptions of fairness fulfil the human psychological needs for the need to have control, the need to belong, increased self-esteem and meaningfulness at work (Cropanzano et al., 2001). On the contrary, low levels of perceived fairness in the organisation also doubles as a work stressor thereby decreasing employee health, wellbeing, and performance (Fujishiro, 2005). Moreover, the perceptions of fairness at work can in turn influence employees' attitudes toward the organisation and their subsequent behaviours (Blader & Tyler, 2005), such as lack of commitment and high turnover rate. On the other hand, employees who are treated fairly are more likely to stay on with the organisation (Ruiz-Quintanilla & Blancero, 1996).

Transparency. Transparency within the organization is another important dimension which has been highlighted by the participants in contributing to their mental wellbeing at work. Transparency is concerned with information and the sharing of information regardless of the content, and it helps to enhance employee wellbeing by alleviating stress and uncertainty (Farrell, 2016); in terms of the decision-making process, employees would generally expect transparency in what is involved in the process and how decisions are made at the workplace. Further, transparency can be broken down into and as a function of three characteristics, namely, disclosure, clarity, and accuracy (Schnackenberg & Tomlinson, 2016); disclosure refers to the extent that relevant information is received in a timely manner; clarity refers to how well the information received is understood; accuracy refers to the correctness of the information received. Importantly, each of these characteristics helps mediate the positive relationship between transparency and trust, both of which help promote a greater sense of employee affective commitment thereby also indirectly help improve the psychological wellbeing of the employee (Klimchak et al., 2020). In the words of P6FG1:

"The symptoms like you all you mentioned is important to have a company which fosters transparency. You can want to share your problems but if you're working with somebody who is toxic, people are unreliable you can't trust them then you are less likely to also want to share your problem. It's definitely an issue there."

In this extract, P6FG1 highlighted the need for the organisation to foster transparency so as to be able to better manage difficult work relationships with colleagues who are less reliable. Trust is associated with transparency in a positive relationship, and transparency is also dependent on trust (Rawlins, 2008). Trust is important because an employee may not know if a colleague would share divulge and use the information being shared with the colleague in the absence of trust as indicated by P6FG1. Transparency thus helps to mitigate such negative experiences which also helps to reduce the level of anxiety and uncertainty at the workplace (Rawlins, 2008).

In the following extract by P1FG2, she spoke of how information was not communicated regarding her performance which subsequently affected her confidence level as she was not sure if she was doing things right at work. In addition to her mental wellbeing being affected, she also indicated that her physical health would be affected as she might start to fall sick.

P1FG2: *"Perform also, right? If feel ambiguity, you're not sure. If things are not being said to you, things are not being transparent. You're not quite sure whether you're on the right track or do you need to doubt yourself but then when you doubt yourself then you might make mistakes because you're not quite sure. Then it reduces your confidence level as well, it feels like spirals then maybe you feel like you don't feel so good. Maybe you start falling sick. I think."*

In another extract in the words of P4FG2:

"…just agreeing with what P7 and P3 say now. I think transparency, being open, communicative is important. I think it's not necessarily equals to being fair because if you talk about it, it can never be that - it's perceived fairness, right? Because no matter what you have to differentiate between the good and the not so good performers. The person might not agree with your assessment of them but somehow at some point you have to judge and reward some people more. It's all subjective in a way because it's perceived performance but then I think it helps to be honest and transparent and communicate. Like I've been in situations before at work where like what P7 was saying. Some people got the bonus and some people didn't...just set their expectation so that people don't have to whisper behind your backs and not say if you got anything and not. I think communication and being honest and transparent…it helps the environment and the situation in the workplace if the boss is communicative and open."

P4FG2 spoke of the importance of being transparent in sharing important and relevant information, albeit unpleasant, to all the employees at the workplace irrespective of how the

respective employees are going to react. Transparency in this context ensured that the employees were made aware of how rewards were distributed fairly according to merits thereby reducing speculation, mistrust and rumours. A lack of transparency in terms of communication resulting in a lack of trust amongst co-workers was also evident in the following extract, as commented by P4FG3:

"*For example, maybe one or two of your colleagues has always been trying to take information of the accounts that you're handling and then they got the information but they pretend that they don't know during the meeting and then they ask you. If you answer maybe not correctly or not in details, then after that they got the information off, this this this. It's not very healthy because it's not very transparent in terms of the communication. I think if the communication is not transparent, it actually leaves a lot of negative vibes that after the bad experience... lack of transparency and lack of trust or you're not sure what is their intention of doing that or you're not sure why they want to do that to you. Especially in the commercial world, I feel that it's very competitive, and that might be the case of people trying to do certain things in certain manners.*

In this extract, P4FG3 narrated her frustration where a few of her colleagues were not being transparent in terms of withholding important information in a way that satisfied their own hidden malicious motives. She attributed this behaviour to being in a competitive corporate setting in which employees are likely to behave in an unprofessional manner in order to climb the corporate ladder. The erosion of trust which ensured was similarly evident in the narrative.

Fostering of transparency in terms of having clear communication within the organisation is therefore crucial for the wellbeing of employees as it helps to reduce stress and uncertainty; at the same time, it also helps to build trust within the organisation which further motivates employees to work together toward achieving organisational goals (Farrell, 2016). Transparency is also important in terms of respect for one another and relationship

building in the organisation because people who communicate transparently are often held in higher regard than those who did not communicate transparently (Auger, 2014). As previously discussed, having a good relationship with co-workers and a good relationship with the boss in terms of receiving good support are important dimensions contributing to workplace mental wellbeing, and transparency helps to lubricate these relationships.

      Employee Recognition. Employee recognition within the organisation is another identified theme which participants highly value. Participants expressed the need to be recognised by everyone at the workplace including the boss and colleagues and for those who work in the service industry, clients as well. For example, in the words of P2FG1:

      "I think the clients they don't need to get me gifts or give you-I mean, all they need to say is thank you, and if they appreciate for all my training. You feel good enough. I think, appreciation, it means a lot. For one thank you from a big, big boss and all, oh no, thank you, it's very hard for them to say thank you sometimes…"

P2FG1 spoke of how being recognised by her clients induced positive emotions for her. She further lamented and felt perhaps disappointment that despite the hard work she put in, she did not receive even a simple recognition from her boss even in the form of a "thank you".

      The need for recognition amongst employees is ubiquitous regardless of the type or status of the job (Brun & Dugas, 2008). Brun and Dugas identified four employee recognition approaches within the organisation, namely, personal recognition, recognition of work practices, recognition of job dedication and recognition of results. In turn, these approaches are vital in fulfilling employees' needs in two ways, first, being recognised as a unique and whole person from the humanistic perspective and second, being appreciated from the contribution they make for the organisation from the work psychodynamics perspective. Moreover, recognition can also come in different ways such as being acknowledged, being appreciated, or being endorsed that one has done something positive or accomplishment something (Caligiuri et al., 2010), and these forms of non-monetary recognition can come in

the simple ways such as saying thank you, giving praises, acknowledging and appreciating ideas being provided and being respected (Nolan, 2012). In the words of P2FG1:

"I'll give you an example. You work in the hotel industry, the GM knows everyone's rank and file to the doormen and greet the same doormen and not just have eyes for the HOD and the directors… then the doormen will feel so happy if the GM greets them, because he's just doing. You need a cleaner, you need housekeeping, you need a doorman. GM is a very small person but if they come to work every day, the hotel is going to need this person to be there, the housekeeper to do that. Not just having the time for the department base."

In this extract, P2FG1 spoke of how the doorman or any other perceived low-ranking employee within the hotel, was being recognised by the general manager by way of simple acknowledgment and greeting. This helped the doorman view himself as existing as a dignified whole person and as being recognised by the important work he was doing despite being perceived as low ranking by others. Similarly, P5FG6 spoke of how important it is to be recognised and being valued by both the boss and colleagues, as commented:

"I think significance at the workplace. Feel that you are important to the company, and your boss and your colleagues value you being around, is one of the intangible things…"

In another extract, P1FG3 spoke of being recognised and respected by virtue of being a dignified human being who has the right to voice her opinions without being judged or criticised, which in turn helps enhance her emotional and mental wellbeing. She commented:

"But I think that it is also the emotional, the mental safety that even if I have got differing points, I am not being mocked, but it is just an opinion or a view that people are allowed to have different voices and being heard, equally, as well. I think that's, in a way, a bit of freedom of speech. I think that is important as well."

In terms of recognising work practices and contribution, P2FG2 spoke of the importance of being listened to, being valued, and being involved as part of the team that can influence decision making.

P2FG2: "*I think if you feel you are being entrusted to do the job well and you feel that they value your input, it could be as simple as listening to what you have to say, noting the contributions that you have made to the team, involving you in important or what you think is important activities, then you feel valued within the organization.*"

Being recognized and respected at the workplace was also noted by P3FG1:

"*Actually, what P4 was saying, I think that being recognized add on to the job satisfaction of the employee, because money is one side and the other one being recognized and being respected at work also gives you a kind of job satisfaction too. Sometimes that's more immediate and it's a different type of job satisfaction.*"

In fact, P3FG1 spoke of how employee recognition is as just as important as receiving monetary rewards in giving her a sense of job satisfaction. This suggests that both monetary rewards and non-monetary rewards such as employee recognition can positively impact on job satisfaction and employee motivation (Tessema et al., 2013). Similarly, P5FG5 spoke of the importance of recognition in the form of non-monetary rewards and how the lack of it would make her feel like she was not contributing at work which in turn affected her confidence level at her job and wellbeing. Indeed, employee recognition is important because it serves as agent for enhancing personal growth (Brun & Dugas, 2008).

P5FG5: "*If my boss and my colleagues just around me do not value the work I do or do not acknowledge, not just through monetary rewards, but just not valuing my input or suggestions, then, yes, it can feel like I'm not contributing to my team or to my department. That would definitely affect my wellbeing as well… I think if you're not valued at work, like, the things that you do or things that you try to suggest are not taken out or valued, then, it feels like maybe what you're doing is not correct or it's wrong or is not what other people expect of you. It feels then you are going to second-guess yourself and feel like you're not sure about what you're doing. For me, it could be a lot of doubts and lack of confidence eventually.*"

Recognition is an important factor because it helps increase employee motivation (Grawitch et al., 2006; Saunderson, 2004) and makes the work that the employee is doing more meaningful (Pavlish & Hunt, 2012). Just as important, employee recognition is crucial for mental health at the workplace (Brun & Dugas, 2008). In fact, a low level of employee recognition is one of the risk factors that is associated with lower a level of employee mental health (Dextras-Gauthier & Marchand, 2016). Thus, employee recognition helps employees attain a higher level of mental wellbeing at the workplace through several pathways including recognising them as dignified persons, enhancing their growth at work, and helping them attribute greater meaning to their work (Grawitch et al., 2006). In fact, in line with the previous study by Wyatt and Wah (2001), Singaporean employees wanted to be treated with respect as a person and expected that their good performance being recognised.

Person-Organisation Fit. Person-organisation fit is another important theme discussed by the participants. The fit between an employee and their work environment is a widely researched area, however, several definitions of fit exist (Hoffman & Woehr, 2006). Fit can be categorised into five main aspects including: fit with the vocation, fit with the job, fit with the organization, fit with co-workers, and fit with supervisor (Kristof-Brown et al., 2005), and it is generally agreed that fit is a multidimensional concept (Greguras & Diefendorff, 2009). Specifically, and of relevance to the current study, person-organisation fit refers to the extent that an employee's characteristics such as personality, philosophy, values, skills, abilities, attitudes, and needs concur with those of the organisation (Aamodt, 2016). In fact, an employee who possesses just the necessary knowledge and skills for the role are no longer sufficient for them to be satisfied and productive employees. For example, differences in personal values and organisational values can result in increased stress level, reduced job satisfaction and higher employee turnover (Kristof-Brown et al., 2005; Srivastava, 2011). Further, it is important for individuals to fulfil their higher order needs such as internal

prosocial values (Hu et al., 2016) which then leads to increased psychological wellbeing (Chung et al., 2019). For example, in the words of P2FG1:

"I think nowadays when people look for a job, you also look at whether the company's value align with your own value. Like if this company look for more social impact. I want to do something that's having more social impact. If this company is also doing this or they're like some nasty evil company, then that's not something I think they are looking for. It's really the alignment of value, things that company also offer."

In this extract, P2FG1 spoke of how it would be important for the organisation to show a commitment to have a positive impact on the society by clarifying their values with which the employee can align according to their own personal values. It suggests that employees are looking beyond monetary rewards such as pay and looking at how organisations can fulfil their higher order prosocial needs. This was also similarly echoed by P4FG1 who emphasized that it was important for her to be able to know and identify what the organisation's values are so that there is a compatibility between her own values and those of the organisation, as commented:

"Being able to identify the company value is very important."

In the following extract, P5FG5 spoke of how a match between her personal values and the values maintained by the organisation was important for her mental wellbeing as it helped reinforce her sense of identity and a sense of belonging at the workplace. It was also important that the people she worked with shared the same values with the organisation which as a result, engendered positive emotions and a higher level of confidence and self-esteem for her. In fact, individuals who share similar values tend to form closer interpersonal as well as better working relationships with one another (Jackson et al., 1991).

P5FG5: *"Yes. I think it's true, though, if your work is the work you do, and the people around you at work or the work culture, centres around the values that you uphold for yourself, and it's more towards in line with your values, then maybe it seems that, then the*

person might feel, or I would feel, that I'm okay at work, I'm confident, I'm happy at work,
and my mental wellbeing is good at work."

The importance of a match between the needs of the employee and the organization is further
highlighted by P4FG5:

"I think I believe that for a person, besides the career and the family, or rather,
besides the family, the career is something that the person has to work towards. So it's
important that whichever company you work in, the direction align with your internal
needs…not just grow, it has to be a good fit as well…take for example, if you a person who's
an introvert, and your current job require you to be an extrovert to meet with your client,
you'll feel very uncomfortable. It doesn't seem to be a good fit for that person…the direction
that the person heading toward doesn't seem to be aligned with the company's culture, value
and the kind of role that the person fits in right now…eventually, let's say if you're looking at
an individual personal point of view, then the company has to be a fit for the person instead
of the other way round."

In this extract, P4FG5 spoke how it was not sufficient for the organisation to provide
opportunities for professional growth, rather, the organisational needs have to be compatible
with those of the employee. Moreover, he spoke of how the organisation has to be the right fit
for the employee rather than the employee adapting to the needs of the organisation. This
suggests a shift of responsibility toward the organisation in eliciting the needs of employees
and creating opportunities and roles most suited for them thereby ensuring a good person-
organisation fit. In fact, this was pointed out by P2FG4 who spoke about the importance of
the organisation in assigning the right role for the employee but not for the employee to
"take" whatever role that is assigned. As pointed out by Aamodt (2016), employees are likely
to experience a heightened level of stress when there is a lack of good fit, and employees
whose needs are not met are also likely to be dissatisfied.

P2FG4: *"That brings us to the point about matching, like job fit, right? If I'm interested in computers and you ask me to go and do customer service work."* Similarly, P5FG6 emphasized the importance of being able to have work which needed to be consistent with values which in turn facilitated his personal growth and functioning. Thus, this fit between his needs and values with those of the organisation is necessary to fulfil his psychological needs of human growth and thriving which in turn can have a significant impact on his mental wellbeing.

P5FG6: *"I think the learning and growth component as well as the being in service to others in meaningful work are just right in line with my values. That's how I want to live my life and that's just how it manifests at work."*

A good person-organisational fit occurs when the employee's characteristics match those of the organisation, and this in turn helps to enhance employee's intrinsic motivations, and job involvement (Leung & Chaturvedi, 2011). From the Self-Determination Theory perspective as proposed by Deci and Ryan (2000), a good fit between the employees and their organisation in terms of similar values and a match of skills and abilities to the demands of the job satisfies their psychological needs of autonomy, competence, and relatedness, which help to enhance their commitment to the organisation and work performance (Greguras & Diefendorff, 2009). In turn, the satisfaction of these three psychological needs are important for wellbeing (Deci & Ryan, 2000). Further, research has suggested that generalisability of an employee's fit with the organisation is an important area of investigation cross-culturally (Gelfand et al., 2007). For example, the study conducted by Greguras and Diefendorff (2009) with Singaporean employees in the non-Western Asian context showed the relevance of person-organisation fit in predicting employees' attitudes and behaviours from the self-determination theory perspective. The current study expands on the study by Greguras and Diefendorff to investigate the extent identified factors contributing to workplace mental wellbeing predicts employee outcomes within the Singaporean context.

Organisational Support. Participants perceived organisational support as an important factor in contributing to their mental wellbeing. Perceived organisational support refers to the extent the employees view their organisation as taking an interest in their wellbeing and valuing their contributions (Eisenberger et al., 2020). For example, organisational support can come in various ways such as appreciating the efforts put in by the employees, assisting them in times of need such as sickness and other work-related issues, providing them with stimulating work and ensuring a good working environment for them (Aubé et al., 2007). Moreover, the support provided by the organisation can also be socioemotional in nature such as showing concern and respect for the employees (Aselage & Eisenberger, 2003). This form of socioemotional support is described by P3FG1 in the following extract:

P3FG1: *I don't know also if always I've been going through this. Is like sometimes when you're a client facing and when there's a conflict and some I think staff would like the company to stay on their side if it's in certain situation, they don't want the company just show this particular staff out to solve the problem. Rather they would prefer the company to stand by their side and support them to go through the ordeal.*

P3FG1 spoke of how it was important for the organisation to provide emotional support for the employee in terms of needs as opposed to just providing a solution for them which might not be relevant at that point of time. Thus, she highlighted the need to focus on the emotional wellbeing of the employee and not just the "cognitive" component of problem solving. In terms of employee wellbeing, P1FG2 spoke of the importance for organisations to genuinely care for their wellbeing and to provide the necessary means to support that such as promoting mental wellbeing initiatives. However, she also noted that such support is not a common occurrence, and it is only start to gain traction in Singapore, highlighting the need for organisation to focus more on employee wellbeing.

P1FG2: "*They actually get speakers to come into the office to talk about various types of mental health issues that they can experience at work. I think it's interesting that companies are starting to do that, but they are more supportive companies.*"

Interestingly, another way of enhancing the wellbeing of employees was described by P4FG4 as she spoke about the availability of food provided to them. This suggests that small and subtle ways of gestures often overlooked by many organisations, can go a long way in improving employee wellbeing.

P4FG4: "*In my ex-company, they used to serve breakfast everyday and then Wednesdays, there will be lunch also. Yes. It's not too bad, I guess that also contributes to the wellbeing.*"

It is important that organisations provide a good working environment that is not only physically safe, but also personally safe for the employees in terms of being safe from any kind of harassment especially sexual harassment. Thus, as Singapore has strict guidelines in place to ensure that workplaces are physically safe for employees, the organisation has a bigger role to play in providing support in terms of ensuring that employees can work in a mentally and emotionally safe environment. In the words of P3FG3:

"*I think traditionally, not safe is definitely physical. That means risks of fall, fire, injury, et cetera, but nowadays there's quite awareness. Now, it could be sexual harassment, it could be, I don't know, fear of litigation or other issues.*"

This is similarly shared by P5FG6 where she spoke of the need to feel personally safe in the working environment and to be supported thus maintaining her mental wellbeing.

P5FG6: "*I just wanted to say, for me there this is one word which is being in a very safe environment and being safe in your environment is a lot of things. It's being free to say what you want to say. Being able to feel supported. It is also being free of workplace harassment. The word for me is being safe in the workplace.*"

In the following extract, P4FG3 spoke at length about the responsibility that organisation has in providing a good working environment through ways such as providing training and workshops for the welfare of the employees. It is important for the organisation to have the appropriate means to provide help in a timely manner when employees encounter difficulties at work. As commented by P4FG3, employees often find it difficult to offload their difficulties for fear of repercussion and the organisation would need to have a dedicated channel to help address this. A strong organisational support system is therefore necessary to reduce a possible sense of helplessness which would in turn negatively impact on mental wellbeing.

P4FG3: "*I guess that this is not only coming out from the individual, it should come out from the company level, that they have to cultivate a good working environment or cultivate the staff about what is right or what is wrong, motivate innovation, working environment. In the company that I work for…we always have training about bias, we have conscious bias trainings, we have also what is a good working environment. We also have an employee relation manager. There's a hotline that we can call in if we notice that there's something not doing right for the company… individually, sometimes in the workplace, it is very difficult for individuals to really voice out because of the fear they have of losing the job or maybe even you don't lose your job, your job might become very difficult.*"

Moreover, P4FG3 indicated that she worked for a Western multinational company, suggesting that it was likely more progressive in terms of ensuring the wellbeing of employees. In contrast, P1FG2 noted that local Singapore companies may not be as progressive and flexible in terms of caring for the welfare of employee, citing an example again comparing with a Western-based company. This again highlighted the gap in promoting mental health initiatives between Western-based companies and local companies.

P1FG2: "*I think it's also important to understand the HR policies have to be flexible. To quote an example, I heard from friends who worked in Netflix. They're quite flexible about*

it. For example, a teammate is down. They cover a lot so I think a more kinder environment as S7 has mentioned but it's not just about kindness, it's about flexibility. A lot of company is very rigid, especially in Singapore. They are all brought up to think that you have to follow the rules by the books but with resources I think a work environment has to be more flexible."

Further, it is also important for organisations to provide the necessary help and resources to assist employees to perform their job to the best of their ability. As P4FG6 put it, having enough support and resources from the organisation allowed him to focus on his job which in turn is likely to improve job performance.

P4FG6: *"Resources, it means a lot of the way that I encounter my work I think. If there is enough manpower, enough support, enough logistics, enough backup, enough resources, then I find that I can channel my energy and effort into doing what I'm supposed to be doing anyway rather than spending more time and energy and effort trying to work around the situation."*

The importance of perceived organisational support in enhancing employee psychological wellbeing has been highlighted by Kurtessis and colleagues (2017). Specifically, employees view strong organisational support in caring for their welfare as highly favourable which in turn, initiates a reciprocal relationship whereby the employees are likely to increase their commitment to the organisation leading to greater rewards. Thus, employees are more likely to identify with and commit to the organisation when they perceive adequate organisational support as meeting their socioemotional needs such as approval, self-esteem and emotional support thereby leading to better wellbeing. Moreover, employees who are treated well are also more likely to have a greater emotional affinity with their organisations leading to improved work performance (Aselage & Eisenberger, 2003). Consistent with the findings by Wyatt and Wah (2001), Singaporean employees emphasized the importance of management support and understanding. Similarly, as highlighted by the participants in the current study, it is therefore vital that organisations in Singapore focus on

supporting the needs, welfare and wellbeing of their employees as opposed to being traditionally focusing solely on increasing productivity.

3.6 Conclusion

The focus on employee mental wellbeing has not attracted significant interest until recently where more awareness has been created especially from the government in Singapore. Consequently, Singapore is still lagging behind its Western counterparts in several areas such as promoting mental health and wellbeing initiatives within the organisation. For example, when compared to other countries, Singapore scored low in terms of happiness and life satisfaction despite achieving a high level of material standard (Vaingankar et al., 2011). In Singapore, there is also a general lack of awareness and high level of stigma regarding mental health issues amongst the general population (Chong, 2007) and even amongst the general health professionals and spitirual leaders (Tonsing, 2017).

The current focus group study aimed to elicit the perspectives from Singaporean employees in relation to mental wellbeing at the workplace. Thirty-one participants provided multiple and rich descriptions of what they viewed as factors that helped contribute to their mental wellbeing at work. This study was conducted with participants from 17 different industries with 15 from the private sector and two from the government. The researcher acknowledged that there exists a variety of industries in Singapore with different working situations that were not captured in this sample. However, this study was not designed to be representative of all workplaces across all industries in Singapore.

Nonetheless, the current study helped to expand on the existing pool of knowledge and delineated 13 organisational factors that would help contribute to workplace mental wellbeing in the Singapore context. Specifically, they are accomplishment, autonomy, learning and professional development, meaningful work, person-organisational fit, work-life balance, co-worker relationship, support from boss, employee recognition, fairness, transparency, and organisational support. These identified factors are consistent with previous

literature and research in that improving each of these factors is likely to bring about improved mental wellbeing for the employees. In fact, an individual approach whereby responsibility lies on the individual, that is, the employee themselves, and individual-based interventions are no adequate in addressing employee mental wellbeing; rather, a more comprehensive approach in the form of support involving active contributions and interventions from the organisation is needed (Noblet & LaMontagne, 2006). The current study revealed the importance of such support from organisations to address each of the 13 identified factors. Improving employee wellbeing is important because employees with good mental wellbeing in turn helps to improve several important outcomes such as interpersonal relationships, physical health, and productivity (Dickson-Swift et al., 2014).

The current study also revealed factors that are unique to the workplace in the Singapore context despite having influenced by Western values in the last few decades. Indeed, Sandberg and colleagues (2012) indicated the presence of factors specific to the Singapore workplace and family contexts; for example, the working environment in Singapore is still uncompromising in terms of having flexible work options compared to the United States and other developed countries. In fact, only 13% of employees in Singapore were indicated having flexible work options in 2007, and even if the organisation provides such flexible working conditions, employees are not utilising them fully (Hill, 2007). Some of the reasons could be attributed to the employees' fear of being perceived negatively by their organisations and the use of such flexible options not being encouraged by the organisational culture (Jones et al., 2008). In addition, Singapore, with a combination of Western and Eastern values as previously discussed, still retains some of the traditional attitudes involving rigid regulations and values. Although there is a strong focus on preserving interpersonal harmony within group members including colleagues and bosses as found in collectivistic cultures such as Singapore, the notion of "quanxi' by which an employee with a better relationship with the boss or people of higher status is likely to secure

better opportunities at work still persists. Indeed, guanxi is a common phenomenon in Singapore whereby informal social exchanges such as having lunch and dinner are used to facilitate favourable outcomes for the parties involved such as getting a better work role or move up the ranks in the organisation (Bian & Ang, 1997). This phenomenon continues to persist as evidenced in the current study, 23 years after the study conducted by Bian and Ang (1997). As such, the theme of fairness is an important factor in ensuring fair opportunities for every employee in the Singapore context.

The current study also revealed the importance of having autonomy at work despite Singapore being more likely to be subjected to power distance. Power distance can be explained in terms of the extent to which employees accept the unequal share of power in an organisation (Hofstede, 1980). As explained by Wyatt and Wah (2001), the need to have more autonomy at work can be attributed to the higher educational level and living standards of Singaporean employees who now value greater control over the work they do. In a study conducted by Tan and Chong (2003) in Singapore, the authors similarly found and highlighted the importance of providing autonomy to employees allowing them to participate in the decision-making process through a conducive organisation culture that actively encourages it. This in turn would help change perceptions of power distance and make employees feel more valued within the organisation.

In addition, there is a greater focus on meaningful work with a view of having a greater positive impact on the society beyond monetary rewards or material success. In fact, none of the participants mentioned the need for extrinsic aspirations such as better pay or more power from the organisation. As previously discussed, this suggests that a further accumulation of wealth in a developed country does not necessarily result in increased wellbeing (Bunge, 2012; Easterlin, 2017; Mikucka & Sarracino, 2014), and flourishing in different areas of life including work life goes beyond the traditional measurement of success in monetary terms (Seligman, 2011). Moreover, the notion of "family" appears to have

shifted from the tradition form of family ties to one that involves other personal pursuits such as social activities, health and having pets. Thus, although the need for of work-life balance is not diminished, it is important that employees be allowed to spend their time off pursuing their personal interests. Consistent with the literature on the eudaimonic viewpoint from the Self-Determination Theory perspective (Deci & Ryan, 2000; Ryan et al., 2008), the current study suggests that the pursuit of intrinsic goals and values such as personal growth, learning, meaning, interpersonal relationships and contribution to the society through the satisfaction of the basic psychological needs of autonomy, competence, and relatedness, helps contribute to greater wellbeing.

3.7 Study Strengths and Limitations

The use of qualitative methods in research study is important (Barker et al., 2016). Firstly, it allows for a more complex phenomenon, that is, workplace mental wellbeing in Singapore, to be examined in greater details and depth; secondly, it provides participants the opportunity to respond in their own ways as well as their own words; thirdly, participants were given "a voice" and their views were heard, which otherwise would be under-represented in other research studies. As far as the researcher is aware of, the current study is the first exploratory study to obtain in-dept perspectives from Singaporean employees in relation to workplace mental wellbeing with 13 wellbeing dimensions identified.

Notwithstanding, several limitations were noted. Firstly. the researcher acknowledged that a variety of industries exists in Singapore with different working situations that were not captured in this sample. However, this study was not designed to be representative of all workplaces across all industries. Secondly, although the participants of the study came from a variety of industries such as the education, finance, and healthcare sectors, they were white-collar employees. Thus, the findings may have limited generalisation to samples of participants who fall outside this category such as blue-collar employees. Future studies could address this issue with a different larger sample size consisting of participants from

blue-collar industries. Thirdly, the researcher acknowledged his own theoretical commitment for the data to be imbued with meanings, and the interpretations of the data were implicitly shaped by theory and past research pertaining to psychological wellbeing and workplace wellbeing. Fourthly, the analysis of data was not repeated by other independent researchers. However, Braun and Clarke (2013) argued that reliability is not a suitable criterion for evaluating qualitative research; qualitative methods acknowledge the context-specific nature of reality, with interpretations and meanings generated by the active researcher who inevitably influences the research process. Thus, procedures for evaluating qualitative work such as obtaining the inter-rater reliability of qualitative coding is less appropriate. Rather, reliability in qualitative research should be conceived as "trustworthiness" by following a 15-point criteria check set of guidelines delineated by Braun and Clarke (2013). In addition, the researcher also adhered to the general framework consisting of four core principles, "sensitivity to context", "commitment and rigour", "transparency and coherence" and "impact and important" developed by Yardley (2000, 2008) to guide the current study.

3.8 Moving Forward

The findings from the current qualitative study, that is, the 13 identified themes, were taken to develop the Workplace SMWEB scale which was tested and examined in greater details in the subsequent quantitative study. This study is described in Chapter 4.

CHAPTER 4: STUDY 2

4.1 Introduction to Study 2

As outlined in the preceding chapters, this research study consisted of a mixed-method sequential exploratory design. Study 1 involved the collection of qualitative data which explored the factors associated with mental wellbeing unique to the workplace in the Singapore context. The qualitative results were presented in Chapter 3. Specifically, 13 factors that contributed to workplace mental wellbeing in Singapore were identified from the focus groups in Study 1. These factors subsequently informed the development of the Study 2 and Study 3, both of which were quantitative studies thereby representing the sequential aspect of the research.
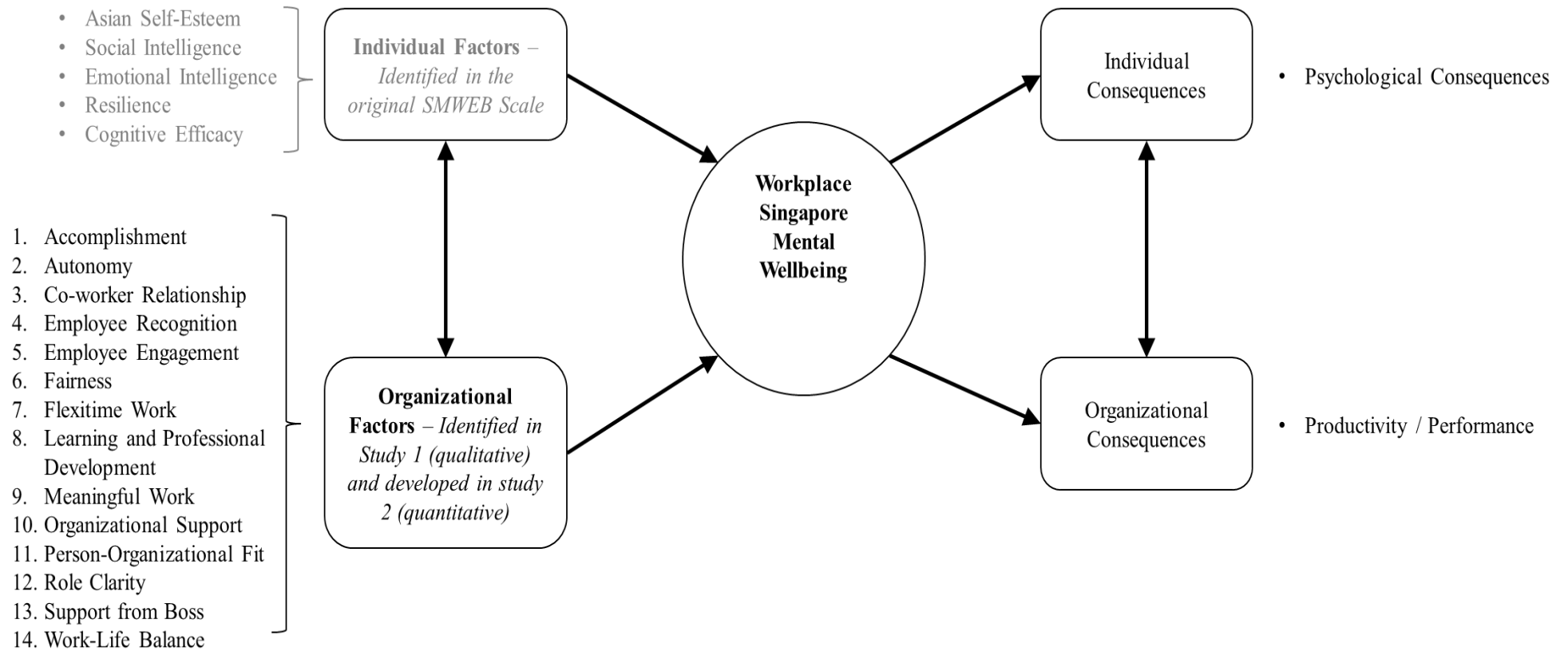
This chapter presents the results of Study 2. Nassar-McMillan and Borders (2002) emphasized that the item generation and refinement process is an important step towards developing a questionnaire or a survey instrument. In fact, the use of focus groups is a very useful supplementary method in eliciting information pertaining to the research area apart from using past literature and research in selecting items to develop a questionnaire. Moreover, focus groups can serve two purposes; first, it helps to further refine a previously researched area and second, it helps to elucidate new findings or information that were previously unknown (Nassar-McMillan & Borders, 2002; Nassar-McMillan et al., 2010).

4.2 Rationale for Study 2

The purpose of study 2 was to develop a new Workplace Singapore Mental Wellbeing (Workplace SMWEB) scale based on the 13 workplace mental wellbeing factors identified in Study 1 conducted using focus groups. Thus, the findings from the focus groups in Study 1 helped to further refine what was previously known about the research area, that is, workplace wellbeing, as well as elucidate new information specific to the Singapore workplace context leading to the newly identified 13 factors. The quantitative aspect of Study 2 reported in this chapter is represented in Figure 4.1.

Figure 4.1

Quantitative Aspect of Study 2 – Developing the Workplace SMWEB scale

- Asian Self-Esteem
- Social Intelligence
- Emotional Intelligence
- Resilience
- Cognitive Efficacy

Individual Factors – *Identified in the original SMWEB Scale*

1. Accomplishment
2. Autonomy
3. Co-worker Relationship
4. Employee Recognition
5. Employee Engagement
6. Fairness
7. Flexitime Work
8. Learning and Professional Development
9. Meaningful Work
10. Organizational Support
11. Person-Organizational Fit
12. Role Clarity
13. Support from Boss
14. Work-Life Balance

Organizational Factors – *Identified in Study 1 (qualitative) and developed in study 2 (quantitative)*

Workplace Singapore Mental Wellbeing

Individual Consequences

- Psychological Consequences

Organizational Consequences

- Productivity / Performance

In addition, Study 2 also aimed to validate the original Singapore Mental Wellbeing (SMWEB) scale which was specifically developed to measure positive aspects of mental health in Singapore beyond emotional happiness. It is a screening tool with five meaningful dimensions that reflect Singaporeans' understanding of wellbeing: Emotional Intelligence, Self-Esteem, Social Intelligence, Cognitive Efficacy, Resiliency (Fen et al, 2013). The SMWEB scale, however, was intended for use in general life experiences and not intended for use at the Singapore workplace as previously discussed. Wellbeing at work is likely to manifest itself in a different context with a different focus on outcomes such as productivity and burnout (Mills et al., 2013; Schulte & Vainio, 2010).

Moreover, the SMWEB has not been validated or published in any research study since its development. Thus, it is necessary to validate the SMWEB scale in its original form along with the modified nine items from the SMWEB scale capturing the workplace context. Nine new modified items in addition to the original 30 items were generated to reflect the workplace context. For example, "I am able to make friends at work" (new item) was a newly generated item in addition to "I am able to make friends" (original item), and "I am able to offer help to colleagues" (new item) was a newly generated item in additional to "I am able to offer help to others" (original item). The original SMWEB scale (30 items) together with the additional modified items (nine items) are shown in Appendix G. The study will inform if the SMWEB scale is also a valid instrument to be used at the workplace in the Singapore context. Notwithstanding, as wellbeing in life and wellbeing at work have spill-over effects on one another (Page & Vella-Brodrick, 2009; Weziak-Bialowolska et al., 2020), it is expected that mental wellbeing in life will have a positive correlation with mental wellbeing at the workplace.

4.3 Item Generation for the Workplace SMWEB Scale

Using the 13 organisational factors that were identified in Study 1, items were generated by searching the literature to find existing items for each of the construct. When there were several potential items, items were chosen that best reflected the construct definition. When modifications such as rewording were made to existing items, changes were made to better measure the underlying construct or to better clarify the item. For example, the wordings of some items were modified to reflect the Singapore workplace context as well as to maintain consistency. For example, the word "supervisor" in some items had been reworded to "boss", the word "company" has been reworded to "organisation", and the word "work" had been added to some items such as "I know what my 'work' responsibilities are for added clarity. Adaption of items were made to ensure that the meaning of the items remained unchanged.

Moreover, as negatively worded items can create factor structure problems in workplace measurements (Idaszak & Drasgow, 1987), some items were modified to be positively worded so that a higher level of agreement indicated a significant workplace factor. For example, the item "Where I work, there are unfair privileges" was modified to "Where I work, there are fair privileges". However, there was only one exception to this in the Work and Meaning Inventory (WMI) developed by Steger, Dik and Duffy (2012) in which one item was negatively worded and remained unchanged in the current study as the scale was adopted in its entirety.

The new Workplace SMWEB scale along with the modifications of the items are shown in Appendix G. The entire measure consisted of 13 scales and 104 items. A minimum of three to four items per concept are usually needed for high internal consistency (Robinson, 2017). The initial item pool in the measure can be larger than the final item pool (Kyriazos & Stalikas, 2018), and the number of initial items can be two times more if the construct is narrow and more defined (Devillis, 2017) as reflected in the narrowly defined 13 constructs in the current study. Having more items is advantageous as it allows for a better selection of

items that best suit the target construct at the later stage of the research (Saville & MacIver, 2017). Moreover, content redundancy is useful in the initial phase of item construction as it can increase internal-consistency reliability which in turn increase validity (Devellis, 2017). The specific objectives of Study 2 are:

1. To examine the construct validity and reliability of the newly developed Workplace SMWEB scale.

2. To examine if the original SMWEB scale is a valid instrument to be used in the workplace context.

3. To examine if the revised SMWEB scale with modified items for the workplace is a more reliable instrument to be used in the workplace context.

4.4 Hypotheses

H1:   It was hypothesized that the Workplace SMWEB consisting of 13 subscales would have good structural validity and internal consistency.

H2:   It was hypothesized that that the revised SMWEB scale with modified items is a more suitable instrument to be used in the workplace context in terms of validity and reliability compared to the original SMWEB scale.

H3:   It was hypothesized that the workplace mental wellbeing as measured by the newly developed Workplace SMWEB scale would have a significant and positive correlation with the mental wellbeing as measured by the original SMWEB scale.

4.5 Method

   4.5.1 Participants. The cross-sectional study was conducted among employees aged 18 and above who were working in Singapore. Research data were collected using a questionnaire survey from various industries operating in a variety of sectors. The full occupation listing of the participants, which is first sorted into the major group followed by the sub-group according to the International Standard Classification of Occupations 2008 (ISCO-8) is shown in Appendix D along with the other demographic details. The two most

common major groups of occupation were the Professionals and the Managers, followed by Technicians and Associate Professionals, Services and Sales Workers and Clerical Support Workers. In terms of sub-groups, the most common occupations were Legal, Social and Cultural Professionals, Administrative and Commercial managers, Chief Executives, Senior Officials and Legislators, Teaching Professionals, Production and Specialised Services Managers, Health Professionals, and Business and Administration Associate Professionals.

A total of 322 employees participated in the study. However, only 318 participants were included in the current analysis after excluding four participants who did not meet the criteria of being in employment as they were either students or not in employment. The 318 participants comprised of 40.3% females and 59.7% males. In terms of age, the majority were in the 31-40 age group (32.4%) followed by the 21-30 age group (24.4%), the 41-50 age group (23.6%), the 51-60 age group (11.9%), the over 60 age group (5.0%) and under 21 age group (0.6%). In terms of ethnicity, the majority were Chinese (80.2%) followed by Indians (9.1%), Malays (5.0%), Eurasians (1.6%), and other ethnic groups (4.1%). In terms of education, the majority had a Bachelor degree (50.6%) followed by a Master/Doctorate degree (30.8%), a diploma (9.1%), GCE "O' Level (5.7%), and GCE 'A' Level ((3.8%). In terms of the total length in employment, the majority had over 20 years (23.9%), followed by 11-15 years (18.2%), 6-10 years (16.7%), 3-5 years (15.4%), 16-20 years (10.7%), less than 1 year (8.8%), and 1-2 years (6.3%). The full demographic characteristics of the study sample and the number of participants within each category are shown in Appendix D.

4.5.2 Procedure. Participants for this study were recruited directly through personal contacts via email, messaging, or word-of-mouth and through recommendations and snowballing by the participants such as their colleagues, peers, and friends. Participation was voluntary and outside of their office hours and as such, consent from their respective organisations were not required. To take part in the study, participants were provided with a website link that directed them to an online survey portal (USQ Surveys).

4.5.3 Data Collection. The data was collected within a 6-month period approximately. Explicit consent was obtained from all participants using a participant information sheet which was included with the online data collection form. The participant information sheet provided all the study details on the voluntary nature and risk benefits of the study. Contact details of Principal Investigator and Co-Investigators were also provided in case the participants had any other related queries. No identifiers were collected from the participants throughout the whole online data collection process. Ethical approval was given by USQ Human Research Committee on the 24th of February 2021. The ethics approval form is attached in Appendix E. A copy of the participant information sheet and informed consent information is attached in Appendix F.

4.5.4 Measures. Data from the current study were collected using a cross-sectional self-report questionnaire. The first section of the questionnaire asked participants to answer a series of demographic questions such as gender, age, marital status, ethnicity, religion, educational level, occupation title (text response), and total length in employment.

The second section of the questionnaire comprised of the original SMWEB scale (30 items) together with the additional modified items (nine items) as previously described. These items measured overall mental wellbeing in five areas - Emotional Intelligence, Self-Esteem, Social Intelligence, Cognitive Efficacy, Resiliency (Fen et al, 2013). Examples of items included in the scale are "I feel balanced in myself" (Emotional Intelligence), "I am able to accept myself" (Self-Esteem), "I am able to think clearly" (Cognitive Efficacy), "I am able to seek help when needed" (Social Intelligence), and "I stand firm under stress" (Resiliency). The SMWEB scale had a high internal reliability with a Cronbach's alpha of 0.962 in the original study by Fen and colleagues (2013).

Lastly, the third section of the questionnaire comprised of 104 items that were developed to reflect the 13 constructs developed from the qualitative component of Study 1. Unless otherwise stated, the questionnaire measures were rated on a five-point Likert-type

scale, with responses options ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). In addition, there was also a "Not Applicable" (NA) option for all the 104 items. Items indicated as "NA" by the participants were not included in the analysis. The copy of the full questionnaire for Study 2 is provided in appendix G.

Meaningful Work. Meaningful work was measured with the 10-item Work and Meaning Inventory (WAMI) developed by Steger and colleagues (2012). The scale was developed to measure employees' subjective experience of positive meaning in work. Specifically, the scale covers three aspects – positive meaning, meaning making through work, and greater good motivations (Steger et al., 2012). Items on the WAMI are rated from 1 (*absolutely untrue*) to 5 (*absolutely true*). The total scale had a high internal consistency with a Cronbach's alpha of 0.93. Examples of items included in the scale are "I understand how my work contributes to my life's meaning", "I view my work as contributing to my personal growth", and "I know my work makes a positive difference in the world". In the current study, this 10-item WAMI had a high level of internal consistency, as determined by a Cronbach's alpha of 0.92.

Person-Organization Fit. Person-organization fit can refer to the degree different factors such as skills, abilities, knowledge, personality and attitudes of an employee match those of the organisation (Aamodt, 2016). Specifically, person-organization fit was measured with eight items that were constructed for this study. Four items were adopted from the person–job fit scale that were used in the study by Afsar and colleagues (2018) to investigate the impact of person–environment fit on employees' innovative work behaviour. These items were originally developed by Edwards (1996) and Lauver and Kristof-Brown (2001), and the scale had an internal consistency of a Cronbach's alpha value of 0.81. Two items were adopted from the Quality of Work Life (QWL) questionnaire developed by Swamy and colleagues (2015) to assess quality of work life among employees in nine areas – work environment, organization culture and climate, relation and co-operation, training and

development, compensation and rewards, facilities, job satisfaction and job security, autonomy of work and adequacy of resources. The reliability coefficient of the questionnaire had a Cronbach's alpha value of 0.88 with factor loadings of 0.50 or greater for all items. The remaining two items were adopted from the nine-item job value scale which was found to be reliable and valid in the study by Wu and colleagues (2013) and in previous research by Smith (2005) investigating the effects of perceived organizational support, supervisor support, and intrinsic job value. Examples of included items are: "My job lets me use my skills and abilities", "My personality is a good match for this job", and "I am the right type of person for this type of work". In the current study, this eight-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.911.

Role Clarity. Role clarity was measured using five items that were constructed for this study. Two items were adapted from the 50-item Organizational Climate Scale developed by Peña-Suárez et al. (2013) to determine employees' perceptions of organizational climate in the areas of physical conditions, work organization, relations, cooperation, rewards, work hours and work-life balance, autonomy, innovation, participation, and attachment to the job. The scale was found to have a one-dimensional structure and had an internal consistency of a Cronbach's alpha value of 0.97. The discrimination indexes of all the items in the scale had values above .40, indicating high discriminatory power of the scale items. The remaining three items were adopted from the scale investigating role ambiguity provided by Rizzo (1970); items from the scale were used in previous research investigating wellbeing patterns at work (Abdi, 2018). Examples of included items are "I know what my work responsibilities are", "My job is well defined" and "Explanation is clear as what needs to be done at work". In the current study, this five-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.901.

Autonomy. Autonomy was measured using nine items from the autonomy scale adopted from the Work Design Questionnaire (WDQ) developed by Morgeson and

Humphrey (2006). The WDQ comprised of a 21-factor model with autonomy separated into three factors of three items each - work scheduling autonomy, decision-making, and work methods autonomy, all of which showed high internal consistencies, as determined by Cronbach's alphas of 0.85, 0.85 and 0.88 respectively. Examples of items included are "My job allows me to plan how I do my work", "My job allows me to make a lot of decisions on my own", and "My job allows me to make decisions about what methods I use to complete my work". In the current study, this nine-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.956.

Work-Life Balance. Work-Life Balance was measured using eight items that were constructed for this study. Six items were adapted from an eight-item work-life balance scale developed by Wu and colleagues (2013) through thorough literature review and was used in their study to investigate the relationships between work–life balance and job-related factors. The Cronbach's alpha of the scale in their study was 0.76. The remaining two items were adapted from the Quality of Work Life (QWL) questionnaire developed by Swamy and colleagues (2015). Examples of items included are "There is a good fit between my personal life and work life", "I am able to do my job and not burn out", and "It is easy to take time off during our work to take care of personal or family matters". In the current study, this eight-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.918.

Learning and Professional Development. Learning and professional development was measured using eight items that were constructed for this study. Three items were adapted from Quality of Work Life (QWL) questionnaire was developed by Swamy and colleagues (2015). Three items were adapted from the Organizational Climate Scale developed by Peña-Suárez et al. (2013). The remaining two items were adapted from the nine-item job value scale which was found to be reliable and valid in the study by Wu and colleagues (2013) and in previous research by Smith (2005). Examples of included items are

"The job has the right level of challenge", "My work offers opportunities for improving knowledge and skills", and "Training programs in our organization help employees to achieve the required skill for performing the job effectively". In the current study, this eight-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.901.

Employee Recognition. Employee recognition was measured using eight items that were constructed for this study. These eight items were adapted from the Organizational Climate Scale developed by Peña-Suárez et al. (2013). Examples of included items are "My suggestions about the job are listened to", "My efforts receive the recognition they deserve", and "When I do something well, my boss congratulates me". In the current study, this eight-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.947.

Support from boss. Support from boss was measured using 10 items that were constructed for this study. Seven items were adapted from the 13-item supervisor support scale which was found to be reliable and valid (Smith, 2005; Wu et al., 2013). Three items were adopted from the Organizational Climate Scale developed by Peña-Suárez et al. (2013). Examples of included items are "I really feel supported by my bosses", "My boss genuinely cares about me", and "My boss helps me learn and improve". In the current study, this eight-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.966.

Co-worker Relationship. Co-worker relationship was measured using 10 items that were constructed for this study. These 10 items were adapted from the 12-item Workplace Friendship Scale developed by Nielsen et al., (2000) to measure two aspects of workplace friendship - the opportunity for friendship and the prevalence of friendship. The internal consistency for the opportunity measure had a Cronbach's alpha value of 0.84, and the internal consistency for the prevalence measure had a Cronbach's alpha value of 0.89. Five

items were chosen from each subscale to construct the 10 items for the current study. Examples of included items were "I am able to work with my colleagues to collectively solve problems", "I have the opportunity to develop close friendships at my workplace", and "I feel I can trust many colleagues a great deal". In the current study, this constructed 10-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.929.

    Accomplishment. Accomplishment was measured using six items that were constructed for this study. Five items were adapted from a 31-item measure developed by Parker and Hyett (2011) to identify factors that contribute to employee wellbeing in four areas - work satisfaction, organizational respect for the employee, employer care, and intrusion of work into private life. These factors were derived from a literature review from the positive psychology perspective (Parker & Hyett, 2011). With standard test-retest correlation, the overall measure had a Pearson r value of 0.91. The remaining one item was adapted from from the nine-item job value scale which was found to be reliable and valid (Smith, 2005; Wu et al., 2013). Examples of included items are "In my work, I have a feeling of success and accomplishment", "My work brings me a sense of satisfaction", and "My daily work activities give me a sense of direction and meaning". In the current study, this constructed six-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.917.

    Transparency. Transparency was measured using seven items that were constructed for this study. Four items were adapted from the Quality of Work Life (QWL) questionnaire was developed by Swamy and colleagues (2015). Three items were adapted from the Organizational Climate Scale developed by Peña-Suárez and colleagues (2013). Examples of included items are "My organisation provides enough information to discharge my responsibilities", "My boss shares important information", and "Communication and information flow between the departments is satisfactory". In the current study, this

constructed six-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.909.

Fairness. Fairness was measured using eight items that were constructed for this study. Five items were adapted from the justice measure developed by Colquitt (2001) which has been shown to have good construct validity in assessing organisational justice in the areas of procedural justice, distributive justice, interpersonal justice and informational justice. Two items were from adapted from the Quality of Work Life (QWL) questionnaire developed by Swamy and colleagues (2015). One item was adapted from the Organizational Climate Scale developed by Peña-Suárez et al. (2013). Examples of included items are "Where I work, there are fair privileges", "Procedures at your organisation have been applied consistently", and "Your organisation has treated you with respect". In the current study, this constructed eight-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.941.

Organisational Support. Organisational support was measured using 10 items that were constructed for this study. Eight items were adapted from the Perceived Organisational Support (POS) measure developed by Eisenberger and colleagues (1986). The measure had an internal consistency of Cronbach's alpha value 0.97, with item-total correlations ranging from 0.42 to 0.83. Items have been adapted onto a five-point Likert scale in previous study investigating the impact of perceived organizational support on work engagement (Imran et al., 2020). The remaining two items were adapted from an 11-item scale for organizational support as used in the study by Wu and colleagues (2013) and had been validated in previous research (Smith, 2005). Examples of included items are "Physical workspace is satisfactory", "Help is available from my organisation when I have a problem", and "My organisation really cares about my wellbeing". In the current study, this constructed eight-item scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.919.

4.6 Analyses performed

The online survey portal (USQ Surveys) was used to administer all self-reported measures as well as record responses from all participants. A copy of the of the full online survey is provided in appendix H. Reliability coefficients were computed using the Cronbach's alpha statistic. Construct validity of the survey was first analysed using parallel analysis (PA) (Horn, 1965) followed by exploratory factor analyses (EFA) with the principal axis factoring method of extraction and oblique rotation to determine that the optimal factor structure of the survey questionnaire.

To account for a reduced set of common factors with the largest possible variance in set of variables, both exploratory and confirmatory methods can be used. However, EFA is the more suitable choice in the initial stage of scale development for identifying the number of common factors without a strong theoretical basis to predict the number of common factors that underlie the observed variables (Auerswald & Moshagen, 2019; Hurley et al., 1997). Thus, deciding on the number of factors to retain is the most crucial methodological step to take for researchers (Hayton et al., 2004). Hayton and colleagues (2004) further explained that choosing too few or too many factors can have a significant impact on the interpretation of information within the data set – too few factors can result in the loss of crucial information while too many factors, although less problematic compared to having too few factors, can result in less relevant information being overly emphasized and in factors that are difficult to interpret.

Despite being under-utilized by researchers, PA has been shown to be more accurate compared to EFA for identifying the number of factors to retain (Hayton et al., 2004; Lim & Jahng, 2019; O'connor, 2000). Specifically, PA proposed that the eigenvalues of the factors from the data set with a valid underlying factor structure should be larger than the eigenvalues obtained from comparable random data in PA, and these factors should therefore be retained. Moreover, as compared to the Kaiser method of retaining factors with

eigenvalues greater than 1 (Kaiser, 1960), PA does not tend to identify too many factors like the Kasiser method does (Horn, 1965; Wood et al., 2015).

Notwithstanding, Turner (1998) pointed out that PA can identify a smaller number of factors than expected in some situations due to the closely dependent nature of eigenvalues particularly from the influence of a large first factor. As previously mentioned, having a smaller number of factors can be more problematic than having a larger number of factors, and it is therefore recommended that PA be used in conjunction with other methods such as the Kaiser method (Hayton et al., 2004; Turner, 1998; Wood et al., 2015). Moreover, Wood and colleagues (2015) also underscored the importance of PA as a procedure to identify the number of factors before conducting an EFA so that the final number of factors to be determined can be done with a greater degree of accuracy. Through their study to investigate the theoretical concepts of PA, Lim and Jahng (2019) further concluded that the final estimate of the number of factors extracted from PA should not be taken as a fixed estimate; rather, it is necessary to compare possible models with varying number of factors to arrive at the optimal model depicting the interpretability of the factor structures. It is therefore recommended that a range of plausible factor models be considered from the smallest to the largest possible number of factors (Watkins, 2018). It is also important that theoretical implications including the relevance of an item for the scale and scale reliabilities be taken into consideration in the decision-making process regarding the final number of factors to be extracted (Auerswald & Moshagen, 2019). Moreover, in deciding whether to remove or put together items in a factor, it is important to examine the content of the items based on theory or what is widely practised rather than based solely on statistical analysis (Sijtsma & van der Ark, 2017).

For the current study to determine the Workplace SMWEB scale structure, PA was run in the Statistical Package for the Social Sciences 27.0.0 package (SPSS, 2020) utilizing the SPSS Syntax for Parallel Analysis script developed by O'Connor (2000). The principal

axis factoring/common factor analysis approach was taken with 100 parallel data sets generated randomly for PA. Eigenvaules were generated from the raw data together with the mean eigenvalues and eigenvalues representing the 95th percentile (O'Connor, 2000). A comparison was then made between the eigenvalues from the actual data and those from the randomly generated data – factors from the actual data with eigenvalues greater than the corresponding eigenvalue from the random data at the 95th percentile was identified. Nine factors were identified through the PA. Following the PA, a series of EFAs ranging from specifying a nine-factor solution to a 16-factor solution were conducted with the principal axis factoring method of extraction and oblique rotation to determine the best possible number of factors for the current study.

The original SMWEB scale, which is intended for use in the general population, has not been validated in any published study nor in the workplace context. EFA is therefore deemed appropriate to delineate its underlying structure as it cannot be assumed that the same structure would apply to the working population. EFA is also suitable for use in the revised SMWEB scale with the modified workplace items as this was exploratory in nature in delineating its underlying structure. Thus, two rounds of EFAs were performed; the first involved exploring the psychometric properties, that is, the underlying structure of the SMWEB, followed by a second EFA to determine if a five-factor structure (as originally developed by Fen et al., 2012) could be replicated in the current study. The same procedure, that is, two arounds of EFAs was conducted with the revised SMWEB scale with nine items replaced by the workplace context items. The principal axis factoring method of extraction and oblique rotation were utilized in the EFAs.

With regard to the sample size required for a factor analysis, fixed rules are no longer relevant (Costello & Osborne, 2005), and a sample size of 200 to 300 cases are appropriate (Boateng et al., 2018). Moreover, in a study to investigate the minimum sample size required for conducting factor analyses, Mundfrom and colleagues (2005) concluded that sample size

is not determined by the number of variables and providing a minimum sample size is not realistic; firstly, sample size is dependent on the ratio of the number of variables to the number of factors – the higher the ratio the smaller the sample size is required particularly when the ratio is more than six; secondly, a higher level of communality requires a smaller sample size. For example, a sample size of not more than 180 cases is required even when a low communality of between 0.2 to 0.4 and a variable-to-factor ratio of seven are taken into consideration. Thus, for a variable-to-factor ratio of eight with high communalities of between 0.6 to 0.8, it is recommended that only a sample size of 100 is needed (Mundfrom et al., 2005).

4.7 Results

This section presents the results of analyses for the Study 2 data set.

4.7.1 Examining the Workplace SMWEB factor structure through Parallel Analysis – Step One

As recommended by Hayton and colleagues (2004), the current study utilized the four-step guide to arrive at the number of factors through PA analysis utilizing the SPSS Syntax for Parallel Analysis script developed by O'Connor (2000). Specifically, Step 1 involved generating random data through establishing number of observations (N cases = 234) and variables (N variables = 104) in the actual data. In this initial analysis, 234 out of the total number of 318 cases were included in and generated from the PA as cases that included responses indicated as "Not Applicable" for at least one item were excluded. Step 2 involved extracting eigenvalues from the random data correlation matrix through a principal axis factor analysis using the SPSS syntax with 100 parallel data sets. Step 3 involved obtaining the average eigenvalues by take the mean and 95th percentile of all eigenvalues generated by principal axis factor analysis of random data sets. Finally, step 4 involved comparing the actual data with the parallel random data and retaining only the factors whose eigenvalues were greater than the eigenvalues from the random data – a total of nine factors were identified. The full results of the PA with the raw data eigenvalues, mean & percentile random data eigenvalues are shown in Appendix I.

4.7.2 Examining the Workplace SMWEB factor structure through Exploratory Factor Analysis (EFA) - Step Two

As previously mentioned, it is recommended that EFA be conducted after PA to determine the optimal number of factors to be retained. This is due to the possibility of PA retaining too few factors (Turner, 1998), which can be more problematic than retaining too many factors (Hayton et al., 2004). Thus, a series of EFAs were conducted to determine the dimensionality of the 104-item questionnaire.

The first analysis involved conducting an EFA with principal axis factoring to investigate the initial underlying structure of the questionnaire. The overall Kaiser-Meyer-Olkin (KMO) measure was 0.954. Bartlett's Test of Sphericity was statistically significant ($p < .001$), indicating that the data were suitable for factor analysis. The results of the EFA revealed 16 factors that had eigenvalues greater than one and which explained around 71% of the total variance. The Promax rotation with Kaiser Normalization was employed to maximise the interpretability of the resulting factors. On inspection, the rotated structure indicated that the data did not fit the 16-factor solution well. Specifically, factor 16 consisted of items scattered across other factors with no items on its own within the 16th factor. Although cross loadings are to be expected if the constructs are related (Field, 2018; Watskins, 2018), there were also numerous loadings across three factors (with loadings > 0.30). As previously mentioned, this may be due to the possibility that EFA tends to identify too many factors with the Kasiser method (Horn, 1965; Wood et al., 2015).

Notwithstanding, results from the PA indicating a nine-factor structure and from the first around of EFA indicating a 16-factor structure suggest that a factor solution or model ranging from nine to 16 factors were plausible, that is, nine, 10, 11, 12, 13, 14, 15 and 16-factor model. However, a 16-factor model had been ruled out as explained. Thus, a series of additional EFAs were conducted for each of the remaining plausible model to determine the optimal number of factors to be retained.

4.7.3 Determining the final Workplace SMWEB factor structure - Step Three

An EFA performed with a nine-factor model as indicated by the PA did not show a good fit. Specifically, there were five factors which had items ranging from 12 to 17 items each. This large number of items in a single factor would make interpretation of the factor difficult with a potential loss of important information (Hayton et al., 2004). This was in line with the findings from Turner (1998) that too few factors may be identified in PA. Moreover, the total variance as explained by the nine factors had also dropped to around 63.9%.

Subsequent EFAs performed on the remaining plausible factor structures, that is, 10, 11, 12, 13, 14 and 15-factor model found that a 14-factor structure was the best fit.

Specifically, a further three rounds of EFAs were performed with the 14-factor factor structure; firstly, the first round of EFA indicated that there were four items with low loadings of less than 0.30 and were therefore deleted. Items with factor loadings below 0.30 are considered inadequate and can therefore be removed (Boateng et al., 2018) These four deleted items were: "If I need help because of a heavy workload, I am given the necessary means", "There are much defined channels for information exchange and transfer", "My job fit my career goals", and "I feel that my work allows me to do my best in a particular area".

Secondly, a second round of EFA was performed. The results indicated that there was only one item with a loading of less than 0.30 remaining and was subsequently deleted. This deleted item was: "It is easy to find help when needed".

Lastly, a third round of EFA was performed. The final results indicated all 99 items had loadings of between 0.302 to 0.975. Importantly, a factor consisting of three items suggesting flexi work time ("My organisation allows a flex-time option", "My work offers schedule flexibility", "It is easy for me to take time off during our work to take care of personal or family matters") was distinguished from the "work-life balance" factor in the 13-factor structure as originally proposed in Study 1. This is an important distinction as flexi work time and work-life balance can be viewed as separate dimensions; flexi work time involved flexible working hours whereas work-life balance involved balancing work life with personal and/or family life.

In the final factor structure, there were 12 items with cross loadings across two factors, but this is to be expected if factors are expected to reflect related constructs; items are chosen based on a greater factor loading on a factor rather than loading only on one factor (Field, 2018). This final 14-factor structure explained 70.16% of the total variance. Based on the content of the remaining items in each factor, the 14 factors were re-named: support from

boss (factor 1), fairness (factor 2), autonomy (factor 3), meaningful work (factor 4), co-worker relationship (factor 5), role clarity (factor 6), work-life balance (factor 7), learning and professional growth (factor 8), person-organisation fit (factor 9), employee engagement (factor 10), employee recognition (factor 11), flexitime work (factor 12), accomplishment (factor 13), organisation support (factor 14). The component loadings from the pattern matrix of this 14-factor structure is shown in Table 4.1 below. Correlational analysis indicated mostly moderate correlations between the factors indicating that the latent constructs represented by the factors are related (see Table 4.2). Internal consistency of each of the 14 factors was evaluated using Cronbach's alpha coefficient and all showed high values of between 0.874 to 0.965. (see Table 4.3). The internal reliability of the overall Workplace SMWEB questionnaire was also found to be to be a high $\alpha = .986$. These values are well above the region of 0.70 to 0.80 required for good reliability (Kline, 1999). The high internal reliability of the Workplace SMWEB questionnaire suggests that the items were highly intercorrelated with each other indicating a singular underlying construct that defines workplace mental wellbeing in Singapore. The number of items, means and standard deviations of all the final variables in the study are presented in Table 4.4.

Table 4.1

14-Factor structure for EFA on the Workplace SMWEB (99 items) scale (N=318) within the Singapore workplace context

Item	Commun-alities	Factor													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
My boss gives me help when I need it.	.857	.975													
My boss provides the help I need to complete my required tasks.	.858	.951													
My boss helps me learn and improve.	.800	.863													
My boss genuinely cares about me.	.806	.804													
My boss encourages me when I have problems so that I can solve them.	.734	.798													
My boss is available to me when I ask for help.	.701	.748													
My boss is approachable.	.800	.722													
I really feel supported by my bosses.	.829	.716													
My boss helps me prevent and address burn-out.	.776	.665													

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My boss is supportive of any on-the-job-training I attend.	.675	.645														
My boss shares important information.	.604	.396														
Promotions are handled fairly.	.761		.904													
Procedures at your organization have been free of bias.	.716		.856													
My organization does a good job of linking rewards to job performance.	.746		.832													
Procedures at your organization been applied consistently.	.746		.824													
Your outcome reflects what you have contributed to your organization.	.732		.637													
Where I work, there are fair privileges.	.652		.618													
Communication and information flow between the departments is satisfactory.	.583		.549													
My efforts are adequately rewarded.	.666		.445									.410				
My organization communicates every new change that takes place.	.575		.375													.304

The orders received are consistent.	.635		.365																
The goals and results obtained are shared with the employees.	.616		.349																
My job allows me to make decisions about what methods I use to complete my work.	.755			.889															
My job allows me to decide on the order in which things are done on the job.	.751			.841															
My job allows me to make a lot of decisions on my own.	.735			.824															
My job allows me to decide on my own how to go about doing my work.	.787			.822															
My job gives me considerable opportunity for independence and freedom in how I do the work.	.827			.820															
My job allows me to plan how I do my work.	.741			.778															
My job provides me with significant autonomy in making decisions.	.723			.761															

My job allows me to make my own decisions about how to schedule my work.	.733			.693		
My job gives me a chance to use my personal initiative or judgment in carrying out the work.	.729			.669		
The work I do serves a greater purpose.	.787				.946	
I know my work makes a positive difference in the world.	.769				.918	
[My work helps me make sense of the world around me.	.607				.787	
I have discovered work that has a satisfying purpose.	.778				.755	
I have a good sense of what makes my job meaningful.	.583				.727	
I understand how my work contributes to my life's meaning.	.599				.702	
My work helps me better understand myself.	.547				.662	
I have found a meaningful career.	.683				.638	

Item						
My work really makes no difference to the world (reversed scored)	.357				.620	
I view my work as contributing to my personal growth.	.638				.535	
I have formed strong friendships at work.	.756					.879
I can confide in people at work.	.682					.839
I socialize with colleagues outside of the workplace.	.617					.826
I have the opportunity to develop close friendships at my workplace.	.754					.825
Being able to see my colleagues is one reason why I look forward to my job.	.658					.767
I have the opportunity to get to know my colleagues.	.584					.688
I feel I can trust many colleagues a great deal.	.676					.680
I am able to work with my colleagues to collectively solve problems.	.535					.618

In my organization, I have the chance to talk informally and visit with others.	.598					.517										
My job is well defined.	.753						.872									
Explanation is clear as what has to be done at work.	.757						.824									
The goals of my work are clearly defined.	.764						.769									
I know what my work responsibilities are.	.576						.700									
I know exactly what is expected of me at work.	.685						.699									
The relation between the job description and the tasks I carry out is good.	.548						.431									
There is a good fit between my personal life and work life.	.806							.906								
There is a good fit between my family life and work life.	.778							.877								
There is a good fit between my job and my personal health.	.772							.751								

Item															
I am able to do my job and not burn out.	.682							.717							
I have sufficient emotional energy for the job.	.737							.692							
Training programs in our organization help employees to achieve the required skill for performing the job effectively.	.673								.742						
My organization offers sufficient opportunities to develop my own abilities.	.736								.681						
My organization provides resources to facilitate my performance.	.731								.668						
My work offers opportunities for improving knowledge and skills.	.665								.545						
The job has the right level of challenge.	.599								.315						
My organization provides enough information to discharge my responsibilities.	.664								.302						
I am the right type of person for this type of work.	.793									.872					

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I have the right skills and abilities for doing this job.	.688									.836				
My personality is a good match for this job.	.716									.699				
There is a good match between the requirements of this job and my skills.	.714									.674				
My organization is committed to my personal safety in the office.	.607									.588				
Help is available from my organization when I have a problem.	.668									.521				
Communication among employees is encouraged by my organization.	.637					.336				.486				
Physical workspace is satisfactory.	.434									.477				
Your organization has treated you with dignity.	.786		.392							.464				
Your organization has treated you with respect.	.783		.383							.450				
My job lets me use my skills and abilities.	.616									.351				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
My bosses value the ideas I put forward for improving the job.	.788	.373										.661			
My boss values the order and accuracy in my work.	.694	.345										.606			
In my job, innovative contributions are appreciated.	.718											.605			
When I do something well, my boss congratulates me.	.739	.518										.547			
My work is adequately valued.	.776											.532			
My suggestions about the job are listened to.	.735											.510			
My efforts receive the recognition they deserve.	.766		.336									.444			
The contribution of new ideas is encouraged.	.630											.436			
My organization allows a flexi-time option.	.723												.739		
My work offers schedule flexibility.	.739												.629		
It is easy to take time off during our work to take care of personal or family matters.	.678												.607		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
My daily work activities give me a sense of direction and meaning.	.793														.665	
My job allows me to recraft my job to suit my strengths.	.637														.637	
My work offers challenges to advance my skills.	.670										.329				.522	
My work brings a sense of satisfaction.	.740														.493	
In my work, I have a feeling of success and accomplishment.	.729														.450	
I feel capable and effective in my work on a day-to-day basis.	.692														.434	
My organization is complimentary of my accomplishments at work.	.750															.504
My organization cares about my general satisfaction at work.	.773		.306													.472
My organization is willing to offer assistance to help me perform my job to the best of my ability.	.713															.391
My organization really cares about my wellbeing.	.751		.324													.382

Note: Extraction Method: Principal Axis Factoring, Rotation Method: Promax with Kaiser Normalization.

Factor loadings below 0.30 are not shown.

Table 4.2

Correlational analyses for the 14-factor Workplace SMWEB scale

Factor	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1.000													
2	.671	1.000												
3	.573	.490	1.000											
4	.436	.441	.322	1.000										
5	.453	.404	.328	.376	1.000									
6	.579	.549	.461	.484	.323	1.000								
7	.517	.528	.557	.444	.364	.483	1.000							
8	.576	.515	.344	.428	.372	.505	.319	1.000						
9	.377	.378	.453	.500	.361	.475	.479	.285	1.000					
10	.534	.446	.500	.374	.481	.463	.363	.471	.424	1.000				
11	.568	.604	.598	.440	.371	.528	.524	.358	.495	.519	1.000			
12	.515	.452	.460	.283	.298	.332	.496	.264	.294	.253	.376	1.000		
13	.487	.520	.413	.579	.457	.535	.494	.387	.558	.485	.509	.271	1.000	
14	.364	.434	.325	.214	.313	.351	.362	.302	.248	.314	.457	.321	.212	1.000

Note: Extraction Method: Principal Axis Factoring; Rotation Method: Promax with Kaiser Normalization.

Table 4.3

Reliability analyses for the final 14-factor Workplace SMWEB scale

Workplace SMWEB Construct	Cronbach's α
Support from boss (11 items)	.965
Fairness (11 items)	.942
Autonomy (9 items)	.956
Meaningful work (10 items)	.921
Co-worker relationship (9 items)	.927
Role clarity (6 items)	.904
Work-Life balance (5 items)	.926
Learning and professional development (6 items)	.897
Person-Job fit (4 items)	.895
Employee engagement (7 items)	.897
Employee recognition (8 items)	.948
Flexitime work (3 items)	.874
Accomplishment (6 items)	.917
Organisation support (4 items)	.926
WORKPLACE SMWEB (99 items in total)	.986

Table 4.4

Final Descriptive Statistics for Study 2 Variables

Variable	No. of Items	M	SD
Support from Boss	11	3.65	0.84
Fairness	11	3.38	0.80
Autonomy	9	3.99	0.79
Meaningful Work	10	4.14	0.77
Co-worker Relationship	9	3.76	0.76
Role Clarity	6	3.79	0.75
Work-Life Balance	5	3.56	0.90
Learning & Professional Development	6	3.67	0.78
Person-organisation Fit	4	3.93	0.71
Employee Engagement	7	3.94	0.66
Employee Recognition	8	3.70	0.84
Flexitime Work	3	3.64	1.04
Accomplishment	6	3.73	0.76
Organisational support	4	3.73	0.76

4.7.4 Examining the validity and reliability of the SMWEB scale

In examining the validity of the original SMWEB scale, the first analysis with EFA revealed a four-factor structure that had eigenvalues greater than one which explained around 53.8% of the total variance. The Promax rotation with Kaiser Normalization was employed to maximise the interpretability of the resulting factors. On inspection however, the rotated structure indicated that the data did not fit the 4-factor solution well. Specifically, factor 4 only consisted of one item which was also a cross-loaded item from factor 2. A second EFA was performed with a 5-factor structure as originally hypothesized by the SMWEB model, and it explained around 55.6% of the total variance. However, the results indicated a poor fit as well. Specifically, factor 5 consisted of only two items, which is below the minimum of three to four items required for high internal consistency (Robinson, 2017). A third EFA performed with a 3-factor structure showed that items from the five original factors domains were diffused suggesting a potential loss of important information, and the total variance explained had also dropped to around 51.4%.

4.7.5 Examining the construct validity and reliability of the revised SMWEB scale as compared to the original SMWEB scale

The revised SMWEB scale had nine items specifically modified to better reflect the workplace context. The first analysis with EFA revealed a four-factor structure that had eigenvalues greater than one and which explained around 55.1% of the total variance. A second analysis of a five-factor structure was also performed as comparison to determine a more suitable structure, that is, four or five-factor. Both factor models (revised SMWEB) showed better structure than when analyses were conducted on the original SMWEB. Specifically, the four and five-factor models on the revised SBWEB showed items loading on each of the factor clearly. On close inspection of the items on each factor on both the four and five-factor models, the four-factor structure appeared to be a better fit as items relating to Social Intelligence (SI) were held together onto one factor; on the five-factor structure

however, these items were more diffused across two separate factors. Subsequently, three items below the loading of 0.30 were also removed from the four-factor structure. These items were: "I am spiritual", "I am able to seek help when needed", and "I accept what life has to offer while working". With these three items removed, the total variance increased to 57.6%. for the four-factor structure. On both models (four and five-factor), items relating to Resiliency (RI) did not form a clear factor but were instead diffused across the other factors just like when analysis was performed on the original SMWEB. This suggests that resiliency as a factor may be less relevant in the workplace context. The final four-factor structure consisted of 27 items. There were two items which cross-loaded into two factors. However, as previously mentioned, cross loadings are to be expected if the constructs are related. In the original study by Fen and colleagues (2013) in the development of the original SMWEB scale, items were similarly selected based on higher loadings.

Based on the content of the items in each factor in the current study, the four factors were: Emotional Intelligence, Cognitive Efficacy, Social Intelligence and Self-Esteem. The component loadings from the pattern matrix of this four-factor structure are shown in Table 4.5 below. Correlational analysis indicated mostly moderate correlations between the factors indicating that the latent constructs represented by the factors are related (see Table 4.6). Internal consistency of each of the four factors and the overall questionnaire was evaluated using Cronbach's alpha coefficient and all showed high values of between 0.874 to 0.965. As compared to the original SMWEB, all the reliabilities have also increased. While internal consistency is significantly influenced by the number of items, that is, the higher the number the higher the internal consistency, the factor (Social Intelligence) has the same number of items and the factor (Self-Esteem) has a lower number of items as compared to the original SMWEB. Moreover, even though the revised SMWEB has only 27 items in total as compared to the original SMWEB which has 30 items, the overall internal consistency has decreased slightly from a Cronbach's alpha coefficient of 0.957 (SMWEB) to 0.952 (revised

SMWEB). These Cronbach alpha values were close to the value of 0.962 in the original study by Fen and colleagues (2013). Refer to Table 4.7 for the reliability analyses for SMWEB and Table 4.8 for the revised SMWEB.

Table 4.5

Four-Factor structure for EFA on the revised SMWEB scale (N=318)

| Item | Factor | | | |
	1	2	3	4
I am happy.	.970			
I am not depressed.	.780			
I am content.	.752			
I feel balanced in myself.	.750			
I feel peace.	.742			
I am optimistic about the future.	.677			
I am appreciative of life.	.538			
I am able to accept myself.	.512	.419		
I appreciate my own self-worth.	.492			
I am calm.	.388			
I am able to think rationally.		.889		
I am able to think clearly.		.834		

I am able to make good decisions.		.695	
I stand firm under stress.		.540	
I am able to accept reality.		.445	
I am alert.		.426	
I am resilient under work's crisis.		.416	
I am able to keep company with my colleagues.			.911
I am able to make friends at my workplace.			.883
I am able to offer help to my colleagues.			.804
I am able to maintain a work-life balance with my colleagues.			.544
I have the strong support of my work peers and my organisation.			.485
I am able to cope with challenges at work.			.386

I am able to contribute positively to the world (eg. environment, work, community).				.757
I believe that life is a continued development of myself.				.721
I seek for self-development/growth/ cultivation at work.				.675
I can handle most situations.		.305		.465

Note: Extraction Method: Principal Axis Factoring, Rotation Method: Promax with Kaiser Normalization.

Factor loadings below 0.30 are not shown.

Table 4.6

Correlational analyses for the four-factor revised SMWEB scale

Factor	1	2	3	4
1	1.000			
2	.723	1.000		
3	.545	.577	1.000	
4	.618	.635	.666	1.000

Table 4.7

Reliability analyses for the original five-factor SMWEB scale

SMWEB Construct	Cronbach's α
Emotional Intelligence (9 items)	.914
Cognitive Efficacy (4 items)	.827
Social Intelligence (6 items)	.813
Self-Esteem (5 items)	.813
Resiliency (6 items)	.837
SMWEB (30 items in total)	.957

Table 4.8

Reliability analyses for the four-factor revised SMWEB scale

Revised SMWEB Construct	Cronbach's α
Emotional Intelligence (10 items)	.926
Cognitive Efficacy (7 items)	.882
Social Intelligence (6 items)	.872
Self-Esteem (4 items)	.823
Revised SMWEB (27 items in total)	.952

4.7.6 Correlation between Workplace SMWEB, SMWEB-R and SMWEB

As a mental wellbeing measure, it is expected that the Workplace SMWEB should correlate moderately and positively with the SMWEB as previously mentioned. Although an inspection of the histograms showed that the overall scores of the Workplace SMWEB and SMWEB were reasonably normally distributed, the Shapiro-Wilk test of normality indicated that they were not. As such, bootstrap methods are appropriate as bivariate normality is not assumed, rather, resampling is calculated with replacement from the observed data (Bishara & Hittner, 2016; Hutson, 2019). A bivariate Pearson's correlation (r) with bootstrapping of 1000 samples was calculated. With $N = 234$, the bivariate correlation the between the Workplace SMWEB and SMWEB was found to be significant and positively and moderately correlated, $r(232) = .554, \ p < .001$.

4.8 Discussion

The aim of Study 2 was to develop and validate a new Singapore Workplace Mental Wellbeing (Workplace SMWEB) scale based on the 13 workplace mental wellbeing factors identified in Study 1. To date, there has not been any suitable mental wellbeing measure developed specifically for the Singapore workplace context. Moreover, the Singapore Mental

Wellbeing (SMWEB) scale was originally developed to measure positive psychological functions of individuals in general life experiences in Singapore (Fen et al., 2013) and has not been validated or published in any research study since its development. Thus, Study 2 also aimed to examine its validity in the workplace context. In addition, nine items from the SMWEB scale were modified to better reflect experiences at the workplace leading to a revised SMWEB scale. The revised SMWEB scale was also examined and compared to the original SMWEB scale to ascertain its suitability for use in the workplace context.

4.8.1 It was hypothesized that the Workplace SMWEB scale would have good structural validity and internal consistency.

Study 2 indicated that the newly developed Workplace SMWEB scale is a valid and reliable instrument for measuring mental wellbeing in a multi-ethnic and multi-cultural working population in Singapore. In identifying the factor structure of the Workplace SMWEB scale, parallel analysis (PA) was conducted prior to exploratory factor analysis (EFA) to determine the optimal number of factors to be extracted. The results indicated that a 14-factor structure rather than a 13-factor structure as initially proposed through Study 1 was a better factor structure. Thus, the final version of the Workplace SMWEB scale consisted of 99 items and 14 factors. These 14 factors were: support from boss, fairness, autonomy, meaningful work, co-worker relationship, role clarity, work-life balance, learning and professional growth, person-organisation fit, employee engagement, employee recognition, flexitime work, accomplishment, and organisation support. Cronbach's alpha coefficients for all the constructs showed excellent levels of internal consistency ranging from 0.874 to 0.995 with the overall Workplace SMWEB scale having a coefficient of 0.986. The high internal reliability suggests that the Workplace SMWEB taps a single underlying construct of Singapore workplace mental wellbeing.

In delineating the 14 factors of the Workplace SMWEB scale, the analysis revealed that the initial items comprising the "work-life balance' construct had subdivided into two factors

– one that measured maintaining a work-life balance and the other that measured having flexible work time. Flexible working or flexitime departs from the traditional working arrangements in the sense that it allows employees to decide when and where to carry out their work tasks (Maxwell et al., 2006; Shockley & Allen, 2007). Such flexitime options for employees have been shown to provide numerous benefits and important outcomes for the organisation as well as employees (McNall et al., 2010). Specifically for the employees, having flexible working time helps to enhance employee wellbeing in several ways such as improved work-life balance and health (Kossek et al., 2005; Shagvaliyeva & Yazdanifard, 2014). Especially for employees who are also mothers with childcare and family responsibilities, having flexible work time can be very valuable for them (Skinner et al. 2014; Sullivan & Lewis 2001).

Past research on work and family life has mostly focused on the American context, and findings cannot be generalised to the Singapore workplace context due to its unique multicultural environment (Jones et al., 2008); working conditions are much less flexible in Singapore as compared to other developed nations, and employees also have less access to flexible work conditions. Moreover, employees in Singapore are also less likely to utilize flexible work options even if provided the opportunity (Hill, 2007).

Having organisations adopt flexible work options is important especially in Singapore given the long working hours, as such options can help to mitigate against long working hours and negative consequences (Hill, 2007) such as negative work, personal, and family outcomes (Hill et al., 2001). In fact, in the study conducted by Jones and colleagues (2008) to investigate if flexible work options predicted work-family fit employees in Singapore, it was found that having just the perception of flexible work options predicted work-family fit rather than used flexible options; this might be attributed to several reasons including employees experiencing an increased sense of control and empowerment and feelings of being more balanced. The psychological experience of having a sense of control over one's working time

is closely linked with wellbeing and feelings of satisfaction (Deci et al., 2001). Thus, regardless of whether employees utilize flexible work options, the availability of such options in an organisation as part of the policy or contract is likely to improve work-family fit leading to positive outcomes such as greater employee engagement and improved mental health (Jones et al., 2008).

In regards to the findings as to why used flexible work arrangement was not significantly associated with improved work-family balance, Jones and colleagues (2008) explained that this might be attributed to the lack of such options at the organisation, the lack of support from management to utilize them and employees not utilizing them as much as they wanted to due to possible discrimination. Moreover, for those employees who utilized such options, they might be already experiencing a high level of stress juggling work and family responsibilities. In fact, the findings from a study by Straughan and Tadai (2016) in Singapore found that significant implemental gaps exist for flexible work arrangements despite the government's push for such arrangements and employers' initial endorsement of such practise in principle. For example, workplace cultures in Singapore typically do not encourage such practice and there is also a lack of clear guidelines to measure productivity with employers still dependent on the traditional method of number of work hours spent at the office (Straughan & Tadai, 2016). Thus, it will be necessary to address such implementation gaps for employees to perceive that such flexitime options are actively being encouraged rather than just a policy on paper.

The factor analysis of the 14 factors of the Workplace SMWEB scale also revealed that the items in the "transparency" construct as original proposed in Study 1 are now subsumed under other factors. Specifically, with one item removed due to low loading as previously described, one of the remaining items is subsumed under "support from boss", four items under "fairness", and one item under "learning and professional development". Transparency is concerned with information and the sharing of information, and it fosters trust and

openness leading to better decision- making process within the organization (Farrell, 2016). Thus, it would be expected that four items ("The goals and results obtained are shared with the employees", " The orders received are consistent", "My organization communicates every new change that takes place" and "Communication and information flow between the departments is satisfactory"), which denote transparent communication, are subsumed under "fairness" which according to Brotheridge (2003), is concerned with the way employees perceive if they are being treated equally. The one item ("My boss shares important information") is highly relevant in how employees perceive the amount of support they receive from their boss; it is critical that the leader or leaders of an organization knows how to role model and foster transparency in order to increase employee engagement which in turn increase support for their employees (Farrell, 2016; Jiang & Luo, 2018). The last item ("My organisation provides enough information to discharge my responsibilities") is associated with learning and professional development as professional growth would only be possible if employees clearly know what their job responsibilities are and can therefore subsequently strive towards improving their knowledge and skillsets in their work.

Employee engagement is a newly renamed theme comprising of seven items. Employee engagement is an important construct that has been widely used in many organisations today (Bailey et al., 2015, Knight et al., 2017). Yet, several definitions for employee engagement exist and there is no consensus on a universal concept (Ling et al., 2013; Macey & Schneider, 2008). It has also been argued that employee engagement can be viewed as an evolving construct rather than of one with a fixed theoretical background (Guest, 2013). Notwithstanding, Kahn (1990) introduced the initial concept of employee engagement (Shahruddin & Daud, 2018) where he explained that employee engagement involved three psychological conditions of meaningfulness, safety, and availability (Kahn, 1990); Specifically, meaningfulness refers to the extent that an employee feels the work is worthwhile and valuable, as reflected in the item "My job lets me use my skills and abilities";

Safety refers to the extent an employee can express themselves without repercussions in a psychological and physically safe working environment, as reflected by four items which represent safety and respect – "My organisation is committed to my personal safety in the office", "Physical workspace is satisfactory", "Your organisation has treated you with dignity" and "Your organisation has treated you with respect". Availability refers to the extent of engagement between people and the amount of psychological resources that can be made available, as reflected in the remaining two items – "Communication among employees is encouraged by my organisation" and "Help is available from my organisation when I have a problem".

In a study to identify workplace psychosocial risk factors amongst employees in the Singapore working population, Abdin and colleages (2019) developed a 27-item iWorkHealth instrument that delineated five key dimensions - job demand, job control, employee and management engagement, supervisor support and colleague support. It was found that employee and management engagement was identified as a distinct dimension in the Singapore context. Specifically, it consists of seven items measuring areas in pay and benefits, promotion opportunities, fairness of reward distribution, how well employees are treated, respect given to employees, process management and if employee welfare is being prioritised. Consistent with the findings from the study by Abdin and colleages (2019), the current study showed that the 14 dimensions in the newly developed Workplace SMWEB scale covered all the areas as identified in the iWorkHealth instrument while employee engagement also emerged as a distinct dimension.

Specifically, within the iWorkHealth instrument, the job demand dimension was associated with emotional drain and contradictory demands; the job control dimension was associated with skillset, availability of help and meaningful work; the supervisor and colleague support dimensions were associated with support from and relationship with supervisors and colleagues. All these dimensions were similarly identified in the Workplace

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SMWEB scale except for pay and benefits. This might be attributed to a greater focus on the fulfilment of psychological needs at the workplace such as workplace support, respect, autonomy and accomplishment beyond monetary rewards when addressing workplace mental wellbeing in Singapore. Thriving at work goes beyond monetary measurement (Seligman, 2011) and further monetary incentives may not necessarily lead to better wellbeing (Bunge, 2012; Easterlin, 2017; Mikucka & Sarracino, 2014). In fact, an increase in income has a much smaller impact on wellbeing in affluent countries as compared to when in poorer countries (Diener & Diener, 1995; Oishi, Diener, Lucas, & Suh, 1999), and psychological needs were found to be only weakly correlated with money and material resources (Diener et al., 2010; Tay & Diener, 2011). It was also found that materialism including the pursuit of monetary incentives was significantly and negatively associated with wellbeing at the expense of psychological needs (Dittmar et al., 2014). In fact, monetary measurement as fulfilment of basic needs was important only during the early stages of economic growth in a country but indicators of wellbeing now include other factors such as work satisfaction and interpersonal relationships as citizens become wealthier (Diener & Seligman, 2004).

The current study expands upon the iWorkHealth instrument in terms of improving employee mental wellbeing. Workplace psychosocial risk factors can be defined as the interaction between employees and a variety of workplace factors such as workplace environment and job demands that are detrimental to employee wellbeing (International Labour Organization, 1986). However, a more holistic approach is needed to improve employee wellbeing (LaMontagne et al., 2007) and an integrated approach consisting of three factors was proposed by LaMontagne and colleagues (2014); firstly, risk factors at the workplace need to be reduced; secondly, there needs to be a focus on employee strengths and the positive dimensions of work; lastly, mental health problems amongst employees need to be addressed. Reducing risk factors at the workplace alone is therefore necessary but not sufficient to improve employee wellbeing.

Further, wellbeing includes positive feelings and functioning and is more than the absence of illnesses (Keyes, 2005), and this notion similarly applies to the workplace (Page & Vella-Brodrick, 2009). While reducing workplace psychosocial risk factors is important, positive approaches aimed at promoting and improving employee mental wellbeing are equally important (LaMontagne et al., 2014) with the need to consider both the eudaimonic and hedonic aspects of wellbeing at the workplace (Keyes, 2005; LaMontagne et al., 2010). Some of these approaches can include developing a positive organisational culture and practices and creating meaningful work for the employees (Page & Vella-Brodrick, 2012). For example, research has indicated that older employees place greater emphasis on factors such as opportunities to utilize their knowledge and skills, having a sense of accomplishment and having good relationships with colleagues rather on financial incentives when considering whether to remain in the workforce (Kooij et al., 2008; Peeters et al., 2008). Especially in the Singapore context, this has important implications as the population and workforce are aging rapidly and it is expected that individuals aged 55 would make up 23% of the workforce in 2050 (Chuan, 2007). Thus, the newly developed Workplace SMWEB scale consists of dimensions that not only address workplace psychosocial risk factors, but also taps on employee strengths and the positive aspects of work encompassing both the eudaimonic and hedonic elements of wellbeing.

4.8.2 It was hypothesized that that the revised SMWEB scale with modified items is a more suitable instrument to be used in the workplace context in terms of validity and reliability.

The results of the factor analysis of the SMWEB scale and the revised SMWEB scale showed that the revised version is a more suitable instrument to be used in the workplace context. Specifically, analysis conducted with EFA on the SMWEB scale using a three, four or five-factor structure did not indicate a good fit. This is expected as the SMWEB scale was developed for general life experiences and not for the workplace context. This was evident as

the item "I am spiritual" had a low loading of below 0.3 across all analyses, suggesting that spirituality was not an important consideration at the workplace. In fact, every focus group in Study 1 had indicated that spirituality was not an important factor in enhancing mental wellbeing at the workplace although a number of participants had spiritual or religious practices in their own personal lives. Another possible explanation could be the lack of opportunities or encouragement for employees to practice or experience spirituality within the working environment particularly in the context of modern workplaces in Singapore. Moreover, culture and practices in a society are likely to evolve over time (Subudhi, 2015). Although some traditional ways of worship such as having an alter for praying to oriental deities, which are practised by Taoists, are still observed in some workplaces in Singapore particularly in construction sites and Singapore Bus Services depots, this cannot be assumed to be the case in most other workplaces; factors such as industry types, organisation management processes, educational level and personal religious beliefs of the employees, and religious and ethnic diversity at the workplace are also important considerations.

The revised SMWEB scale had nine items specifically modified to better reflect the workplace context. It was found that a four-factor structure (Emotional Intelligence, Social Intelligence, Cognitive Efficacy and Self-Esteem) was a more suitable structure. Specifically, items relating to Resiliency did not form a clear factor but were instead diffused across the other factors just like when analysis was performed on the original SMWEB. This suggests that resiliency as a factor may be less relevant in the workplace context. Rather, resilience can be better represented by the other factors. For example, two Resiliency items "I stand firm under stress" and "I am resilient under work's crisis" are now subsumed under Cognitive Efficacy (CE) factor, suggesting that how an employee utilizes their cognitive resources such as cognitive reappraisal can contribute to how they perceive and respond to stress and adversities at work (Britt et al., 2016; Shatté et al., 2017). Furthermore, in a study to develop a scale to measure resilience for the workplace to predict work performance and emotional

health for employees, Winwood and colleagues (2013) conceived workplace resilience as consisting of seven factors such as maintaining perspectives, interacting cooperatively and building relationships and not as a single factor to represent resilience. The current revised SMWEB scale is consistent with Winwood and colleagues' (2013) findings that items in the Resiliency factor could be better explained by other factors. For example, another item ("I can handle most situations") from Resiliency is now subsumed under Self-Esteem, as it can refer to how an employee maintains their perspective regarding their abilities to manage situations at work.

4.8.3 It was hypothesized that the workplace mental wellbeing as measured by the newly developed Workplace SMWEB scale would have a significant positive and moderate correlation with the mental wellbeing as measured by the original SMWEB scale.

As expected, it was found that the Workplace SMWEB scale was positively and moderately correlated with the SMWEB scale. Indeed, research has shown that workplace wellbeing is distinct from general wellbeing (Bartels et al., 2019), but both have spill over effects and reciprocal relationships with one another (Page & Vella-Brodrick, 2009; Weziak-Bialowolska et al., 2020). For example, a bidirectional relationship between happiness in life and happiness at work was found, and work-related wellbeing in terms of social relationships and purpose was also found to have an impact on life wellbeing (Weziak-Bialowolska et al., 2020). Specifically, Cognitive Efficacy, the ability to think rationally and clearly, is an important ability required meet the demands of the modern working environment (Hunt &

Madhyastha, 2012); Social Intelligence, the ability to form reciprocal relationships, is necessary in building healthy relationships at work and working collaborative with one another (Njoroge & Yazdanifard, 2014); Emotional Intelligence, the ability to regulate one's emotions, is important in managing conflict and stress at the workplace (Ashkanasy & Daus, 2005); Self-esteem, which refers to how one views oneself positively or negatively, has been found to be an important factor contributing to wellbeing in different life domains including work, health and relationships (Kuster, Orth, & Meier, 2013).

As the SMWEB taps into the positive mental functions of individuals, it is also expected to predict success in life in areas beyond happiness in areas such as thriving, growth and development (Fen et al., 2013). For example, thriving at work is one important area contributing to life satisfaction and that has been shown to predict important work outcomes such as work performance and reduced instances of burnout (Guan & Frenkel, 2020). Thus, it is expected that the SMWEB should correlate positively with the Workplace SMWEB give that both are important determinants of thriving beyond happiness.

4.9 Limitations of Study 2

Several limitations of the current study were noted. First, that data were collected using self-report which seems appropriate as the focus of the research was on the participants' subjective experience of workplace mental wellbeing and general mental wellbeing. Although self-report surveys have a few advantages such as easy accessibility to data, issues including common method variance and response bias are not uncommon (Podsakoff et al., 2012). Thus, steps were followed to minimise these issues. These include voluntary participation in the research and anonymity. Moreover, the nature of the information required for the research was not overly sensitive, and the research was conducted outside of the participants' work settings.

Second, the current study involved the use of a cross-sectional survey design, with participants' responses captured at one point-in-time. While cross-sectional design studies are

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useful for exploratory studies (Spector 2019), limitations exist. For example, the evaluation of temporal validity may be limited. Future studies could employ longitudinal research designs to assess participants' wellbeing over a period of time.

Third, although the participants of the study came from a variety of industries such as the administrative, commercial, and social sectors, many of them were managers, professionals, technicians, and associate professionals. Many participants also had qualifications with a bachelor's degree and above. Thus, the findings may have limited generalisation to samples of participants who do not fall into these categories. Future studies could address this issue with a larger sampling size consisting of participants of diverse but specific demographic groups. For example, other blue-collar workers such as drivers and logistic workers could be recruited to further test the validity of the Workplace SMWEB scale.

4.10 Moving Forward

The findings from the current quantitative study have provided evidence for the structural validity and reliability for the Workplace SMWEB scale consisting of 14 dimensions which contribute to employee mental wellbeing in the Singapore context. This scale was then tested using the conceptual Singapore Workplace Mental Wellbeing Model to examine its relationship with employee and organisation outcomes (consequences) in the subsequent quantitative study 3. This study is described in Chapter 5.

CHAPTER 5: STUDY 3

5.1 Introduction to Study 3

As outlined in the preceding chapters, this research study consisted of a mixed-method sequential exploratory design. Study 1 involved the collection of qualitative data which explored the factors associated with mental wellbeing unique to the workplace in the Singapore context. The qualitative findings were presented in chapter 3. These factors subsequently informed the development of Study 2 and Study 3, both of which were quantitative studies thereby representing the sequential aspect of the research. The quantitative aspect of Study 3 reported in this chapter is represented in Figure 5.1.

This chapter presents the results of Study 3. As previously mentioned, Study 3 was undertaken by adapting the employee wellbeing framework developed by Danna and Griffin (1999) that identifies the important components of the nomological network of health and wellbeing in the workplace context. Specifically in the current research, the focus was on organisational factors that contribute to employee wellbeing which in turn was expected to lead to improved individual and organisational outcomes.

5.2 Rationale for Study 3

This section outlines the contribution of the qualitative analyses of Study 1, followed by the quantitative analyses of Study 2, both of which in turn informed the development of the final Study 3 model for analyses.

5.2.1 Study 1 qualitative contribution. The results of the qualitative aspect of Study 1 indicated that there were 13 factors perceived as important components in determining mental wellbeing specifically in the Singapore workplace context. These factors were: accomplishment, autonomy, learning and professional development, meaningful work, person-organisational fit, role clarity, work-life Balance, co-worker relationship, support from boss, employee recognition, fairness, transparency, and organisational support. These identified factors were consistent with previous literature and research in that, improving each of these factors is likely to bring about improved mental wellbeing for the employees, with the added benefit that they are especially pertinent to the Singapore context. Importantly, these factors were distinct to the five factors identified in the Singapore Mental Wellbeing (SMWEB) scale developed by Fen and colleagues (2013) which was originally designed to measure mental wellbeing in the context of general life experiences. These five factors were Asian self-esteem, social intelligence, emotional intelligence, resilience and cognitive efficacy.

5.2.2 Study 2 quantitative contribution. Through a combination of parallel analysis (PA) and a series of exploratory factor analysis (EFA), the results of Study 2 indicated that the newly developed Singapore Workplace Mental Wellbeing (Workplace SMWEB) scale consisted of 14 factors instead of the 13 factors identified in Study 1. Based on the exploratory factor analysis, the items in these 14 factors were regrouped and renamed: support from boss, fairness, autonomy, meaningful work, co-worker relationship, role clarity, work-life balance, learning and professional growth, person-organisation fit, employee engagement, employee recognition, flexitime work, accomplishment, and organisation support. Importantly, the findings also indicated that the Workplace SMWEB scale is a more

suitable instrument to be used to measure mental wellbeing in the workplace context as compared to the original SMWEB scale. Notwithstanding, a moderate and positive correlation between the SMWEB overall score and Workplace SMWEB overall score supported previous findings that workplace wellbeing is distinguishable from general wellbeing (Bartels et al., 2019), yet spillover effects and reciprocal relationships with one another have also been empirically supported (Page & Vella-Brodrick, 2009; Weziak-Bialowolska et al., 2020).

Figure 5.1

Quantitative Aspect of Study 3 – Examining the construct validity of the Workplace SMWEB scale

- Asian Self-Esteem
- Social Intelligence
- Emotional Intelligence
- Resilience
- Cognitive Efficacy

Individual Factors – *Identified in the original SMWEB Scale*

1. Accomplishment
2. Autonomy
3. Co-worker Relationship
4. Employee Recognition
5. Employee Engagement
6. Fairness
7. Flexitime Work
8. Learning and Professional Development
9. Meaningful Work
10. Organizational Support
11. Person-Organizational Fit
12. Role Clarity
13. Support from Boss
14. Work-Life Balance

Organizational Factors *– Identified in Study 1 (qualitative) and developed in study 2 (quantitative)*

Workplace Singapore Mental Wellbeing

Job Satisfaction

Individual Consequences

- Psychological Consequences

Organizational Consequences

- Productivity / Performance

5.2.3 Specific Aims of Study 3. Construct validity of a measurement can be assessed through convergent, discriminant, and nomological validity (Hair et al., 2014). To further test for the construct validity of the Workplace SMWEB scale, the employee wellbeing framework developed by Danna and Griffin (1999) was adapted in which the core constructs of wellbeing is identified along with the nomological network that surrounds these constructs. According to the authors, the concept of employee wellbeing is broad and encompassing but can be seen as comprising of various domains of satisfactions in life including job satisfaction which is specific to the workplace context. Indeed, job satisfaction has been described as one of the most accepted operationalizations of workplace wellbeing (Wright, 2014; Wright & Bonnet, 2007) with high levels of job satisfaction being an important indicator of positive mental wellbeing (Spector, 2022). The relationship between job satisfaction and employee wellbeing has been found to be crucial (Faragher, Cass & Cooper, 2005; Warr, 2009), and both the concepts of job satisfaction and employee wellbeing have also been found to be related from past literature (Sironi, 2019). Moreover, job satisfaction can be significantly influenced by several important workplace factors such as assuming responsibilities at work, opportunities to use knowledge and skills and relationship with manager as well as coworkers (Baptiste, 2008; Foote & Tang, 2008). Thus, job satisfaction, like employee wellbeing, can be seen as multi-dimensional construct with critical influence on employee outcomes (Aazami et al., 2015).

Specifically, studies have indicated critical links between job satisfaction and several health outcomes for employees. For example, strong association was found between job satisfaction and negative psychological consequences with the strongest correlations for burnout, depression and anxiety; that is, the lower the level of job satisfaction the higher the level for burnout, depression and anxiety leading to reduced productivity (Faragher et al., 2005). Indeed, the employee wellbeing framework by Danna and Griffin (1999) further identifies two sets of consequences arising from employee wellbeing and job satisfaction,

namely individual consequences including psychological consequences such as stress, anxiety and depression, and organisational consequences such as work performance. This is highly relevant in the Singapore work context in which economic success is still largely determined by work performance, yet stress-related illness' such as anxiety and depression due to excessive work remains a significant problem as compared to other countries such as the USA and the UK (Tan, 2021). Moreover, a prolonged accumulation of work stress can result in burnout leading to negative consequences for both the employees and the organisation (Lubbadeh, 2020), and several workplace factors such as a lack of fairness and a lack of a sense of autonomy at work have been found to contribute to employee burnout (Maslach & Leiter, 2008). In fact, occupational burnout due to chronic work stress has been described in the International Classification of Diseases (ICD-11) by the World Health Organization (WHO) as a factor which can negatively affect an employee's health status.

Although a significant amount of research has primarily focused on various aspects of employee health including workplace wellbeing and its consequences, there has been limited research on employee flourishing (Ho & Chan, 2022; Hone et al., 2015). Yet, researchers have found that several factors such as having a sense of autonomy, having work-life balance and job satisfaction have been found to be positively correlated with employee flourishing (Hone et al., 2015). As wellbeing is a multidimensional construct, the focus on employee wellbeing has to consider the dimension of positive consequences including employee flourishing, as well as the dimension of negative consequences including employee stress, anxiety, depression, and burnout (Hone et al., 2015). As indicated by Keyes (2005; 2007), mental health and mental illness are highly correlated but separate factors, and flourishing is an important criterion to be included for positive mental health. To further elucidate the concept of flourishing, Burns and colleagues (2022) found that flourishing needs to be defined by both wellbeing such as having a high level of psychological wellbeing and mental health such as the absence of or having a low level of psychological distress. The distinction

between wellbeing and mental health is important as interventions can be developed to enhance wellbeing such as having positive relationships as well as to address issues relating to mental health problems such as depression and anxiety (Burns et al., 2022).

For the purposes of study 3, a quantitative study included a cross-sectional survey design. Consistent with theory, this approach and design enabled further exploration of the factor structure of the Workplace SMWEB scale and its association with job satisfaction, individual outcomes including social-psychological functioning (flourishing), burnout and symptoms of depression, anxiety and stress, and organisation outcomes including work performance.

The specific objective of Study 3 is:

- To establish the construct validity and reliability of the newly developed Workplace SMWEB scale.

In addition, the supplementary objective of Study 3 is:

- To examine if the Workplace SMWEB scale is a more suitable instrument to be used in the Singapore workplace context to ascertain job satisfaction as compared to the Singapore Mental Wellbeing (SMWEB) scale which was originally developed to measure mental wellbeing in the context of general life experiences.

5.2.4 Hypotheses

H1:   It was hypothesized that the Workplace SMWEB scale would have the specific psychometric structure as identified by the EFA analysis in study 2.

H2:   It was hypothesized that workplace mental wellbeing would have a significant and positive correlation with job satisfaction.

H3:   It was hypothesized that workplace mental wellbeing would have a significant and positive correlation with job performance.

H4:   It was hypothesized that workplace mental wellbeing would have a significant and positive correlation with flourishing.

H5:   It was hypothesized that workplace mental wellbeing would have a significant and

negative correlation with burnout.

H6:   It was hypothesized that workplace mental wellbeing would have significant and

negative correlations with depression, anxiety, and stress.

H7:   It was hypothesized that as compared to general mental wellbeing, workplace mental

wellbeing would have a significantly stronger and positive correlation with job

satisfaction.

H8:   It was hypothesized that workplace mental wellbeing would have a significant and

positive correlation with general mental wellbeing.

5.3 Method

5.3.1 Participants. The cross-sectional study was conducted with among employees

aged 18 and above who were working in Singapore. Research data were collected using a

questionnaire survey from various industries operating in a variety of sectors. The full

occupation listing of the participants, which is first sorted into the major group followed by

the sub-group according to the International Standard Classification of Occupations 2008

(ISCO-8) is shown in Appendix J along with the other demographic details. The two most

common major groups of occupation were the Professionals and the Managers followed by

the Services and Sales Workers. In terms of sub-groups, the most common occupations were

Administrative and Commercial managers followed by Legal, Social and Cultural

Professionals, Business and Administration Associate Professionals, and Chief Executives,

Senior Officials and Legislators.

A total of 310 employees participated in the study. However, only 303 participants

were included in the current analysis after excluding seven participants who they did not meet

the criteria of being in employment as they were either students or in the mandatory military

service in Singapore. The 303 participants comprised of 59.4% females and 40.6% males. In

terms of age, the majority were in the 31-40 age group (36.3%) followed by the 21-30 age

group (32.3%), the 41-50 age group (17.5%), the 51-60 age group (9.6%), the over 60 age group (3.0%) and under 21 age group (1.3%). In terms of ethnicity, the majority were Chinese (78.5%) followed by Indians (7.6%), Malays (5.6%), other ethnic groups (5.0%), and Eurasians (3.3%). In terms of education, the majority had a Bachelor's degree (57.1%) followed by a Master/Doctorate degree (24.0%), a diploma (9.9%), GCE "O' Level (5.0%), and GCE 'A' Level (4.0%). In terms of the total length in employment, the majority had 6-10 years (21.5%), followed by 11-15 years (19.8%), over 20 years (18.7%), 3-5 years (12.2%), 16-20 years (9.6%) and 1-2 years (9.6%), and less than 1 year (8.6%). The full demographic characteristics of the study sample and the number of participants within each category are shown in Appendix J.

5.3.2 Procedure. Participants for this study were recruited directly through personal contacts via email, messaging or word-of-mouth and through recommendations and snowballing by the participants such as their colleagues, peers and friends. Participation was voluntary and outside of their office hours and as such, consent from their respective organisations were not required. To take part in the study, participants were provided with a website link that directed them to an online survey portal (USQ Surveys).

5.3.3 Data Collection. The data were collected within a 4-month period approximately. Implicit consent was obtained from all participants using a participant information sheet which was included with the online data collection form. The participant information sheet provided all the study details on the voluntary nature and risk benefits of the study. Contact details of Principal Investigator and Co-Investigators were also provided in case the participants had any other related queries. No identifiers were collected from the participants throughout the whole online data collection process. Ethical approval was given by USQ Human Research Committee on 14th January 2022. The ethics approval form is attached in Appendix K. A copy of the participant information sheet and informed consent information is attached in Appendix L.

5.3.4 Measures. Data from the current study were collected using a cross-sectional self-report questionnaire. The first section of the questionnaire asked participants to answer a series of demographic questions such as gender, age, marital status, ethnicity, religion, educational level, occupation title (text response), and total length in employment.

The second section of the questionnaire comprised of the newly developed Workplace SMWEB scale along with six other sets of scales which were utilised to test the conceptual Workplace SMWEB model adapted from the employee wellbeing framework developed by Danna and Griffin (1999). These seven sets of scales were described below. Unless otherwise stated, the questionnaire measures were rated on a five-point Likert-type scale, with responses options ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Negatively worded items were reversed when necessary. The full questionnaire is shown and attached in appendix M.

Workplace Mental Wellbeing. Workplace mental wellbeing was measured using the 99-item Workplace SMWEB scale developed from Study 1 and Study 2. These items measured overall workplace mental wellbeing in 14 areas - support from boss, fairness, autonomy, meaningful work, co-worker relationship, role clarity, work-life balance, learning and professional growth, person-organisation fit, employee engagement, employee recognition, flexitime work, accomplishment, and organisation support. Examples of items included in the scale are "My abilities fit the demands of this job", "The goals of my work are clearly defined", and "My job allows me to plan how I do my work". Findings from Study 2 showed that all the subscales that measured the 14 areas had a high internal reliability with Cronbach's alpha values ranging from of 0.874 to 0.956. The internal reliability of the overall Workplace SMWEB questionnaire was also found to be to be a high $\alpha = .986$. Due to the large number of items in the Workplace SMWEB scale, the subscale scores (the total of each subscale) of each of the 14 factors were calculated and used in the CFA model analysis rather than each of the individual 99 items.

General Mental Wellbeing. General mental wellbeing was measured using the short-form of the original Singapore Mental Wellbeing (SMWEB-S) Scale which consisted of 16 items developed by Fen and colleagues (2013). These items measured overall mental wellbeing in five areas - Emotional Intelligence, Self-Esteem, Social Intelligence, Cognitive Efficacy, Resiliency (Fen et al, 2013). Examples of items included in the scale are "I am appreciative of life" (Emotional Intelligence), "I am able to accept myself" (Self-Esteem), "I am able to think clearly" (Cognitive Efficacy), "I am able to seek help when needed" (Social Intelligence), and "I stand firm under stress" (Resiliency). The SMWEB-S scale had a high internal reliability with a Cronbach's alpha of 0.962 in the original study by Fen and colleagues (2013).

Job Satisfaction. Job satisfaction was measured with the 5-item Short Index of Job Satisfaction (SIJS) which is a shorten version of the 18-item Index of Job Satisfaction developed by Brayfield and Rothe (1951). The SIJS has been used in other studies and its internal reliability was found to be good with a Cronbach's alpha of 0.89 (Judge et al., 2000) and between 0.82 to 0.83 (Judge et al., 2003). Two of the five items were reversed scored. Examples of items included in the scale are "I feel fairly satisfied with my present job" and "Each day at work seems like it will never end".

Work Performance. Work performance was measured with the 18-item Individual Work Performance Questionnaire (IWPQ) developed by Koopmans et al. (2014). The IWPQ measures individual work performance with three subscales consisting of three domains - task performance (five items), contextual performance (eight items) and counter-productive work behaviour (five items). Items on the IWPQ were rated on a five-point rating scale (0 = seldom to 4 = always for task and contextual performance; and 0 = never to 4 = often for counterproductive work behaviour). The IWPQ has demonstrated good internal consistency for task performance ($\alpha = 0.78$), contextual performance ($\alpha = 0.85$) and counterproductive work behaviour ($\alpha = 0.79$) (Koopmans et al.,2014). Examples of items included in the scale

are "I managed to plan my work so that I finished it on time", "I took on challenging tasks when they were available" and "I complained about minor work-related issues at work".

Flourishing. Flourishing was measured with the eight-item Flourishing Scale (FS) developed by Diener and colleagues (2010) to measure wellbeing in the domains of relationships, life purpose, self-esteem, and optimism. Items on the scale are rated on a seven-point Likert scale, ranging from "strongly disagree" to "strongly agree." The FS's internal reliability was found to be good with a Cronbach's alpha of 0.86 (Schotanus-Dijkstra et al., 2016) and 0.819 (Ramandi et al., 2020). Examples of items included in the scale are "I lead a purposeful and meaningful life" and "My social relationships are supportive and rewarding".

Burnout. Burnout was measured with the Copenhagen Burnout Inventory (CBI) developed by Kristensen and colleagues (2005) to measure three domains of burnout, namely personal burnout, work-related burnout, and client-related burnout. Items on the CBI are rated on a five-point Likert scale, ranging from "never" to "always" Internal reliability of each of the subscale was found to be good with Cronbach's alpha of 0.89, 0.86 and 0.92 respectively, and overall reliability was 0.93 (Todorovic et al., 2021).

The term "client" in the client-related burnout subscale can be replaced by other terms to suit the research context (Kristensen et al., 2005). The COVID-19 outbreak around the world including Singapore has resulted the need for distancing measures and many organisations have imposed the need for employees to work from home (Adalja et al., 2020). Consequently, boundaries between work and family are no longer distinct (Capitano & Greenhaus, 2018) which increases the challenges that employees face when managing multiple work and family roles (Ashforth et al., 2000). This is especially prevalent given the restrictions arising from the COVID-19 pandemic which can drain the mental and emotional capacities of employees trying to fulfil both family and work responsibilities (Restubog et al., 2020) leading to increased stress and burnout (Sonnentag et al., 2010).

Thus, the term "client" in the client-related burnout subscale had been replaced by "remote working" to investigate this phenomenon in the current research. Examples of items are "How often do you feel tired?" (personal burnout subscale), "Do you feel worn out at the end of the working day? (work-related burnout subscale) and "Does it drain your energy to work remotely at home?" (remote working burnout subscale).

Depression, Anxiety and Stress. Depression, anxiety, and stress were measured on the short version 21-item Depression, Anxiety, and Stress Scale (DASS21) for the negative emotional states of depression, anxiety and stress developed by Lovibond and Lovibond (1995). DASS21 is divided into the three domains of depression, anxiety, and stress with seven items in each subscale. All three domains are moderately inter-correlated and the DASS21 can be taken as a whole to measure negative emotional state (Lovibond & Lovibond, 1995). For example, the authors indicated that work stress is a broad concept and is likely to contain the three domains of depression, anxiety, and stress.

Items on the scale are rated on a four-point Likert scale (0 = did not apply to me at all to 3 = applied to me very much, or most of the time). The DASS-21 has been validated numerous populations demonstrating that it is a psychometrically sound instrument with good reliability and validity (Oei et al., 2013). Examples of items are "I couldn't seem to experience any positive feeling at all" (depression subscale), "I was worried about situations in which I might panic and make a fool of myself" (anxiety subscale) and "I tended to over-react to situations" (stress subscale).

5.4 Analyses performed

The online survey portal (USQ Surveys) was used to administer all self-reported measures as well as record responses from all participants. A copy of the of the full online survey is provided in appendix N. The data were screened for accuracy of input, outliers, normality, linearity, singularity, and multicollinearity using the Statistical Package for the

Social Sciences 27.0.0 package (SPSS, 2020) prior to statistical analyses. No values were missing from the dataset.

Correlations of .90 for singularity and .80 for multicollinearity were used as criterion. With large sample sizes (n $\geq$ 200) statistical tests of univariate (Field, 2018) and multivariate (Kline, 2016) normality are likely to be significant with slight deviation from normality. The shape of the distribution and absolute values of skew and kurtosis can be appropriately used to determine the normality of the variables in this study (Field, 2018; Kline, 2016). As recommended by Curran, West, and Finch (1996), absolute values of 2 for skew and 7 for kurtosis were used as criteria for problematic values. Univariate outliers can be detected by checking the frequency distributions of z scores (Kline, 2016), and an absolute value of above 3.29 and below -3.29 is the standard value used for identifying outliers (Tabachnick & Fidell, 2019). Multivariate outliers can be detected by checking the squared Mahalanobis distance (d2) for each case and to look out for unusual pattern, and this can be done in structural equation modelling (SEM) computer programs including Amos (Kline, 2016).

The data were analysed with the Amos 26 SEM program using Maximum Likelihood (ML) estimation of parameters. The parameter estimates derived from ML estimation are those that maximise the likelihood that the data (the observed covariances) match the proposed model. Maximum Likelihood (ML) estimation is the most frequently used estimation method in SEM (Kline, 2016). The sample size (N = 303) in the current study was greater than the minimum of 200 cases recommended for the use of SEM techniques (Kline, 2016).

In the analysis of the covariance structure of theoretical models in SEM, three main methods are considered, namely, strictly confirmatory, alternative model, and model generation (Jöreskog, 1993). A confirmatory factor analysis (CFA) measurement model can be evaluated to determine if the variables share common variance in defining a latent variable, and this would require a single model to be specified a priori, and the chi-square

statistic and fit indices are used to determine model fit leading to a confirmation or disconfirmation of the model without any modification (Byrne, 2016). With an alternative model method, several theoretically relevant alternative models are proposed and compared with one another, and the final model is determined from the one that best fits the data using chi-square difference tests (Schumacker & Lomax, 2016). With the model generation method, an initial theoretical model is specified, and one or more parameters may be re-specified if the data does not ft the hypothesised model (Byrne, 2016). Specifically, theoretically justifiable paths can be added or omitted from the model based on the standardised covariance residual matrix and modification indices used to denote relationships not adequately explained by the model (Kline, 2016, Schumacker & Lomax, 2016). As the current research aimed to establish key variables that relate to a construct, that is, Singapore workplace mental wellbeing, a CFA measurement model is the chosen method for analysis.

Specifically, CFA is conducted to evaluate measurement aspect of the Workplace SMWEB model in the current study in terms of the convergent, discriminant, and nomological validity of the observed indicators on their respective latent variable and the measurement relationship between the Workplace SMWEB variables and other variables including job satisfaction, work performance, flourishing, burnout and depression, anxiety and stress.

Model fit can be assessed with acceptable model fit statistics as indicated by a combination of goodness-of-fit indices which in turn provide a good indication of construct validity (Hair et al. 2014). However, it has been emphasized that it is not unusual to expect a poorer fit of a proposed model given the highly complex nature of SEM (Hooper et al., 2008), and fit indices are subject to high variability and biasness depending on the basis of their selection by the researcher (Kine, 2016; Stone, 2021). Following strict cut-off values for indices can also result in the rejection of a model that is in fact acceptable (Marsh et al, 2004). Given that study of psychology is a complex human phenomenon, researchers would

need to look beyond depending solely on statistical data but instead also need to consider the use of relevant theories and sound rational (Mayrhofer & Hutmacher, 2020; Stone, 2021; Zitzmann & Loreth, 2021). It is therefore important to avoid reporting only fit indices that represent a good fit of the model (Hooper et al., 2008). Moreover, many researchers could not agree how model-fit indices should be presented resulting in different reporting guidelines (Schumacker & Lomax, 2016). For example, Jaccard and Wan (1996) suggested that at least three fit tests should be reported (one absolute, one relative, and one parsimonious) to reflect the diverse criteria, whereas Hooper and colleagues (2008) suggested that the Chi-Square statistic including its degrees of freedom and p value, RMSEA, SRMR, CFI and one parsimony fit index such as the PCFI be reported. It will also be important to specify any post hoc modifications made to the model such as allowing some error terms to covary if needed (Jackson et al., 2009).

Notwithstanding, it is essential to identify and report multiple fit indices to evaluate model fit in order to assess consistency among various indices (Crowley & Fan, 1997; Tabachnick & Fidell, 2019). The various indices also indicate a different facet of model fit (Hooper et al., 2008). Schumacker and Lomax (2016) emphasised that there is no single model-fit criteria can meet all the requirements, and more than one fit index should be presented. Specifically, additional fit indices depending on the type of model proposed along with chi-squared, RMSEA, and Standardized RMR should be presented. The proposed theoretical model can be said to be supported by data if most of the fit indices presented indicate an acceptable model (Schumacker & Lomax, 2016).

The difference between the predicted and observed relationships within the Workplace SMWEB model can be tested with the model chi-square ($\chi2$) statistic to evaluate the alternative hypothesis that there was a difference between the proposed model and the sample covariance matrices at the .05 level (Cunningham, 2008). Although the chi-square statistic, an absolute fit index, is widely used and reported, several serious limitations

regarding its use exist (Hooper et al., 2008). In particular, it is highly sensitive to sample size and is a suitable indicator when sample sizes are between 75 and 200 (Stone, 2021). However, it would almost certainly lead to a rejection of the model if the study involves a large sample size (Bentler and Bonnet, 1980; Jöreskog and Sörbom, 1993). Thus, ratio of the chi-square to the degrees of freedom ($\chi 2/df$) (df = the difference between the number of items in the covariance matrix and the number of estimated parameters) is proposed as the alternative as it provides a more meaningful indication of model fit with values up to 5 being accepted (Marsh & Hocevar, 1985).

The RMSEA is an absolute fit index that informs the extent that the proposed model would fit the populations covariance matrix (Byrne, 1998) with low RMSEA values denoting low errors of approximation (Kline, 2016). When reporting with other fit indices, values of between .05 and .08 are considered accepted (Schumacker & Lomax, 2016). A confidence interval (CI) of 90% around the RMSEA is also an indication of the accuracy of the estimate (Byrne, 2016).

The SRMR is an absolute fit index which measures the overall discrepancy between the observed and predicted correlations in the sample and hypothesised covariance model (Kline, 2016) with lower values explaining correlations within a small average error (Byrne, 2016, Schumacker & Lomax, 2016). Although SRMR values of less than .5 are considered reasonable to represent a good-fitting model, values up to .09 are also acceptable (Hair et al., 2014).

The Tucker-Lewis Index (TLI) is an incremental fit index which can be used to evaluate the proposed model against a null model or alternative models (Schumacker & Lomax, 2016) but with constraints that the fit follows a chi-square distribution with the degrees of freedom of the proposed model (Hu & Bentler, 1998). Although TLI values close to 1.00 are considered satisfactory, those between .80 and .90 are also acceptable (Fassih-Ramandi et al., 2020). The Comparative Fit Index (CFI) is also an incremental fit index to

evaluate the proposed model against the null model with the sample covariance matrix (Cangur & Ercan, 2015). However, CFI assumes a noncentral chi-square distribution (Hu & Bentler, 1998). Values of close to .9 can be considered a relatively good fit (Bentler, 1990).

Notwithstanding, investigation into whether measures of fit, namely, RMSEA, TLI and CFI, improve or deteriorate revealed that as more variables are added to a correctly specified model, RMSEA improves while TLI and CFI deteriorate (Kenny & McCoach, 2003). For example, Monte Carlo simulation study conducted by Ding and colleagues (1995) with sample sizes of 50, 100, 200 and 500 using both the maximum likelihood and generalized least squares estimate methods found a drop from 1.005 to .984 for the average TLI value and from .995 to .983 for the average CFI value in a model when variables per factor were increased from two to six. On the other hand, RMSEA tended to remain stable or improved as the number of variables were increased (Breivik & Olsson, 2001). Marsh and colleagues (2008) underscored that having more variables per factor is advantageous for several important reasons such as having more reliable factors, more accurate and stable estimates for parameters and increased interpretability and therefore cautioned against reducing the number of variables for the sole purpose of improving model fit. Kenny and McCoach (2003) concluded that the RMSEA together with the CFI or TLI be evaluated in models with a large number of variables. A model can be considered acceptable if the RMSEA has an acceptable value even though the values of TLC and CFI are lower than expected. However, if all the values of RMSEA, TLC and CFI are much lower than expected, it may point to a poor fitting model (Kenny & McCoach (2003).

The Parsimony Normed Fit Index (PNFI) and Parsimony Comparative Fit Index (PCFI) are parsimonious fit indices that disadvantage more complex models with a larger number of parameter estimations by adjusting the number of estimations (Meyers et al., 2017). As a result, the values of parsimony fit indices are much lower as compared to other

fit indices (Hooper et al., 2008). Values above .50 for PNFI and PCFI suggest that the proposed model is acceptable (Meyers et al., 2017; Mulaik et al., 1989).

In order to assess construct reliability, internal consistency, convergent validity, and discriminant validity of the constructs in the current study, Cronbach's alpha, maximal reliability (MR), composite reliability (CR), average variance extracted (AVE), and maximum shared squared variance (MSV) were calculated (Fornell & Larcker, 1981). Reliability coefficients were computed using the Cronbach's alpha statistic. Values above 0.70 for Cronbach's alpha indicate good internal consistency and reliability (Kline, 1999). Values above 0.70 for maximal reliability and composite reliability indicate good construct reliability (Pahlevansharif & Naghavi, 2020).). Standardised factor loadings of items of equal or greater than 0.50, and values of greater than 0.50 for AVE are required for convergent validity (Hair et al. 2014). However, AVE is considered to be an overly strict measure and criteria (Malhotra & Dash, 2011; Sharif et al., 2019) and composite reliability alone can be used to determine convergent validity (Malhotra & Dash, 2011). For discriminant validity, the square root of AVE of each construct should be greater than its MSV with other variables (Fornell & Larcker, 1981), and the values of the Heterotrait-monotrait ratio of correlations (HTMT) matrix should be less than .85 (Henseler et al., 2015). However, a threshold of 0.90 and below for HTMT matrix has also been proposed by some researchers for less conservative discriminatory validity (Gold, Malhotra & Segars 2001; Teo et al. 2008).

Nomological validity was evaluated by estimating the correlations between the Workplace SMWEB construct and the constructions of job satisfaction, job performance, flourishing, burnout, and the negative emotional states of depression, anxiety, and stress. Although many researchers commonly use the standard cut-off criteria for effect sizes (0.10, 0.30, 0.50) recommended by Cohen (1988, 1992), Gignac and Szodorai (2016) argued that this criterion was too stringent and was not based on quantitative evidence. Instead, the correlations of 0.10, 0.20, and 0.30 for small, typical, and relatively large effect sizes

respectively are recommended based on meta-analytically derived correlations from a large sample study (Gignac & Szodorai, 2016). In fact, even small correlations can have a significant impact on an individual's life and on practical consequences (Noftle & Robins, 2007; Ozer& Benet-Martínez, 2006). These correlations recommended by Gignac and Szodorai (2016) are therefore used in the current study.

5.5 Results

This section presents the results of analyses for the Study 3 data. The descriptive statistics for all the Study 3 variables are first presented including the Pearson's product moment inter-correlations. This is followed by the CFA analysis results of the Workplace SMWEB model.

5.5.1 Descriptive statistics. The number of items, means, standard deviations, range of scores, and Cronbach's alpha, skewness and kurtosis values for all variables in the study are presented in Table 5.1. The variable inter-correlations are shown in Table 5.2. Participants responded above the midpoint of the Likert-type scales on most variables except for DASS, burnout (remote working) and counter-productive work behaviours where they were just below the midpoint. The Cronbach's alpha measure of internal consistency reliability for all the scales were good ($\alpha \geqslant .70$) From examination of bivariate scatterplots and normal probability plots of the standardised residuals, the relationships between the variables appeared to be linear and the distribution of the residuals uniform. Absolute values of skew and kurtosis for the variables in this study were below the criteria of 2 for skew (range -.94 to 1.16) and 7 (range -.78 to 1.73) for kurtosis recommended as problematic values by Curran et al. (1996). A few univariate outliers ($z = \pm 3.29$, $p < .001$) were identified for the overall sample on the SMWEB, Workplace SMWEB, IWPQ, Flourishing and DASS. However, a small number of outliers are not unexpected with a large sample size and they can be retained as they are considered a legitimate part of the in the dataset after checking

that the data is accurate (Tabachnick & Fidell, 2019). An inspection of the squared

Mahalanobis distance values prior to the analysis did not reveal any extreme multivariate

outliers among the cases that may have an impact of the results of the analysis (Byrne, 2016).

Table 5.1

Descriptive Statistics for the Study 3 Variables

Variable	No of items	M	SD	Actual Range	α	Skew	Kurtosis
SIJS	5	3.49	0.79	1.00-5.00	.85	-.56	.41
FS	8	5.55	0.90	1.00-7.00	.91	-.63	.40
DASS	21	1.74	0.57	1.00-4.00	.94	.99	.68
Depression	7	1.69	0.65	1.00-4.00	.90	1.16	1.09
Anxiety	7	1.65	0.59	1.00-4.00	.83	1.01	.54
Stress	7	1.89	0.63	1.00-4.00	.87	.65	.01
CBI							
Personal	6	2.97	0.88	1.00-5.00	.92	.34	-.38
Work	7	2.83	0.84	1.00-5.00	.91	.42	-.19
Remote	6	2.37	0.97	1.00-5.00	.88	.57	-.20
IWPQ							
Task	5	3.66	0.88	1.00-5.00	.92	-.26	-.76
Contextual	8	3.32	0.89	1.00-5.00	.91	-.09	-.78
Counter Productive	5	2.36	0.68	1.00-5.00	.80	.46	1.32
SMWEB	16	3.93	0.53	1.00-5.00	.91	-.49	.76
Workplace SMWEB	99	3.69	0.56	1.00-5.00	.98	-.42	.62
Support From boss	11	3.70	0.77	1.00-5.00	.95	-.40	.01
Fairness	11	3.36	0.71	1.00-5.00	.93	-.19	.14

Variable	No of items	M	SD	Actual Range	α	Skew	Kurtosis
Autonomy	9	3.86	0.80	1.00-5.00	.96	-.94	1.61
Meaningful Work	10	3.87	0.75	1.00-5.00	.94	-.74	.84
Co-worker Relationship	9	3.71	0.74	1.00-5.00	.92	-.65	.86

Variable	No of items	M	SD	Actual Range	α	Skew	Kurtosis
Role Clarity	6	3.76	0.76	1.00-5.00	.93	-.93	1.73
Work-life Balance	5	3.38	0.94	1.00-5.00	.93	-.54	.03
Learning & Professional Development	6	3.56	0.68	1.00-5.00	.87	-.39	.26
Person-Organisation Fit	4	3.92	0.75	1.00-5.00	.91	-.57	.41
Employee Engagement	7	3.88	0.66	1.00-5.00	.90	-.71	1.43
Employee Recognition	8	3.79	0.71	1.00-5.00	.94	-.71	1.07
Flexitime	3	3.57	1.04	1.00-5.00	.88	-.53	-.25
Accomplish	6	3.65	0.83	1.00-5.00	.92	-.80	.82
Organisation Support	4	3.46	0.86	1.00-5.00	.92	-.58	.38

Note. N = 303

The bivariate correlations (Pearson's *r*) between the continuous variables in Study 3 were statistically significant in the positive direction between Workplace SMWEB and job satisfaction, SMWEB and work performance, job satisfaction and work performance, job satisfaction and flourishing, work performance and flourishing, and DASS and burnout. Correlations between Workplace SMWEB and DASS, Workplace SMWEB and burnout, job

satisfaction and DASS, job satisfaction and burnout, work performance and DASS, work performance and burnout, flourishing and DASS, and flourishing and burnout were statistically significant in the negative direction. All correlations were below the criteria .80 criterion for high multicollinearity (Field, 2018). Although Meyers and colleagues (2017) noted that values in the high .70 may potentially be problematic as indicated by the correlation of .76 between Workplace SMWEB and job satisfaction, this is unlikely to be an issue in the current study as Workplace SMWEB and job satisfaction are expected to correlate strongly based on past literature and research.

Moreover, when compared to the SMWEB, the positive correlation between Workplace SMWEB and job satisfaction was much stronger (0.760 vs 0.482). Stronger positive correlations were also noted for job performance (0.493 vs 0.471), and stronger negative correlation for burnout (-0.419 vs -0.374). Lower correlations were noted for flourishing (0.599 vs 0.676) and for DASS (-0.451 vs -0.507). The correlation between the Workplace SMWEB and SMWEB was positive (0.575), which is consistent with the findings from study 2 (0.554). Table 5.2 contains the correlation coefficients between these constructs.

Table 5.2

Summary of Inter-correlation for Study 3 Variables

Variables	Workplace SMWEB	SMWEB	SIJS	IWPQ	FS	DASS	CBI
Workplace SMWEB	1.00						
SMWEB	.575	1.000					
SIJS	.760	.482	1.000				
IWPQ	.493	.471	.399	1.000			
FS	.599	.676	.573	.502	1.000		
DASS	-.451	-.507	-.529	-.321	-.498	1.000	
CBI	-.419	-.374	-.524	-.319	-.400	.647	1.000

Note. All correlations significant at the $p = .01$ level (2-tailed)
    Workplace SMWEB = Workplace Singapore Mental Wellbeing
    SMWEB = Singapore Mental Wellbeing
    SIJS = Short Index of Job Satisfaction
    IWPQ = Individual Work Performance Questionnaire
    FS = Flourishing Scale
    CBI = Copenhagen Burnout Inventory
    DASS = Depression Anxiety and Stress Scale

5.5.2 Confirmatory factor analysis. The results obtained from the first confirmatory factory analysis did not indicate an adequate fit for data: $(\chi 2) = 9700.417$, p $<.05$, $\chi 2/df = 2.795$, RMSEA (90% C.I.) = .077, SRMR = .0992, CFI = .675, TLI = .666, PNFI = .558, PCFI = .657. On inspection, there were in total 15 items that had factor loadings of less than .50 and they were subsequently removed. Specifically, one item was the subscale total "flexi-work time" belonging to the Workplace SMWEB scale. The rest of the 14 items were: all five items from the counter-productive work behaviours domain (IWPQ), one item (item 4) from the work-related burnout domain, all six items from the remote-work burnout domain (CBI), one item (item 3) from the SIJS, and one item (item 1 anxiety) from the DASS.

When the initial data do not appear to be a good fit for the proposed model, one of the ways to improve model fit is to inspect the modification indices and when appropriate, an error covariance term can be added between observed variables (Byrne 2016; Schumacker & Lomax, 2016). It is also emphasised that justification needs to be given for adding an error covariance term. For example, an added error covariance term is appropriate between observed variables within a factor or within a measurement scale which are closely related (Schumacker & Lomax, 2016).

Although some researchers cautioned against the use of correlating measurement errors inappropriately without explanation as this can lead to a data-driven rather than a theory-driven methodology (Landis et al., 2009; Hermida, 2015), Pan and colleagues (2017) noted several advantages of using modification indices to improve model fit from a pragmatic viewpoint: first, it is very rare to obtain real world data that conforms to the factor pattern from CFA which is an overly-restrictive approach of analysis; second, it is very rare in practice to match the high requirements of acceptance for CFA models such as accounting for the proportion of variance; third, post hoc modifications can help to identify misspecification thereby leading to an improved and more robust model. In fact, the necessity of model respecification including covarying error terms has similarly being highlighted with reasons such as item content overlap and correlation of large error terms between observed items being consistent with real world data as justifiable (Bryne, 2016). Indeed, such correlated errors are also necessary in order to explain for the additional covariance between items owing to nonrandom measurement error such as participants having an acquiescent response style (Brown, 2015).

Byrne (2016) noted that values in modification indices which are less than 10 are generally considered insignificant and do not have a huge impact on the overall model fit. As such, the Amos default cut-off point was changed from four to that of 10 in the current analysis. The steps to covary error terms in the Workplace SMWEB model followed the

recommendations provided by Byrne (2016); first, start with the largest value in the modification indices followed by the second largest in descending order only if it is reasonable and justifiable; second, care is needed so as not to "overfit" a model once the minimum fit is reached as it may not add substantive value to the model. The minimum fit is decided by the researcher who needs to take into consideration various criteria from the theoretical, empirical and pragmatic perspectives rather than pure fit coefficients given the complexity of a model (Byrne, 2016). Further in line with the recommendation by MacCallum and colleagues (1992), a careful approach with a small number of modifications was carried out in the current study.

Based on the modification indices and recommended steps as previously mentioned, 16 pairs of measurement errors in total were allowed to freely covary resulting in the final model fit improved considerably. All error terms that were allowed to correlate belonged to items within the same factor or measurement scale. The error term pairs and their justification are provided below:

IWPQ (Task)

1. Items 1 ("I managed to plan my work so that I finished it on time") and 3 ("I was able to set priorities").

2. Items 1 and 4 ("I was able to carry out my work efficiently").

3. Items 1 and 5 ("I managed my time well").

4. Items 2 ("I kept in mind the work result I needed to achieve") and 3.

5. Items 2 and 4.

6. Items 3 and 4.

7. Items 3 and 5.

Justification: According to Koopmans and colleagues (2012) who developed the IWPQ, the emphasis was on task performance which described how proficient an individual is in performing his or her specific work tasks. The authors acknowledged that the disadvantage of

using self-report items in measuring work performance is that participants would tend to respond in a socially desirable manner. Such nonrandom measurement errors are to be expected with self-report data and can therefore be theorised to correlate (Plichta & Kelvin, 2013; Sharif Nia et al., 2018). Moreover, Sharif Nia and colleagues (2018) further highlighted that measurement errors can also occur due to similar meanings between the items, and the items in task performance may have very similar meanings perceived by the participants relating to work proficiency, that is, the presence of content overlap. In fact, Koopmans and colleagues (2012) noted that the items within the construct in the IWPQ will correlate with one another and are also interchangeable or replaceable with one another. Correlating the error terms of these items was therefore justifiable.

IWPQ (Contextual)

8. Items 2 ("I took on challenging tasks when they were available") and 7 ("I continually sought new challenges in my work").

9. Items 3 ("I worked on keeping my job-related knowledge up-to-date") and 4 ("I worked on keeping my job-related skills up-to-date").

10. Items 6 ("I took on extra responsibilities") and 7.

11. Items 6 and 8 ("I actively participated in meetings and/or consultations").

Justification: Similarly, items in the correlated error pairs in the IWPQ (contextual) were very close in meanings. For example, items 2 and 7 measured taking on new challenges at work which suggests significant content overlap. Correlating the error terms of these items was therefore justifiable.

CBI (Personal)

12. Items 1 ("How often do you feel tired?") and 2 ("How often are you physically exhausted?").

Justification: According to Kristensen and colleagues (2005), the personal burnout measures both the physical and psychological aspects of burnout. Close inspection of items 1 and 2

suggests a significant overlap of the physical aspect of personal burnout. Correlating the error terms of these items was therefore justifiable.

<u>CBI (Work)</u>

13. Items 2 ("Are you exhausted in the morning at the thought of another day at work?") and 3 ("Do you feel that every working hour is tiring for you?").

Justification: Similarly, the work-related burnout measures both the physical and psychological aspects of burnout but is specific to the work context (Kristensen et al., 2005). Close inspection of items 2 and 3 suggests a significant overlap of the physical aspect of work-related burnout. Correlating the error terms of these items was therefore justifiable.

<u>DASS (Stress)</u>

14. Items 4 ("I found myself getting agitated") and 6 ("I was intolerant of anything that kept me from getting on with what I was doing").

<u>DASS (Depression)</u>

15. Items 3 ("I felt that I had nothing to look forward to") and 7 ("I felt that life was meaningless").

16. Items 6 ("I felt that I wasn't worth much as a person") and 7.

Justification: Lovibond and Lovibond (1995) indicated that items measuring the different syndromes in the DASS21 are inter-correlated as they share several common causes such as biological and environmental factors. Inspection of these items pairs suggests significant overlapping of meanings and correlating the error terms of these items was therefore justifiable.

The results obtained from the second and final confirmatory factory analysis after removing 15 items with factor loadings below .50 and correlating 16 pairs of error terms indicated an acceptable fit for data: ($\chi2$) = 5054.782, p <.05, $\chi2$/df = 2.184, RMSEA (90% C.I.) = .063 [.061, .065], SRMR = .0833, CFI = .834, TLI = .826, PNFI = .702, PCFI = .799. Although the CFI is below the cut-off of 0.90, a model can be considered to be acceptable if

the RMSEA has an acceptable value even though the values of TLC and CFI are lower than expected as this is not unexpected in models with a large number of variables (Kenny & McCoach, 2003).

5.5.3 Convergent and discriminant validity. Based on the Workplace SMWEB measurement model, a full measurement model was constructed in which job satisfaction, work performance, flourishing, DASS, and burnout were included. The criteria for convergent validity were met. The AVE of each construct was above 0.50 except for job performance (0.448) and DASS (0.470). However, as the AVE is an overly strict criteria (Malhotra & Dash, 2011; Sharif et al., 2019), a CR greater than 0.70 was used as an indication for good convergent validity. CR (ranging from 0.876 to 0.953) and MR (ranging from 0.889 to 0.957) of all constructs were greater than 0.7 demonstrating construct reliability and convergent validity.

For discriminant validity, the AVE of each construct should be greater than their MSV (ranging from 0.220 to 0.762). However, the AVE were lower than the MSV for Workplace SMWEB, job satisfaction, DASS. Specifically, the square root of the AVE for Workplace SMWEB is less than its correlation with job satisfaction, the square root of the AVE for job satisfaction is less than its correlation with Workplace SMWEB, and the square root of the AVE for DASS is less than its correlation with burnout. The results of the HTMT analyses showed values ranging from 0.231 to 0.893 with the pair of variables, Workplace SMWEB and job satisfaction (0.893), sitting between the recommended thresholds of 0.90 and 0.85. These suggest that the Workplace SMWEB had limited discriminant validity when compared to the SIJS, and the DASS had limited discriminant validity when compared to the CBI.

Table 5.3 contains the CR, AVE, MSV, MaxR and correlation coefficients between the Workplace SMWEB and job satisfaction, work performance, flourishing, burnout and DASS. All the correlations are significant, and they are all in the expected direction providing

support for the nomological validity of the Workplace SMWEB instrument. In terms of the correlations, Workplace SMWEB had significant positive relationships with job satisfaction ($r = 0.873$; large effect), job performance ($r = 0.447$; large effect) and flourishing ($r = 0.628$; large effect). Workplace SMWEB had significant negative relationships with burnout ($r = -0.531$; large effect) and DASS (-0.471; large effect). Table 5.4 shows the results of the HTMT analysis. Figure 5.2 shows the results of the full Workplace SMWEB CFA analysis model.

Table 5.3

Validity Analysis

	CR	AVE	MSV	MaxR	Workplace SMWEB	SIJS	IWPQ	CBI	FS	DASS
Workplace SMWEB	.934	.528	.762	.946	.726					
SIJS	.876	.640	.762	.889	.873**	.800				
IWPQ	.911	.448	.220	.928	.447**	.388**	.669			
CBI	.953	.631	.485	.957	-.531**	-.590**	-.176*	.795		
FS	.913	.569	.432	.919	.628**	.657**	.469**	-.457**	.754	
DASS	.946	.470	.485	.949	-.471**	-.513**	-.214*	.696**	-.540**	.685

Note. * Significant at the $p = .01$ level, ** Significant at the $p = .001$ level
CR = Composite Reliability, AVE = Average Variance Extracted
MSV = Maximum Shared Squared Variance
MaxR = Maximal Reliability
Workplace SMWEB = Workplace Singapore Mental Wellbeing
SIJS = Short Index of Job Satisfaction
IWPQ = Individual Work Performance Questionnaire
CBI = Copenhagen Burnout Inventory
FS = Flourishing Scale
DASS = Depression Anxiety and Stress Scale

Table 5.4

HTMT Analysis

	Workplace SMWEB	SIJS	IWPQ	CBI	FS	DASS
Workplace SMWEB						
SIJS	.893					
IWPQ	.517	.406				
CBI	.545	.612	.231			
FS	.655	.648	.520	.445		
DASS	.492	.534	.273	.690	.534	

Note. Workplace SMWEB = Workplace Singapore Mental Wellbeing
SIJS = Short Index of Job Satisfaction
IWPQ = Individual Work Performance Questionnaire
CBI = Copenhagen Burnout Inventory
FS = Flourishing Scale
DASS = Depression Anxiety and Stress Scale

Figure 5.2

Full Workplace SMWEB CFA Analysis Model
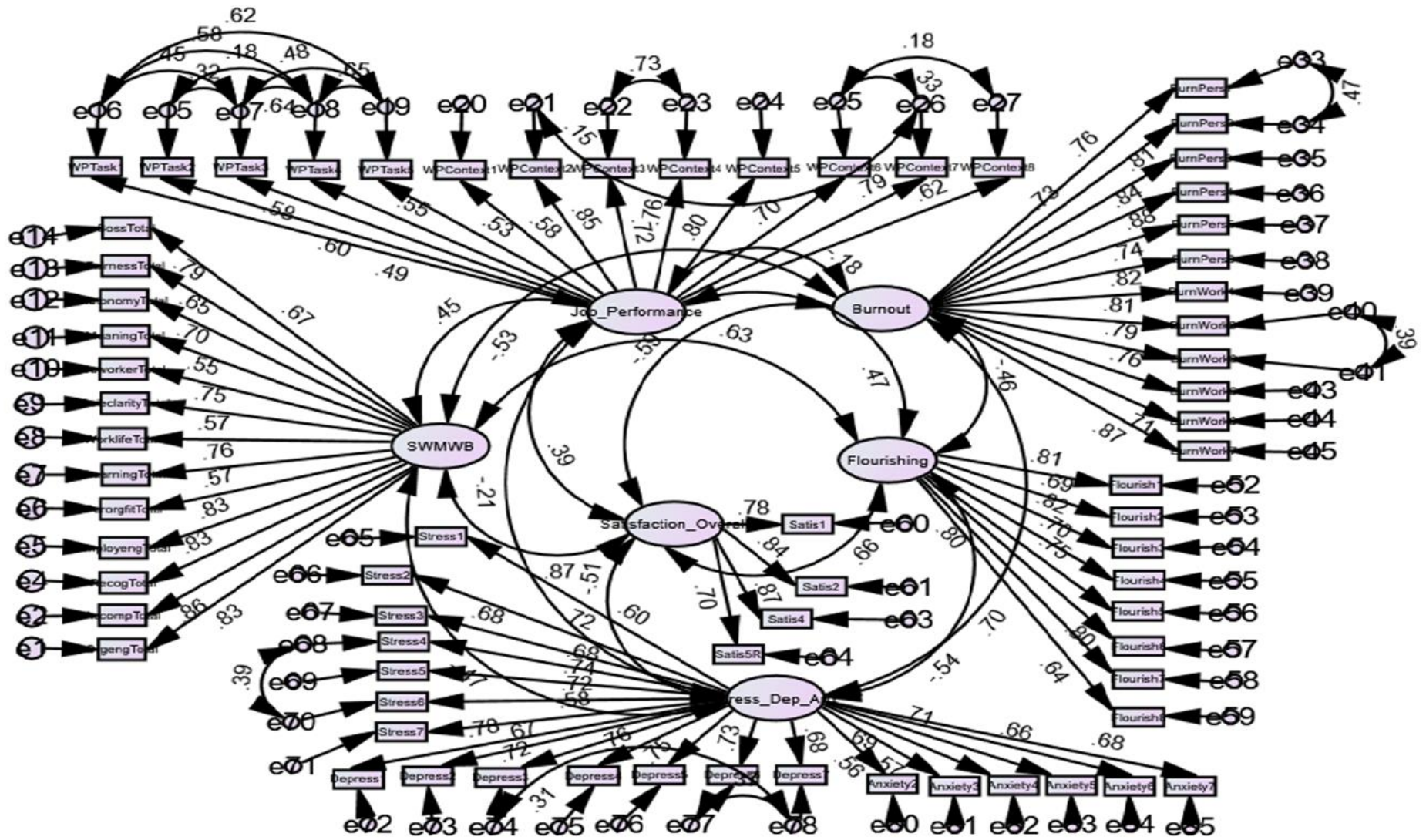
5.6 Discussion

The aim of study 3 was to examine the construct validity of the Workplace SMWEB scale through convergent, discriminant and nomological validity, as well as the relationship between the Workplace SMWEB scale with job satisfaction, individual outcomes including social-psychological functioning (flourishing), burnout and symptoms of depression, anxiety and stress, and organisation outcomes including work performance. The Workplace SMWEB scale was developed from study 1 and study 2 which subsequently informed the development of study 3. Based on the employee wellbeing framework developed by Danna and Griffin (1999) that identifies the important components of the nomological network of health and wellbeing in the workplace context, the Workplace SMWEB model was developed for CFA analysis. CFA is appropriate as it can provide a more accurate and conclusive evaluation of factor structure of the scale including the latent factors through the goodness of fit results for the proposed model (Soleimani et al., 2016). The Workplace SMWEB model consists of six constructs, namely, the Singapore workplace mental wellbeing as measured by the Workplace SMWEB scale, job satisfaction as measured by the Short Index of Job Satisfaction (SIJB), job performance as measured by the Individual Work Performance Questionnaire (IWPQ), flourishing as measured by the Flourishing Scale (FS), burnout as measured by the Copenhagen Burnout Inventory (CBI), and depression, anxiety and stress as measured by the Depression Anxiety and Stress Scale (DASS). The relationships between the constructs are consistent with the literature on employee wellbeing as a multidimensional construct which can lead to positive and negative consequences (Hone et al., 2015).

In the current study, the CFA analysis confirmed that the final Workplace SMWEB model was an acceptable fit. The present study used multiple fit indices, that is, $(\chi 2) =$ 5054.782, p <.05, $\chi 2/df = 2.184$, RMSEA (90% C.I.) = .063, SRMR = .0833, CFI = .834, TLI = .826, PNFI = .702, PCFI = .799, to evaluate model fit. According to the final model of Workplace SMWEB, there are correlations between measurement errors of 16 pairs of items.

Such correlations can be deemed necessary due to nonrandom measurement errors (Brown, 2015). From a pragmatic viewpoint, it is also more consistent with real world data as CFA is an overly restrictive approach of analysis (Bryne, 2016; Pan et al., 2017). Although the value of CFI is lower than expected, a model can be considered accepted if the RMSEA has an acceptable value which can be due to the high number of variables per factor used in the current study (Kenny & McCoach, 2003). Given the highly complex nature of SEM, it is also not unusual to have a lower than expected fit of a proposed model (Hooper et al., 2008), and strict cut-off values for indices can result in the rejection of a model that is in fact adequate (Marsh et al, 2004). Given the complexity of the Workplace SMWEB model with a large number of variables, the lower CFI and TLI values in the current study are therefore not unexpected.

Doll and colleagues (1994) have previously emphasized that evaluating goodness-of-fit is relative and not absolute and standard cut-off points are not relevant. A model should be evaluated based on substantive theory and for the purpose of theory-testing rather than just examining the absolute cut-off values of model fit which is based on purely descriptive statistics rather than real world data (Barrett, 2007; Hooper et al., 2008). The construction of the Workplace SMWEB model is based on the employee wellbeing framework developed by Danna and Griffin (1999) in which the core constructs of wellbeing are identified along with the nomological network including individual and organisational consequences that surrounds these constructs. It is therefore theory informed with practical consequences given the results of the SEM analysis strongly indicated that the Workplace SMWEB scale has a significant and positive association with positive individual and organisational consequences and significant and negative association with negative individual and organisational consequences.

Moreover, Tarka (2016) pointed out that as the correlations between the observed variables become weaker, the absolute fit of the model improves which in turn can result in

an inaccurate interpretation that the model fit indices are acceptable. In fact, this has been previously highlighted by Fornell and Larcker (1981) that a model would most likely have a good level of fit particularly with the use of Chi-square statistic and derivative descriptive measures of model fit if observed variables have sufficiently weak correlations. Thus, given the high reliability of the measurement instruments used in the Workplace SMWEB model coupled with strong correlations between the variables, this likely points to the appropriate choice of the measurement instruments in the current study rather than an inadequate model (Browne et al., 2002). Notwithstanding, future research might help to further revise and improve the Workplace SMWEB scale such as further analysing the correlation between the error terms of items and rewording some of the items.

In determining the construct validity of the Workplace SMWEB model, construct reliability, convergent validity, and discriminant validity were evaluated. Nomological validity was evaluated by estimating the correlations between the Workplace SMWEB construct and the constructs of job satisfaction, job performance, flourishing, burnout, and the negative emotional states of depression, anxiety and stress. Results showed that all the constructs had good construct reliability (CR > 0.70) and maximal reliability (MR > 0.70). Although the AVE of each construct was above 0.50 except for job performance (0.448) and DASS (0.470), AVE is considered to be an overly strict criteria and a CR greater than 0.70 can be used as an indication for good convergent validity (Malhotra & Dash, 2011; Sharif et al., 2019).

In terms of discriminant validity, it was found that the Workplace SMWEB and job satisfaction were highly correlated suggesting limited discriminant validity of the Workplace SMWEB scale, that is, the value of 0.893 for HTMT sits between the recommended thresholds of 0.85 and 0.90. However, Ratner (2009) cautioned against the use of strict cut-off value for discriminant validity as the context under which the discriminant validity is evaluated needs to be considered. For example, these considerations may include the type of

constructs being measured, the theory behind the constructs and the particular sample group being investigated. Thus, low discriminant validity can be accepted and even expected if the two constructs are expected to correlate highly based on theory and prior empirical studies (Ratner, 2009). Moreover, even though two constructs can be highly correlated, they can be distinct; conversely, low correlation does not necessarily mean that the constructs are distinct either.

In the current study, the high correlation between Workplace SMWEB and job satisfaction was expected as the concept of employee wellbeing can be seen as comprising of job satisfaction in the workplace context (Danna & Griffin, 1999). Both the concepts of employee wellbeing and job satisfaction have also been found to be related from past literature (Sironi, 2019). Yet, both concepts are clearly distinct as employee mental wellbeing reflects the positive aspects of mental health including the hedonic and eudaimonic components (Keyes, 2005; LaMontagne et al., 2010), and job satisfaction reflects the extent that employees like or dislike their jobs with an affective component (Spector, 1997).

Further, the perception of job satisfaction can be directly influenced by an employee's mental health status (Warszewska-Makuch, 2021). While a meta-analysis conducted by Bowling and colleagues (2010) found evidence of a reciprocal relationship between wellbeing and job satisfaction, the authors also found that the influence of wellbeing on job satisfaction was greater than the influence of job satisfaction on wellbeing. This helps to establish the casual relationship between wellbeing and job satisfaction, that is, the casual path from wellbeing to job satisfaction. This could be explained from the dispositional perspective which posits that the affective state of an individual such as the experience of positive emotions can influence satisfaction in areas such as work domain (Diener, 1984; Diener et al., 2002; Judge & Hulin, 1993). Moreover, the mind-congruent theory also suggests that having positive emotions can lead to an individual having positive evaluations; in the workplace context, an employee with positive mental health is therefore likely to

experience greater job satisfaction (Cao et al., 2022). This was supported by the study conducted by Cao and colleagues (2022) in which it was found that the positive aspects of mental health had a significant and positive relationship with job satisfaction.

Thus, the high correlation between the Workplace SMWEB and job satisfaction in the current study is consistent with theory and prior empirical results. In addition, employee wellbeing tends to be too narrowly focused on being operationalised as job satisfaction (Rothmann, 2008), and investigation into employee wellbeing needs to involve examining factors beyond the concept of job satisfaction (Hone et al., 2015). In line with the recommendation by Hone and colleagues (2015), the current study has therefore helped to elucidate the specific the factors that comprised employee wellbeing, that is, the factors that comprised the Workplace SMWEB scale.

5.6.1 It was hypothesized that the Workplace SMWEB scale would have the specific psychometric structure as identified by the EFA analysis in study 2.

The results did not support the hypothesis that the Workplace SMWEB scale would have the specific psychometric structure as identified by the EFA analysis in study 2. Instead, the results supported a 13-factor structure rather than a 14-factor structure for the Workplace SMWEB scale identified in study 2. Specifically, the "flexi-work time" subscale was dropped from the Workplace SMWEB scale due to loading of less than .50. This subscale consisted of three questions, namely, "My organisation allows a flexi-time option", "My work offers schedule flexibility", and "It is easy to take time off during my work to take care of personal and family matters". This could be attributed to several reasons. First, it may be that many of the sample participants in study 3 did not perceive flexible work time as feasible or practical in their line of work. Second, it may be that they have yet to see the importance of having flexible work time. In fact, although concept of flexible work time work appears warranted, its utilisation by employees remains low (Williams et al., 2013).

In Singapore, it was found that employees were less likely to utilize flexible work options even if provided the opportunity (Hill, 2007; Straughan & Tadai, 2018). The reasons given included the lack of organisation support and procedures for the normalisation of flexible work time and employee concern of significant personal costs including pay and career progression (Straughan & Tadai, 2018). Third, it may be that employees who utilized flexi work options might be already experiencing a high level of stress juggling work and family matters therefore making little difference to their level of wellbeing (Jones et al., 2008). Last, the context under which flexible work time can be effectively utilized, such as the cultural context, needs to be considered. For example, although having flexible work time is common in Europe (Wessels et al., 2019), this may not be the case in Asia. In fact, the work-life concept including having flexible work time originally stemmed from the USA and other developed economies (Hein, 2005), and most of the research around the work-life concept were conducted in Western countries and may not be applicable to other cultural context such as those Asian countries (Bowes, 2005; Lewis et al., 2007). For example, it was found that employees in collectivist societies tended to view work as a way to support their families and not to enhance their self-esteem which suggests that work demands are unlikely to significantly interfere with family demands (Lu et al., 2006). Although working life in Southeast Asia including Singapore has started to shift as a consequence of globalization (Cieri & Bardoel, 2009), flexi work time is still a relatively new concept in Singapore and has not gained widespread acceptance in organisations.

5.6.2 It was hypothesized that workplace mental wellbeing would have a significant and positive correlation with job satisfaction.

As predicted, the results supported a significant and positive correlation between workplace mental wellbeing and job satisfaction ($r = 0.760$). Employees who experienced a high level of mental wellbeing were also more likely to experience high level of job

satisfaction. The results were consistent with prior literature and research that concepts of employee wellbeing and job satisfaction are highly intertwined, yet distinct concepts. This provided further support for the employee wellbeing framework conceptualised by Danna and Griffin (1999) that employee wellbeing can be seen as reflecting job satisfaction in the workplace context.

5.6.3 It was hypothesized that workplace mental wellbeing would have a significant and positive correlation with job performance.

The results supported a significant and positive correlation between workplace mental wellbeing and job performance ($r = 0.493$). Employees who experienced a high level of mental wellbeing were also more likely to perform better at their work. Employee wellbeing is essential for better work performance and productivity (Cotton & Hart, 2003; Litchfield, Cooper, Hancock, & Watt, 2016; Warr & Nielsen, 2018), which in turn would ensure the survival and sustainability of the organisation (Currie, 2001). Improved organisational outcomes including job performance is also likely to emanate from positive changes in organisational practices as a direct consequence of increased employee wellbeing (Baptiste, 2008). The results provided further support for the employee wellbeing framework by Danna and Griffin (1999) which identifies organisation consequences including job performance arising from employee wellbeing and job satisfaction.

5.6.4 It was hypothesized that workplace mental wellbeing would have a significant and positive correlation with flourishing.

The results supported a significant and positive correlation between workplace mental wellbeing and flourishing ($r = 0.599$). Employees who experienced a high level of mental wellbeing were also more likely to be flourishing. Flourishing can be seen as one of the ways to conceptualise wellbeing (Hone et al., 2014), and individuals flourish when they experience

high levels of wellbeing (Keye, 2007; Keyes & Annas, 2009). In the workplace context, Rothmann (2013) have found that factors such as work role fit, job characteristics and co-worker relationships resulted in higher level of employee flourishing. Employee flourishing has also similarly been found to be positively correlated with other workplace factors such as having a sense of autonomy and having work-life balance (Hone et al., 2015). The results provided further support that employees who have a high level of wellbeing are also functioning highly in terms of flourishing at work (Rautenbach & Rothmann, 2017).

5.6.5 It was hypothesized that workplace mental wellbeing would have a significant and negative correlation with burnout.

The results supported a significant and negative correlation between workplace mental wellbeing and burnout ($r = -0.419$). Employees who experienced a high level of wellbeing were also less likely to experience burnout. The results provided further support for the employee wellbeing framework by Danna and Griffin (1999) which identifies individual consequences including psychological and physiological consequences such as burnout as arising from low levels of employee wellbeing. Positive aspects of work that contribute to employee wellbeing can positively influence job performance, on the other hand, negative aspects of work can be detrimental to the employee which can in turn lead to work stress and burnout (Corrêa et al., 2019). In fact, studies have consistently shown that employee wellbeing has a significant but negative association with burnout (Corrêa et al., 2019; Milfont et al., 2008; Rothmann, 2009), and targeting specific workplace factors such as increasing fairness and creating a more suitable match between the employees and their work role can help to mitigate burnout (Maslach & Leiter, 2008).

Another finding was that the "remote working" subscale was dropped from the CFA model due to loading of less than .50 for all six questions. This could be attributed to several reasons. First, it might be remote working might be less relevant and important. Living with the COVID-19 pandemic and working remotely have become the norm and generally well

accepted in Singapore (Cho & Chew, 2021), and employees have since adapted to remote working when needed. In fact, it was also found that working remotely long term had no influence on the satisfaction level with remote working (Cho & Chew, 2021). Second, remote working might be less relevant for employees who have longer working experiences as they are more likely to know their tasks and scope of work well and to be more independent requiring minimal supervision. In the current study sample, most participants had working experiences of over six years all the way to over 20 years. Third, many participants in the current study sample had qualifications with a bachelor's degree and above and were professionals and managers. Wang and colleagues (2021) reported that remote working is already relatively common for white-collar employees and employees having an income of more than $65,000. Remote working therefore is not likely to have an impact or make any difference in terms of burnout. Last, remote working is also unlikely to make any difference for employees who are already experiencing burnout due to issues such as overworking.

5.6.6 It was hypothesized that workplace mental wellbeing would have a significant and negative correlation with depression, anxiety, and stress.

The results supported a significant and negative correlation between workplace mental wellbeing and depression, anxiety, and stress ($r = -0.451$). Employees who experienced a high level of wellbeing were also less likely to experience the negative emotional state of depression anxiety and stress. The results provided further support for the employee wellbeing framework by Danna and Griffin (1999) which identifies personal psychological consequences including the negative emotional state of depression, anxiety and stress that can result from low employee wellbeing. In fact, this negative emotional state has been recognised as one of the important personal consequences in workplace settings in the context of employee wellbeing (Cheung & Yip, 2015; Dreyer et al., 2019), and it has been highlighted that workplace factors can lead to significant work stress which in turn can lead to increased levels of depression or anxiety (Plaisier et al., 2007). For example, factors

including high job demand, limited autonomy and limited support at the workplace have been found to be associated with symptoms of depression and anxiety (Sanne et al., 2005).

5.6.7 It was hypothesized that as compared to general mental wellbeing, workplace mental wellbeing would have a significantly stronger and positive correlation with job satisfaction.

The results supported the hypothesis that workplace mental wellbeing had a significantly stronger and positive correlation with job satisfaction ($r = 0.760$) as compared with general mental wellbeing ($r = 0.482$). As expected, general mental wellbeing, as measured by the SMWEB scale developed by Fen and colleagues (2013), was primarily intended as a measure of positive psychological functions of general life experiences of individuals in Singapore. At the workplace however, work life can present a different set of experiences for the individuals. Specifically, workplace mental wellbeing as measured by the Workplace SMWEB scale developed in study 2 and confirmed in study 3, was represented by 13 unique workplace factors. Workplace mental wellbeing is therefore likely to significantly correlated stronger with job satisfaction within the workplace context. As indicated by Danna and Griffin (1999), the concept of wellbeing can include measures of general experience such as life satisfaction in the context of general life experience, but within the workplace context, a measurement of generalised job-related experience such as job satisfaction is warranted.

5.6.8 It was hypothesized that workplace mental wellbeing would have a significant and positive correlation with general mental wellbeing.

The results supported a significant and positive correlation between workplace mental wellbeing and general mental wellbeing ($r = 0.575$). Employees who experienced a high level of workplace mental wellbeing were also more likely to experience a high level of general mental wellbeing. As expected, the results were consistent with those found in study 2 ($r = 0.554$). As discussed previously in study 2, workplace wellbeing is distinguishable from general wellbeing (Bartels et al., 2019), yet spill-over effects and reciprocal relationships

with one another have also been empirically supported (Page & Vella-Brodrick, 2009; Weziak-Bialowolska et al., 2020).

5.7 Implications of Study 3

Study 3 was undertaken by adapting the employee wellbeing framework developed by Danna and Griffin (1999) that identifies the important components of the nomological network of health and wellbeing in the workplace context. From the contribution of study 1 and 2, study 3 provided empirical support that established the construct validity of the Workplace SMWEB scale in Singapore workplaces. Study 3 also provided empirical support for the important relationship between workplace mental wellbeing and job satisfaction. Further, study 3 provided empirical support that workplace mental wellbeing had a significant and positive association with job performance and flourishing and a significant and negative association with burnout and the negative emotional state of depression, anxiety and stress.

The current study presents organisations in Singapore with a psychometrically sound and culturally meaningful workplace mental wellbeing measuring tool that identifies important workplace factors. A novel contribution of this study is that the Workplace SMWEB scale was specifically developed to be relevant for use in the local context with a culturally diverse population. In line with the recommendations by Danna & Griffin (1999), the workplace factors identified in the Workplace SMWEB scale can be targeted for interventions to improve individual and organisation outcomes. Specifically, the Workplace SMWEB scale goes beyond measuring organisational outcomes and taps into measuring the positive functions of individuals within the employee wellbeing framework. This is essential and necessary in ensuring that employees can have a good level of mental health, as well as thrive and flourish within the organisational realm which in turn is also like to have spill over positive effects on overall mental wellbeing. Consequently, this would lead to positive benefits for the society and for the entire nation.

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5.8 Limitations of Study 3

Several limitations of the current study were noted. First, data were collected using self-report which seems appropriate as the focus of the research was on the participants' subjective experience of workplace mental wellbeing and emotional state. As in Study 2, although self-report surveys have a few advantages such as easy accessibility to data, issues including common method variance and response bias are not uncommon (Podsakoff et al., 2012). Thus, steps were again followed to minimise these issues. These include voluntary participation in the research and anonymity. Moreover, the nature of the information required for the current study was not overly sensitive, and it was again conducted outside of the participants' work settings.

Second, as in study 2, the current study involved the use of a cross-sectional survey design, with participants' responses captured at one point-in-time. While cross-sectional design studies are useful for exploratory studies (Spector 2019), limitations exist. For example, the evaluation of predictive validity may be limited. Future studies could employ longitudinal research designs to provide further support to the construct validity and casual relationships in the Workplace SMWEB model such as evaluating the concurrent and predictive validity of the Workplace SMWEB scale.

Third, although the participants of the study again came from a variety of industries such as administrative, business, legal and social sectors, many of them were managers and professionals. Many participants also had qualifications with a bachelor's degree and above. Thus, the findings may have limited generalisation to samples of participants who do not fall into these categories. Future studies could again address this issue with a larger sampling size consisting of participants of diverse but specific demographic groups. For example, employees from the government sector as well as from the private sector could be recruited to further test the validity of the Workplace SMWEB scale.

CHAPTER 6: REVIEW AND CONCLUSIONS

This dissertation led to a significant understanding of employee mental wellbeing in the Singapore workplace context. Specifically, the identification of workplace factors which contributed to workplace mental wellbeing informed the development of the new Singapore workplace mental wellbeing (Workplace SMWEB) scale. The current research established the construct validity of the Workplace SMWEB scale which comprises of 13 workplace factors. These factors are: support from boss, fairness, autonomy, meaningful work, co-worker relationship, role clarity, work-life balance, learning and professional growth, person-organisation fit, employee engagement, employee recognition, accomplishment, and organisation support. Employee wellbeing was examined within the employee wellbeing framework by Danna and Griffin (1999) that identifies the important components of the nomological network of health and wellbeing in the workplace context. Employee wellbeing

has important implications as a high level of wellbeing is expected to lead to improved individual and organisational outcomes (Danna & Griffin, 1998; Litchfield, Cooper, Hancock, & Watt, 2016; Warr & Nielsen, 2018).

In review, there were three studies and four research questions in total. Study 1 was a qualitative study which examined research questions 1 and 2. Study 2 and 3 were quantitative studies which examined the hypotheses related to research questions 3 and 4. The four research questions were outlined in Chapter 1. Study 1 addressed research questions 1 and 2 by identifying the workplace factors that contributed to employee mental wellbeing in the Singapore context which subsequently informed the development of Study 2 and 3. Study 2 and 3 addressed research questions 3 and 4 in three steps. First, the Workplace SMWEB scale was constructed based on the 13 workplace mental wellbeing factors identified in Study 1. Second, the construct validity of the Workplace SMWEB scale was evaluated. Third, the association between the Workplace SMWEB scale and other components of the nomological network of wellbeing was examined to further provide evidence for the construct validity of the Workplace SMWEB scale.

The findings of the current research are significant as to date, there has not been any mental wellbeing measure developed specifically for the Singapore workplace context. Moreover, the Singapore Mental Wellbeing (SMWEB) scale was originally developed to measure positive psychological functions of individuals in general life experiences including Asian self-esteem, cognitive efficacy, emotional intelligence, social intelligence, and resiliency (Fen et al., 2013). However, the SMWEB scale has not been validated or published in any research study since its development.

To shed more light into the validity of the SMWEB scale, the current research also examined if it is a valid instrument to be used in the workplace context. The results found that a revised version of the SMWEB scale with items modified to better reflect the workplace context is a more suitable instrument as compared to the original SMWEB scale. Another

interesting finding is that items relating to resiliency did not form a clear factor but were instead diffused across the other factors suggesting that resiliency could be better represented by the other factors. This is in line with the findings by Winwood and colleagues (2013) who found that workplace resilience was represented by seven factors such as interacting cooperatively and building relationships rather than a single factor.

Notwithstanding, as the SMWEB taps into the positive mental functions of individuals, it is also expected to predict success in life in areas beyond happiness in areas such as thriving, growth and development (Fen et al., 2013). This is based on research showing a bidirectional relationship between wellbeing in life and wellbeing at work (Weziak-Bialowolska et al., 2020). While workplace wellbeing is distinct from general wellbeing (Bartels et al., 2019), both have spill over effects and reciprocal relationships with one another (Page & Vella-Brodrick, 2009; Weziak-Bialowolska et al., 2020). The current research also found support for a significant and positive correlation between workplace mental wellbeing and general mental wellbeing. Moreover, as compared to the SMWEB scale, the newly developed Workplace SMWEB scale had a significantly stronger (and positive) correlation with job satisfaction thereby providing evidence that the SMWEB scale was primarily intended as a measure of positive psychological functions of general life experiences and not for work experiences. This is also a clear indication that the Workplace SMWEB scale is a more suitable instrument to be used in the workplace context.

The findings of the current research provided evidence that the Workplace SMWEB instrument, which comprises of 99 items in 13 domains of workplace mental wellbeing factors, was reliable and valid for providing insights into employee mental wellbeing in the Singapore workplace context. The development of a mental wellbeing measure is timely and highly relevant in the Singapore workplaces where economic success is still largely determined by work performance, yet stress-related illness' such as anxiety and depression

due to excessive work remains a significant problem as compared to other countries such as the USA and the UK (Tan, 2021).

Another major finding is that the Workplace SMWEB scale was found to have significant and positive associations with job satisfaction, work performance, and flourishing, as well as significant and negative associations with the negative emotional state of depression, anxiety, stress, and burnout. This finding has important implications for the Singapore workforce where employees have one of the longest working hours in the world. Hughes and Parkes (2007) found that longer working hours are not necessarily detrimental to wellbeing as factors such as having greater control over work can help to reduce its impact on employees. Other factors such as having a safer psychological environment and having better work and family balance are also important considerations (Cho & Koh, 2015; Tsutsumi, 2019). In line with the recommendation by Ganster, Rosen and Fisher (2016) who conducted a critical review of the vast literature that investigates the effects of working hours on wellbeing, effects of long working hours have to be seen in the light of several factors including the cultural context where working long hours can be considered to be more acceptable compared to most other European cultures. The Workplace SMWEB scale has identified these critical factors in the local Singapore context and therefore can be utilized to mitigate the long hours put in by Singapore employees through effective interventions targeted at these factors.

Further, when an employee's wellbeing is optimal, they will be able to perform better at their work. At the same time however, the workplace also needs to be able to provide the growth and positive factors to promote and support their wellbeing as the reciprocal relationship between mental wellbeing and workplace factors is closely intertwined. As mental wellbeing also directly affects how employees think and feel about their job and organisation (Tov & Chan, 2012), it is therefore critical that employers focus on employee mental wellbeing as a way for the organisations to grow. In fact, Spector (2022) emphasized

that caring for employees as human beings is the right thing to do ethically and morally, and it is also the right thing to do from a practical viewpoint as it raises productivity level for the organisation.

Consequently, it is hoped that the Workplace SMWEB instrument can lead to the development of best practice, standards, guidelines, and interventions ensuring that employee mental wellbeing remains the focus for the organisation to thrive and remain competitive in today's challenging economy through greater productivity and reduced negative psychological consequences. For example, the Workplace SMWEB instrument can be used as the first step of intervention as it can pinpoint specific areas of concerns based on the 13 identified factors influencing employee mental wellbeing. Interventions such as workshops can then be appropriately designed and conducted based on the results of the Workplace SMWEB survey. These workshops can for example, train and empower bosses on how to better support their employee wellbeing and provide their employees with adequate recognition as well as a sense of autonomy in pursuing work goals; at the same time, interpersonal relationships and harmony within the organisation can be further enhanced through helping employees develop emotional intelligence skills yet allowing them to utilize their work skills more fully. Moreover, interventions can also be in the form of assisting human resource personnel to develop specific guidelines on how procedures and processes can be free of bias ensuring fairness is maintained across the whole organisation. Importantly, the Workplace SMWEB instrument caters to the cultural nuances embedded in a collectivistic society in Singapore leading to interventions that are effective and relevant.

The Workplace SMWEB scale will benefit from further development and validation. The current development of the scale included an overrepresentation of employees in white-collar or knowledge-based occupations and an underrepresentation of employees who may not normally work with computers such as blue-collar workers, skill-based workers and workers in the food and entertainment industries. As Singapore moves towards emphasising

on skill-based employment rather than solely relying on traditional yardsticks such as educational qualifications, it will be necessary to further validate the Workplace SMWEB scale on these group of employees. Further, employees in the government sector were also underrepresented in the current study and this could similar be addressed in subsequent studies.

It is expected that norms could be developed for different groups such as for white-collar and blue-collar workers. Cut-off points for different level of workplace mental wellbeing could also be determined through further investigation on the correlation with other wellbeing measurements. Other considerations for future research can include having alternative design strategies such as using different and separate sources of input (bosses and employees) to gather responses and measuring predictor and outcomes variables at different time points. Longitudinally, the use of the Workplace SMWEB scale will also allow for the tracking of change over time and the exploration of how the different dimensions of the scale change over time as a result of the change in workplace dynamics. For example, this change in workplace dynamics can be the result of the increasing number of employees from Generation Z who prefer more flexible work options, entering the workforce gradually replacing the older employees from the baby boomers era who are moving into retirement.

A short form of the Workplace SMWEB scale can also be constructed to facilitate the ease of use for screening purposes at the population level. To be a workable alternative for assessing the same underlying construct of Singapore workplace mental wellbeing, the short form should also retain the internal structure and meaningfulness of the Workplace SMWEB scale. Additionally, Workplace SMWEB scale will benefit from validation in other Asian countries. Singapore has a close historical tie and socio-cultural relationship particularly with other Southeast Asian countries. The region was under Western colonial rule and influence for more than 100 years (British, French, Dutch) with migrants from China, India and neighbouring locations integrating with the indigenous population cumulating a unique fusion

of East West identity that is uniquely Southeast Asian. Singapore was part of Malaysia under the British colonial rule (1826-1957) before it gained independence in 1965. Singapore therefore shares many characteristics with other Southeast Asian countries including the business system (Tupton, 2009). However, studies into wellbeing of populations in Southeast Asia are limited (Bernardo, 2022). Thus, the Workplace SMWEB scale serves as the foundational construct through which it serves to enrich theoretical and empirical work in the workplace wellbeing area within the Southeast Asia region. Validating the Workplace SMWEB scale in other Asian countries allows for scale adaption if necessary and prepares for further work to be conducted such as modification of items relevant to the specific region. This in turn allows for the development of more contextualized theories of workplace wellbeing in these countries and subsequently informs the development of relevant intervention.

In conclusion, the three studies included in this dissertation provide evidence for the development and construct validity of the Workplace SMWEB scale in the Singapore context. Specifically, this research confirmed acceptable psychometric properties and the factor structure of the Workplace SMWEB scale in Singapore workplace samples. Given these findings, the Workplace SMWEB scale can be used as a valid and reliable tool for the screening of workplace mental wellbeing in Singapore.

REFERENCES

Aamodt, M. G. (2016). *Industrial/Organizational Psychology. An Applied Approach* (8th ed.). USA: Cengage Learning.

Aazami, S., Shamsuddin, K., Akmal, S., & Azami, G. (2015). The Relationship Between Job Satisfaction and Psychological/Physical Health among Malaysian Working Women. *The Malaysian journal of medical sciences: MJMS, 22(4),* 40-6.

Abdi, T., Peiró, J., Ayala, Y., & Zappalà, S. (2018). Four Wellbeing Patterns and their Antecedents in Millennials at Work. *International Journal of Environmental Research and Public Health, 16(1),* 25. https://doi:10.3390/ijerph16010025

Abdin, E., Subramaniam, M., Chan, A., Chen, J. A., Chong, C. L., Wang, C., Lee, M., & Gan, S. L. (2019). iWorkHealth: An instrument to identify workplace psychosocial risk factors for a multi-ethnic Asian working population. *PloS one, 14(8),* e0220566. https://doi.org/10.1371/journal.pone.0220566

Abid, M. (2016). Impact of economic, financial and institutional factors on CO2 emissions: Evidence from Sub-Saharan Africa economies. *Utilities Policy, 41*, 85–94. https://doi:10.1016/j.jup.2016.06.009

Adalja, A. A., Toner, E., & Inglesby, T. V. (2020). Priorities for the US health community

    responding to COVID-19. *Journal of American Medical Association, 323 (14),* 1343-

    1344. https://doi.org/10.1001/jama.2020.3413

Afonso, P., Fonseca, M., & Pires, J. F. (2017). Impact of working hours on sleep and mental

    health. *Occupational Medicine*, *67*(5), 377–382.

    https://doi.org/10.1093/occmed/kqx054

Afsar, B., & Badir, Y. F. (2016). Person–organization fit, perceived organizational support,

    and organizational citizenship behavior: The role of job embeddedness. *Journal of*

    Human Resources in Hospitality & Tourism, 15(3), 252–278.

    https://doi:10.1080/15332845.2016.1147936

Afsar, B., Badir, Y.F., & Khan, M.M. (2015). Person–job fit, person–organization fit and

    innovative work behavior: The mediating role of innovation trust. *The Journal of*

    High Technology Management Research, 26, 105-116.

    https://doi:10.1016/j.hitech.2015.09.001

Aked, J., Marks, N., Cordon, C. & Thompson, S. (2008). *Five Ways to Wellbeing: A report*

    presented to the Foresight Project on communicating the evidence base for improving

    people's well-being. London: New Economics Foundation.

Akhtar, C. S., Kashif, A., Arif, A., & Khan, A. (2012). Impact of Long Working Hours on

    Family Wellbeing of Corporate Family. *World Applied Sciences Journal, 16*(9), 1302-

    1307.

Alsagoff, L. (2010). English in Singapore: culture, capital and identity in linguistic variation.

    World Englishes, 29(3), 336–348. https://doi:10.1111/j.1467-971x.2010.01658.x

Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007).

    Transformational leadership and psychological well-being: The mediating role of

    meaningful work. *Journal of Occupational Health Psychology, 12,* 193–203.

    https://doi:10.1037/1076-8998.12.3.193

Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behavior, 24 (5, SpecIssue),* 491–509. https://doi.org/10.1002/job.211

Ashkanasy, N. M., & Daus, C. S. (2002). Emotion in the workplace: The new challenge for managers. *Academy of Management Perspectives*, *16*(1), 76–86. https://doi.org/10.5465/ame.2002.6640191

Ashkanasy, N. M., & Daus, C. S. (2005). Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated. *Journal of Organizational Behavior*, *26*(4), 441–452. https://doi.org/10.1002/job.320

Aubé, C., Rousseau, V., & Morin, E. M. (2007). Perceived organizational support and organizational commitment: The moderating effect of locus of control and work autonomy. *Journal of Managerial Psychology, 22(5),* 479-495. https://doi.org/10.1108/02683940710757209

Auerswald, M., & Moshagen, M. (2019). How to determine the number of factors to retain in exploratory factor analysis: A comparison of extraction methods under realistic conditions. *Psychological methods, 24(4),* 468–491. https://doi.org/10.1037/met0000200

Auger, G. A. (2014). Trust Me, Trust Me Not: An Experimental Analysis of the Effect of Transparency on Organizations. *Journal of Public Relations Research, 26(4)*, 325–343. https://doi:10.1080/1062726x.2014.908722

Avinandan, M., & Neeru, M. (2006). Does role clarity explain employee-perceived service quality? A study of antecedents and consequences in call centres. International

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being in Two Work Settings. *Journal of Applied Social Psychology, 34(10),* 2045–2068. https://doi.org/10.1111/j.1559-1816.2004.tb02690.x

Bader, G. E., & Rossi, C. A. (2002). *Focus Groups: A Step-By-Step Guide* (3rd ed.). USA: The Bader Group.

Bailey, C., Madden, A., Alfes, K. and Fletcher, L. (2015). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews, 19 (1),* 31-53. https://doi.org/10.1111/ijmr.12077

Baptiste, R. N. (2008). Tightening the link between employee wellbeing at work and performance: A new dimension for HRM. *Management Decision, 46(2),* 284-309. https://doi.org/10.1108/00251740810854168

Barker, C., Pistrang, N., & Elliott, R. (2016). *Research methods in clinical psychology: An introduction for students and practitioners* (3rd ed.). UK: John Wiley.

Bartels, A. L., Peterson, S. J., & Reina, C. S. (2019). Understanding well-being at work: Development and validation of the Eudaimonic Workplace Well-being Scale. *PLoS ONE, 14(4)*, Article e0215957. https://doi.org/10.1371/journal.pone.0215957

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117(3),* 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Bazeley, P., & Jackson, K. (2013). *Qualitative data analysis with NVivo* (2nd ed). London: SAGE Publications.

Bentler P. M. (1990). Comparative fit indexes in structural models. *Psychological bulletin, 107(2),* 238–246. https://doi.org/10.1037/0033-2909.107.2.238

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88(3),* 588–606. https://doi.org/10.1037/0033-2909.88.3.588

Bergsma, A., Veenhoven, R., ten Have, M., & de Graaf, R. (2011). Most people with mental disorders are happy: A 3-year follow-up in the Dutch general population. *The Journal*

of *Positive Psychology*, *6*(4), 253–259.

https://doi.org/10.1080/17439760.2011.577086

Bian, Y., & Ang, S. (1997). Guanxi Networks and Job Mobility in China and Singapore.
Social Forces, 75(3), 981. https://doi:10.2307/2580527

Biggio, G., & Cortese, C. (2013). Well-being in the workplace through interaction between
individual characteristics and organizational context. *International Journal of
Qualitative Studies on Health and Well-Being*, *8*(1), 19823.
https://doi.org/10.3402/qhw.v8i0.19823

Bishara, A. J., Hittner, J. B. (2016). Confidence intervals for correlations when data are not
normal. *Behavior Research Methods, 49,* 294–309 (2017).
https://doi.org/10.3758/s13428-016-0702-8

Bjonnes, R. (2009). Strategies to Eradicate Poverty: An Integral Approach to Development.
In S. T. Inayatullah (Eds.), *Global Transformations and World Futures - Volume I*
(pp. 318-342). Oxford: Eolss Publisher.

Black, C. (2008). *Working for a healthier tomorrow: Dame Carol Black's review of the
health of Britain's working age population*. London: The Stationery Office.

Blader, S. L., & Tyler, T. R. (2005). How can theories of organizational justice explain the
effects of fairness? In J. Greenberg & J. A. Colquitt (eds.), *Handbook of
organizational justice*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Bloor, M., Frankland, J., Thomas, M., & Robson, K. (2001). *Focus Groups in Social
Research*. London: Sage.

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L.
(2018). Best Practices for Developing and Validating Scales for Health, Social, and
Behavioral Research: A Primer. *Frontiers in public health, 6*, 149.
https://doi.org/10.3389/fpubh.2018.00149

Bowes, J.M. (2005). Emphasizing the family in work family research: A review of current

research and recommendations for future directions. In S.A.Y. Poelmans (Ed.), *Work and family: An international research perspective* (pp. 415-438). Mahwah, NJ: Erlbaum

Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional Intelligence: Implications for Personal, Social, Academic, and Workplace Success. *Social and Personality Psychology Compass*, *5*(1), 88–103. https://doi.org/10.1111/j.1751-9004.2010.00334.x

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3(2),* 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2013). *Successful Qualitative Research: A Practical Guide for Beginners.* London: Sage.

Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35(5)*, 307–311. https://doi.org/10.1037/h0055617

Breivik, E., & Olsson, U. H. (2001). Adding variables to improve model fit: The effect of model size on fit assessment in LISREL. In R. Cudeck, S. Du Toit, & D. Sorbom (Eds.), *Structural equation modeling: Present and future* (pp. 169–194). Lincolnwood, IL: Scientific Software International.

Bridger, E., & Daly, M. (2018). Cognitive ability as a moderator of the association between social disadvantage and psychological distress: evidence from a population-based sample. *Psychological Medicine*, *49*(09), 1545–1554. https://doi.org/10.1017/s0033291718002118

Britt, T. W., Shen, W., Sinclair, R. R., Grossman, M. R., & Klieger, D. M. (2016). How much do we really know about employee resilience? *Industrial and Organizational Psychology: Perspectives on Science and Practice, 9(2),* 378–404. https://doi.org/10.1017/iop.2015.107

Brooks, J., McCluskey, S., Turley, E., & King, N. (2015). The Utility of Template Analysis in Qualitative Psychology Research. *Qualitative Research in Psychology, 12*, 202–222. https://doi:10.1080/14780887.2014.955224

Brotheridge, C. M. (2003). The Role of Fairness in Mediating the Effects of Voice and Justification on Stress and Other Outcomes in a Climate of Organizational Change. *International Journal of Stress Management, 10(3),* 253–268. https://doi.org/10.1037/1072-5245.10.3.253

Brown, H. S., & Vergragt, P. J. (2016). From consumerism to wellbeing: toward a cultural transition? *Journal of Cleaner Production*, *132*, 308–317. https://doi.org/10.1016/j.jclepro.2015.04.107

Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). The Guilford Press: New York.

Brun, J.-P., & Dugas, N. (2008). An analysis of employee recognition: Perspectives on human resources practices. *The International Journal of Human Resource Management, 19(4),* 716–730. https://doi.org/10.1080/09585190801953723

Bryman, A. (1996) Leadership in Organizations. In S. R. Clegg, C. Hardy & W. R. Nord (eds.), Handbook of Organization Studies, London: Sage.

Bundick, M. J., Yeager, D. S., King, P. E., & Damon, W. (2010). Thriving across the Life Span. *The Handbook of Life-Span Development*. https://doi.org/10.1002/9780470880166.hlsd001024

Bunge, M. (2012). Wealth and Well-Being, Economic Growth, and Integral Development. *International Journal of Health Services*, *42(1),* 65–76. https://doi.org/10.2190/hs.42.1.g

Burke, R. J. (2010). Workplace stress and well‑being across cultures: research and practice. Cross Cultural Management: *An International Journal, 17(1),* 5‑9. https://doi:10.1108/13527601011016871

Burke, R. J., Koyuncu, M., Fiksenbaum, L., & Acar, F. T. (2009). Work hours, work intensity, satisfactions and psychological well-being among Turkish manufacturing managers. *Europe's Journal of Psychology*, *5*(2), 12–30. https://doi.org/10.5964/ejop.v5i2.264

Burns, R. A., Crisp, D. A., Chng, J., & Murry, K. (2022). Community Members Prioritise Indicators of Both Mental Health and Wellbeing to Define Flourishing and Quality of Life: Towards The Total Psychological Health Framework. *Applied Research Quality Life*. https://doi.org/10.1007/s11482-022-10075-7

Butler, J., & Kern, M. L. (2016).The PERMA-Profiler: A brief multidimensional measure of flourishing. *International Journal of Wellbeing, 6(3),* 1-48. https://doi:10.5502/ijw.v6i3.52

Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (3rd ed.). New York: Routledge.

Byrne, B.M. (1998), *Structural Equation Modeling with LISREL, PRELIS and SIMPLIS: Basic Concepts, Applications and Programming*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Caligiuri, P., Lepak, D., & Bonache, J. (2010). Global Dimensions of Human Resources Management: Managing the Global Workforce, Hoboken, NJ: John Wiley & Sons, Inc.

Camfield, L. (2004), 'Measuring SWB in developing countries', in Glatzer, W., Von Below, S. and Stoffregen, M. *Challenges for the quality of life in contemporary societies*, Netherlands: Kluwer Academic Publishers.

Camfield, L. (2006). *The why and the how? Understanding subjective wellbeing in four developing countries: Exploratory work by the WoD group*. Wellbeing in Developing Countries Group, Economic and Social Research Council. Retrieved from http://www.welldev.org.uk/research/workingpaperpdf/wed26.pdf

Cangur, S., & Ercan, I. (2015). Comparison of model fit indices used in structural equation modeling under multivariate normality. *Journal of Modern Applied Statistical Methods, 14(1),* 152-167. https://doi:10.22237/jmasm/1430453580

Capitano, J., & Greenhaus, J. H. (2018). When work enters the home: Antecedents of role boundary permeability behavior. *Journal of Vocational Behavior, 109*, 87-100. https://doi.org/10.1016/j.jvb.2018.10.002

Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues, 54*(2), 245–266. https://doi.org/10.1111/j.1540-4560.1998.tb01217.x

Chan, D. (2012). Singaporeans' well-being: It's not just about emotions. *Research Collection School of Social Sciences.* Paper 1352. Retrieved from https://ink.library.smu.edu.sg/soss_research/1352

Chan, K. B., Lai, G., Ko, Y. C., & Boey, K. W. (2000). Work stress among six professional groups: the Singapore experience. *Social Science & Medicine, 50*(10), 1415–1432. https://doi.org/10.1016/S0277-9536(99)00397-4

Chandra, V. (2012). Work–life balance: eastern and western perspectives. *The International Journal of Human Resource Management, 23(5),* 1040-1056. https://doi: 10.1080/09585192.2012.651339

Charlemagne-Badal, S. J., Lee, J. W., Butler, T. L., & Fraser, G. E. (2015). Conceptual domains included in wellbeing and life satisfaction instruments: A review. *Applied Research in Quality of Life, 10*(2), 305–328. https://doi.org/10.1007/s11482-014-9306-6

Chen, F. F., Jing, Y., Hayes, A., & Lee, J. M. (2012). Two Concepts or Two Approaches? A Bifactor Analysis of Psychological and Subjective Well-Being. *Journal of Happiness Studies*, *14*(3), 1033–1068. https://doi.org/10.1007/s10902-012-9367-x

Chen, N., & Tjosvold, D. (2007). Guanxi and leader member relationships between American managers and Chinese employees: Open-minded dialogue as mediator. *Asia Pacific Journal of Management, 24(2),* 171–189. https://doi:10.1007/s10490-006-9029-9

Cheng, Y., Park, J., Kim, Y., & Kawakami, N. (2012). The recognition of occupational diseases attributed to heavy workloads: experiences in Japan, Korea, and Taiwan. *International archives of occupational and environmental health, 85(7)*, 791–799. https://doi.org/10.1007/s00420-011-0722-8

Cho, E., Chew, I. A. (2021). Work-life balance among self-initiated expatriates in Singapore: Definitions, challenges, and resources. *Currrent Psychology, 40*, 4612–4623. https://doi.org/10.1007/s12144-019-00413-8

Cho, E., & Koh, C. W. (2015). Governmental interventions and social re-engineering to facilitate work–life balance: Singapore and South Korea. In *Handbook of research on work–life balance in Asia*. Edward Elgar Publishing.

Chong, S. A. (2007). Mental Health in Singapore: A Quiet Revolution? *Annals Academy of Medicine, 36*, 795-796.

Chong, S. A., Vaingankar, J., Abdin, E., & Subramaniam, M. (2012). The prevalence and impact of major depressive disorder among Chinese, Malays and Indians in an Asian multi-racial population. *Journal of Affective Disorders*, *138*(1-2), 128–136. https://doi.org/10.1016/j.jad.2011.11.038

Choo, L. S. (2017). Colleague Support and Role Clarity in Promoting the Work Engagement of Frontliners in Malaysian Hotels. *Performance Improvement Quarterly, 29(4),* 389–405. https://doi.org/10.1002/piq.21234

Christopher, J. C. (1999). Situating Psychological Well-Being: Exploring the Cultural Roots of Its Theory and Research. *Journal of Counseling & Development*, *77*(2), 141–152. https://doi.org/10.1002/j.1556-6676.1999.tb02434.x

Chuan, K.E. (2007). Labour force growth in Singapore. *Asian Population Studies, 3*, 207–220. https://doi.org/10.1080/17441730701746292

Chung, Y. W., Im, S., & Kim, J. E. (2019). The Role of Volunteer Participation and Person-Organization Fit in the Relationship between Motives and Psychological Well-Being. *Sustainability, 12(1),* 330. https://doi:10.3390/su12010330

Cieri, H. D., & Bardoel, E. A. (2009). What does 'work–life management' mean in China and Southeast Asia for MNCs?, Community, *Work & Family, 12*(2), 179-196, https://doi.10.1080/13668800902778959

Cohen J. (1992). A power primer. *Psychological bulletin, 112(1),* 155–159. https://doi.org/10.1037//0033-2909.112.1.155

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86(3),* 386–400. https://doi:10.1037/0021-9010.86.3.386

Cooper, C. L. (2009). The changing nature of work: enhancing the mental capital and well-being of the workplace. *Twenty-First Century Society, 4*(3), 269–275. https://doi.org/10.1080/17450140903197393

Cooper, C. L., & Marshall, J. (1978). *Understanding Executive Stress*. London: Macmillan.

Cooper, C. L., Goswami, U., Sahakian, B. J. (2009) *Mental Capital and Wellbeing*. Wiley-Blackwell: Oxford, UK.

Costello, A. B., & Osborne, J. (2005). Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most from Your Analysis. *Practical Assessment Research & Evaluation, 10,* 1-9.

Cotton, P., & Hart, P. M. (2003). Occupational Wellbeing and Performance: A Review of Organisational Health Research. *Australian Psychologist, 38*(2), 118–127. https://doi.org/10.1080/00050060310001707117

Cox, T., & Cox, S. (1992). Occupational health: Past, present and future. *Work & Stress, 6*(2), 99–102. https://doi.org/10.1080/02678379208260343

Crabtree, B. F., & Miller, W. L. (1999). Using codes and code manuals: A template organizing style of interpretation. In B. F. Crabtree & W. L. Miller (eds.), *Doing qualitative research* (2nd ed.). Thousand Oaks, CA: Sage Publications

Creswell, J. W., & Creswell, J. D. (2015). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). Thousands Oaks, CA: Sage.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Los Angeles: Sage Publications.

Creswell, J.W., Plano Clark, V. L., Gutmann M.L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In Tashakkori A. and Teddlie C. (eds.) *Handbook of Mixed Methods in Social and Behavioral Research*. Thousand Oaks, California: Sage Publications.

Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior, 58(2),* 164–209. https://doi.org/10.1006/jvbe.2001.1791

Crowley, S. L., & Fan, X. (1997). Structural equation modeling: basic concepts and applications in personality assessment research. *Journal of personality assessment, 68(3),* 508–531. https://doi.org/10.1207/s15327752jpa6803_4

Cunningham, E. (2008). *Structural equation modeling using AMOS*. Melbourne: Statsline.

Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. Psychological Methods, 1(1), 16-29. https://doi:10.1037/1082-989X.1.1.16

Cyr, J. (2019). *Focus Groups for the Social Science Researcher*. UK: Cambridge University Press.

Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management, 25(3),* 357–384. https://doi.org/10.1177/014920639902500305

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11(4),* 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Deci, E. L., & Ryan, R. M. (2006). Hedonia, eudaimonia, and well-being: an introduction. *Journal of Happiness Studies, 9*(1), 1–11. https://doi.org/10.1007/s10902-006-9018-1

Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology/Psychologie canadienne, 49(1),* 14–23. https://doi.org/10.1037/0708-5591.49.1.14

Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology, 74(4),* 580–590. https://doi.org/10.1037/0021-9010.74.4.580

Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former Eastern bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin, 27(8), 930–942.* https://doi.org/10.1177/0146167201278002

Deva M. P. (1999). Mental health in the developing countries of the Asia Pacific region. Asia-*Pacific journal of public health, 11(2),* 57–59. https://doi.org/10.1177/101053959901100201

DeVellis, R. F. (2017). *Scale Development: Theory and Applications* (4th ed.). Thousand

    Oaks, CA: Sage.

Dextras-Gauthier, J., & Marchand, A. (2016). Does organizational culture play a role in the

    development of psychological distress? *The International Journal of Human Resource*

    Management, 30(2), 337-359. https://doi:10.1080/09585192.2016.1216874

Dickson-Swift, V., Fox, C., Marshall, K., Welch, N., & Willis, J. (2014). What really

    improves employee health and wellbeing. *International Journal of Workplace Health*

    Management, 7(3), 138–155. https://doi.org/10.1108/ijwhm-10-2012-0026

Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem.

    Journal of personality and social psychology, 68(4), 653–663.

    https://doi.org/10.1037//0022-3514.68.4.653

Diener, E., & Seligman, M. E. P. (2004). Beyond Money: Toward an Economy of Well-

    Being. *Psychological Science in the Public Interest, 5(1),* 1–31.

    https://doi.org/10.1111/j.0963-7214.2004.00501001.x

Diener, E., Ng, W., Harter, J., & Arora, R. (2010). Wealth and happiness across the world:

    material prosperity predicts life evaluation, whereas psychosocial prosperity predicts

    positive feeling. *Journal of personality and social psychology, 99(1),* 52–61.

    https://doi.org/10.1037/a0018066

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three

    decades of progress. *Psychological Bulletin, 125*(2), 276–302.

    https://doi.org/10.1037/0033-2909.125.2.276

Diener, E., Wirtz, D., Tov, W., Kim-prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R.

    (2010). New Well-being Measures: Short Scales to Assess Flourishing and Positive

    and Negative Feelings. *Social Indicators Research, 97,* 143-156.

    https://doi:10.1007/s11205-009-9493-y

Ding, L., Velicer, W. F., & Harlow, L. L. (1995). Effects of estimation methods, number of

    indicators per factor, and improper solutions on structural equation modeling fit

    indices. *Structural Equation Modeling, 2,* 119–144.

    https://doi:10.1080/10705519509540000

Dittmar, H., Bond, R., Hurst, M., & Kasser, T. (2014). The relationship between materialism

    and personal well-being: A meta-analysis. *Journal of Personality and Social*

    Psychology, 107(5), 879–924. https://doi.org/10.1037/a0037409

Dodge, R., Daly, A., Huyton, J., & Sanders, L. (2012). The challenge of defining wellbeing.

    International Journal of Wellbeing, *2*(3), 222–235. https://doi.org/10.5502/ijw.v2i3.4

Du, H., King, R. B., & Chi, P. (2017). Self-esteem and subjective well-being revisited: The

    roles of personal, relational, and collective self-esteem. *Plos One*, *12*(8).

    https://doi.org/10.1371/journal.pone.0183958

Duan, W., Guan, Y., & Gan, F. (2016). Brief Inventory of Thriving. *Chinese Sociological*

    Dialogue, 1(1), 15–31. doi:10.1177/2397200916665230

    during service delivery in a third world setting. *Journal of Workplace Learning, 25*

    (4), 231–246. https://doi: 10.1108/13665621311316429

Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic review of depression,

    anxiety, and other indicators of psychological distress among U.S. and Canadian

    medical students. *Academic medicine: journal of the Association of American*

    Medical Colleges, 81(4), 354–373. https://doi.org/10.1097/00001888-200604000-

    00009

Easterlin, R. A. (2017) Economic Growth Increases People's Well-Being. In: B. S. Frey, D.

    Iselin (Eds), *Economic Ideas You Should Forget* (pp.37-38). Cham: Springer

Edwards, J. R. (1996). An examination of competing versions of the person–environment fit

    approach to stress. *Academy of Management Journal, 39(2),* 292–339.

    https://doi.org/10.2307/256782

Eguchi, H., Wada, K., & Smith, D. R. (2016). Recognition, Compensation, and Prevention of Karoshi, or Death due to Overwork. *Journal of Occupational and Environmental Medicine, 58(8)*, 313-314. doi:10.1097/jom.0000000000000797

Eisenberger, R., Shanock, L. R., & Wen, X. (2020). Perceived Organizational Support: Why Caring About Employees Counts. *Annual Review of Organizational Psychology and Organizational Behavior, 7*, 101-124. https://doi.org/10.1146/annurev-orgpsych-012119-044917

Ellen, B. P., Kiewitz, C., Garcia, P. R. J. M., & Hochwarter, W. A. (2017). Dealing with the Full-of-Self-Boss: Interactive Effects of Supervisor Narcissism and Subordinate Resource Management Ability on Work Outcomes. *Journal of Business Ethics*. https://doi:10.1007/s10551-017-3666-4

Elliot, R., Fischer, C. T., & Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology, 38,* 215-229. https://doi:10.1348/014466599162782

Emmerling, R. J., & Boyatzis, R. E. (2012). Emotional and social intelligence competencies: cross cultural implications. *Cross Cultural Management: An International Journal*, *19(1),* 4–18. https://doi.org/10.1108/13527601211195592

European Network for Workplace Health Promotion. (2010). *A guide to the business case for mental health*. Retrieved from https://www.enwhp.org/resources/toolip/doc/2018/04/23/mentalhealth_broschuere_businesscase.pdf

Evans, A., Elford, J. and Wiggins, D. (2008) Using the internet for qualitative research, in C. Willig and W. Stainton Rogers (eds). *The Sage Handbook of Qualitative Research in Psychology*. London: Sage.

Fan, L. B., Blumenthal, J. A., Watkins, L. L., & Sherwood, A. (2015). Work and home stress: associations with anxiety and depression symptoms. *Occupational medicine (Oxford, England), 65(2)*, 110–116. https://doi.org/10.1093/occmed/kqu181

Farrell, M. (2016). Transparency. *Journal of Library Administration, 56(4),*444-452. https://doi:10.1080/01930826.2016.1157426

Fassih-Ramandi, Z., Soleimani, M. A., Allen, K. A., Gorgulu, O., & Motalebi, S. A. (2020). Validity and Reliability of the Flourishing Scale in a Sample of Older Adults in Iran. *Clinical interventions in aging, 15,* 673–681. https://doi.org/10.2147/CIA.S251067

Feeney, B. C., & Collins, N. L. (2014). A New Look at Social Support. *Personality and Social Psychology Review, 19*(2), 113–147. https://doi.org/10.1177/1088868314544222

Felstead, A., Gallie, D., Green, F., & Inanc, H. (2015). Fits, misfits and interactions: learning at work, job satisfaction and job-related well-being. *Human Resource Management Journal, 25(3)*, 294–310. https://doi:10.1111/1748-8583.12071

Fen, C. M., Isa, I., Chu, C. W., Ling, C., & Ling, S. Y. (2013). Development and Validation of a Mental Wellbeing Scale in Singapore. *Psychology, 4(7),* 592-606. https://doi.org/10.4236/psych.2013.47085

Ferris, D. L., Lian, H., Brown, D. J., Pang, F. X. J., & Keeping, L. M. (2010). Self-esteem and job performance: The moderating role of self-esteem contingencies. *Personnel Psychology, 63*(3), 561–593. https://doi.org/10.1111/j.1744-6570.2010.01181.x

Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.

Fisher, C. D. (2014). Conceptualizing and measuring wellbeing at work. In P. Y. Chen & C. L. Cooper (Eds.), *Wellbeing: A complete reference guide. Work and wellbeing* (pp. 9–33). UK: Wiley-Blackwell.

Folkestad, B. (2008). Analysing Interview Data: Possibilities and challenges, *Eurosphere Working Paper Series*, Online Working Paper, 13.

Foote, D. A., & Tang, T. L.-P. (2008). Job satisfaction and organizational citizenship behavior (OCB): Does team commitment make a difference in self-directed teams? *Management Decision, 46(6),* 933–947. https://doi.org/10.1108/00251740810882680

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18(1),* 39–50. https://doi.org/10.2307/3151312

Fujishiro, K. (2005). *Fairness at work: its impacts on employee well-being.* (Electronic Thesis or Dissertation). Retrieved from https://etd.ohiolink.edu

Gallagher, M. W., Lopez, S. J., & Preacher, K. J. (2009). The hierarchical structure of well-being. *Journal of personality, 77*(4), 1025–1050. https://doi.org/10.1111/j.1467-6494.2009.00573.x

Galovan, A. M., Fackrell, T., Buswell, L., Jones, B. L., Hill, E. J., & Carroll, S. J. (2010). The work–family interface in the United States and Singapore: Conflict across cultures. *Journal of Family Psychology, 24(5),* 646–656. doi:10.1037/a0020832

Ganster, D. C., & Schaubroeck, J. (1991). Work Stress and Employee Health. *Journal of Management, 17(2),* 235–271. https://doi:10.1177/014920639101700202

Ganster, D. C., Rosen, C. C., & Fisher, G. G. (2016). *Long Working Hours and Well-being: What We Know, What We Do Not Know, and What We Need to Know. Journal of Business and Psychology, 33*(1), 25–39. https://doi.org/10.1007/s10869-016-9478-1

Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences, 102,* 74–78. https://doi.org/10.1016/j.paid.2016.06.069

Gilboa, S., Shirom, A., Fried, Y. and Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: examining main and moderating effects. *Personnel Psychology, 61*, 227–71. https://doi.org/10.1111/j.1744-6570.2008.00113.x

Gloria, C. T., & Steinhardt, M. A. (2016). Relationships Among Positive Emotions, Coping, Resilience and Mental Health. *Stress and health: Journal of the International Society for the Investigation of Stress, 32*(2), 145–156. https://doi.org/10.1002/smi.2589

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective, *Journal of Management Information Systems 18(1),* 185–214. https://doi.org/10.1080/07421222.2001.11045669

Goleman, D. (2006). *Social Intelligence: The New Science of Social Relationships*. New York, Bantam Books.

Gopalkrishnan N. (2018). Cultural Diversity and Mental Health: Considerations for Policy and Practice. *Frontiers in public health*, *6,* 179. https://doi.org/10.3389/fpubh.2018.00179

Gopalkrishnan, N., & Babacan, H. (2015). Cultural diversity and mental health. *Australasian Psychiatry*, *23*(6_suppl), 6–8. https://doi.org/10.1177/1039856215609769

Gough, B., & Madill, A. (2012). Subjectivity in psychological science: from problem to prospect. *Psychological Methods*, 17, 374–384. https://doi:10.1037/a0029313

Grant, A. M., Christianson, M. K., & Price, R. H. (2007). Happiness, health, or relationships? Managerial practices and employee well-being tradeoffs. *The Academy of Management Perspectives, 21*(3), 51–63. https://doi.org/10.5465/amp.2007.26421238

Grawitch, M. J., Gottschalk, M., & Munz, D. C. (2006). The path to a healthy workplace: A critical review linking healthy workplace practices, employee well-being, and organizational improvements. Consulting Psychology Journal: *Practice and Research, 58(3)*, 129–147. https://doi.org/10.1037/1065-9293.58.3.129

Greenhalgh, T. (2002). Integrating qualitative research into evidence based practice. *Endocrinology and Metabolism Clinics of North America, 31(3)*, 583-601. https://doi: 10.1016/s0889-8529(02)00009-9

Greguras, G. J., & Diefendorff, J. M. (2009). Different fits satisfy different needs: Linking person-environment fit to employee commitment and performance using self-determination theory. *Journal of Applied Psychology, 94(2),* 465–477. https://doi:10.1037/a0014068

Grieve, R., & Mahar, D. (2013). Can social intelligence be measured? Psychometric properties of the Tromsø Social Intelligence Scale—English Version. The Irish Journal of Psychology, *34*(1), 1–12. https://doi.org/10.1080/03033910.2012.737758

Guan, X., & Frenkel, S. (2020). Organizational support and employee thriving at work: exploring the underlying mechanisms, *Personnel Review, 50(3),* 935-953. https://doi.org/10.1108/PR-10-2019-0569

Guest, D. E. (2013). Employee engagement: Fashionable fad or long-term fixture. In C. Truss, K. Alfes, R. Delbridge, A. Shantz, & E. Soane (Eds.), *Employee Engagement in Theory and Practice.* Routledge: London, UK.

Guest, D. E. (2017). Human resource management and employee well-being: towards a new analytic framework. *Human Resource Management Journal, 27*(1), 22–38. https://doi.org/10.1111/1748-8583.12139

Gudykunst, W. B. (1998). *Bridging differences: Effective intergroup communication* (3rd ed.). Sage Publications, Inc.

Haddon, J. (2018). The impact of employees' well-being on performance in the workplace. *Strategic HR Review*, *17*(2), 72–75. https://doi.org/10.1108/shr-01-2018-0009

Hair, J. F. Jr., Black, W. C., Babin, B. J., & Andersen, R. E. (2014). *Multivariate data analysis* 8th ed.). Cengage Learning: UK.

Halbesleben, J. (2010). A meta-analysis of work engagement: relationships with burnout, demands, resources and consequences. In Bakker, A.B. and Leiter, M.P. (eds), *Work Engagement: A Handbook of Essential Theory and Research.* New York: Psychology Press.

Haque, M. S. (2004). The Myths of Economic Growth (GNP): Implications for Human Development. In G. Mudacumura & M. S. Haque (Eds.), *Handbook of Development Policy Studies* (pp. 89–110). New York: Marcel Dekker.

Hart, P. M., & Cooper, C. L. (2001). Occupational stress: Toward a more integrated framework. In N. Anderson, D.S. Ones, H.K. Sinangil & C. Viswesvaran (Eds.), *Handbook of industrial, work and organisational psychology* (Vol 2., pp. 93–114). Sage: London.

Harvey, S. B., Modini, M., Joyce, S., Milligan-Saville, J. S., Tan, L., Mykletun, A., Bryant, R. A., Christensen, H., & Mitchell, P. B. (2017). Can work make you mentally ill? A systematic meta-review of work-related risk factors for common mental health problems. *Occupational and environmental medicine, 74*(4), 301–310. https://doi.org/10.1136/oemed-2016-104015

Haslett, B. B, & Leidel, K. (2015). Work values in a changing global environment: comparing Chinese and U.S. students. *Intercultural Communication Studies, 24(2),* 11–34.

Hassan, S. (2013). The Importance of Role Clarification in Workgroups: Effects on Perceived Role Clarity, Work Satisfaction, and Turnover Rates. *Public Administration Review, 73(5),* 716–725. https://doi.org/10.1111/puar.12100

Hatch, S. L., Harvey, S. B., & Maughan, B. (2010). A developmental-contextual approach to understanding mental health and well-being in early adulthood. *Social science & medicine (1982), 70(2),* 261–268. https://doi.org/10.1016/j.socscimed.2009.10.005

Hayes, M. (2010). *Why professional development matters*. Learning Forward. Retrieved

    from: https://learningforward.org/wp-content/uploads/2017/08/professional-

    development-matters.pdf

Hayton, J. C., Allen, D. G., & Scarpello, V. (2004). Factor Retention Decisions in

    Exploratory Factor Analysis: a Tutorial on Parallel Analysis. *Organizational*

    Research Methods, 7(2), 191–205. https://doi.org/10.1177/1094428104263675

Health Promotion Board. (2012). *Mental Wellbeing of Working Singaporeans*. Retrieved

    from https://www.hpb.gov.sg/article/health-promotion-board-launches-integrated-

    workplace-mental-health-solution-and-centre-of-excellence-for-healthy-mind-to-

    improve-mental-well-being-of-working-singaporeans

Heckman, J. J., Stixrud, J., & Urzua, S. (2006). *The effects of cognitive and noncognitive*

    abilities on labor market outcomes and social behavior (No. w12006). National

    Bureau of Economic Research. Retrieved from

    http://jenni.uchicago.edu/papers/Heckman-Stixrud-Urzua_JOLE_v24n3_2006.pdf

Hein, C. (2005). *Reconciling work and family responsibilities: Practical ideas from global*

    experience. Geneva, Switzerland: International Labor Organization.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant

    validity in variance-based structural equation modeling. *Journal of the Academy of*

    Marketing Science, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hermida, R. (2015). The problem of allowing correlated errors in structural equation

    modeling: concerns and considerations. *Computational Methods in Social Sciences,*

    3(1), 5-17.

Hill, E. J. (2007). *Singapore national study of work-life harmony: Final report.* Provo, UT:

    Brigham Young University.

Hill, E. J., Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week:

    The positive influence of perceived job flexibility on work and family life balance.

Family Relations: *An Interdisciplinary Journal of Applied Family Studies, 50(1),* 49–58. https://doi.org/10.1111/j.1741-3729.2001.00049.x

Hill, E. J., Yang, C., Hawkins, A. J., & Ferris, M. (2004). A cross-cultural test of the work-family interface in 48 countries. *Journal of Marriage and Family, 66*(5), 1300–1316. https://doi.org/10.1111/j.0022-2445.2004.00094.x

Hill, M., & Lian, K. F. (1995). *The politics of nation building and citizenship in Singapore.* London: Routledge.

Ho, H., & Chan, Y. C. (2022). Flourishing in the Workplace: A One-Year Prospective Study on the Effects of Perceived Organizational Support and Psychological Capital. *International journal of environmental research and public health, 19(2),* 922. https://doi.org/10.3390/ijerph19020922

Ho, J. T. S. (1997). Corporate wellness programmes in Singapore: Effect on stress, satisfaction and absenteeism. *Journal of Managerial Psychology, 12*(3), 177–189. https://doi.org/10.1108/02683949710174801

Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person–organization fit and behavioral outcomes. *Journal of Vocational Behavior, 68(3),* 389–399. https://doi:10.1016/j.jvb.2005.08.003

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage.

Holman, D., & Wall, T. (2002). Work characteristics, learning-related outcomes, and strain: A test of competing direct effects, mediated, and moderated models. *Journal of Occupational Health Psychology, 7(4),* 283–301. https://doi:10.1037/1076-8998.7.4.283

Hone, L. C., Jarden, A., Duncan, S., & Schofield, G. M. (2015). Flourishing in New Zealand Workers: Associations With Lifestyle Behaviors, Physical Health, Psychosocial, and

Work-Related Indicators. *Journal of occupational and environmental medicine, 57(9),* 973–983. https://doi.org/10.1097/JOM.0000000000000508

Hooper, D., Couglan, J., & Mullen, M. R. (2008). Structural equation model: Guidelines for determining model fit. *Electronic Journal of Business Research Methods, 6*, 53-60

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika, 30(2),* 179–185. https://doi.org/10.1007/BF02289447

Hsu, Y.-Y., Bai, C.-H., Yang, C.-M., Huang, Y.-C., Lin, T.-T., & Lin, C.-H. (2019). Long Hours' Effects on Work-Life Balance and Satisfaction. *BioMed research international*, *2019*, *5046934*. https://doi.org/10.1155/2019/5046934

Hu, J., Jiang, K., Mo, S., Chen, H., & Shi, J. (2016). The motivational antecedents and performance consequences of corporate volunteering: When do employees volunteer and when does volunteering help versus harm work performance? *Organizational Behavior and Human Decision Processes, 137,* 99–111. https://doi:10.1016/j.obhdp.2016.08.005

Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to unparameterized model misspecification. *Psychological Methods, 3,* 424–453. http://dx.doi.org/10.1037/1082-989X.3.4.424

Hughes, E. L., & Parkes, K. R. (2007). Work hours and well-being: The roles of work-time control and work–family interference. *Work & Stress, 21*(3), 264–278. https://doi.org/10.1080/02678370701667242

Hunt, E., & Madhyastha, T. M. (2012). Cognitive demands of the workplace. *Journal of Neuroscience, Psychology, and Economics, 5*(1), 18–37. https://doi.org/10.1037/a0026177

Hunter, J. E. (1986). Cognitive ability, cognitive aptitude, job knowledge, and job performance. *Journal of Vocational Behavior, 29*(3), 340–362. https://doi.org/10.1016/0001-8791(86)90013-8

Huo, M., & Boxall, P. (2020). Do workers respond differently to learning from supervisors and colleagues? A study of job resources, learning sources and employee wellbeing in China. *International Journal of Human Resource Management*, 1-21. https://doi.org/10.1080/09585192.2020.1744029

Huppert, F. A., & So, T. T. C. (2013). Flourishing Across Europe: Application of a New Conceptual Framework for Defining Well-Being. *Social Indicators Research, 110*(3), 837–861. https://doi.org/10.1007/s11205-011-9966-7

Hurley, A. E., Scandura, T. A., Schriesheim, C. A., Brannick, M. T., Seers, A., Vandenberg, R. J., & Williams, L. J. (1997). Exploratory and confirmatory factor analysis: Guidelines, issues, and alternatives. *Journal of Organizational Behavior, 18(6),* 667-683. https://doi.org/10.1002/(SICI)1099-1379(199711)18:6<667::AID-JOB874>3.0.CO;2-T

Hutson A. D. (2019). A robust Pearson correlation test for a general point null using a surrogate bootstrap distribution. *PloS one, 14(5),* e0216287. https://doi.org/10.1371/journal.pone.0216287

Idaszak, J. R., & Drasgow, F. (1987). A revision of the Job Diagnostic Survey: Elimination of a measurement artifact. *Journal of Applied Psychology, 72(1),* 69–74. https://doi.org/10.1037/0021-9010.72.1.69

Ilies, R., Schwind, K. M., & Heller, D. (2007). Employee well-being: A multilevel model linking work and nonwork domains. *European Journal of Work and Organizational Psychology, 16*(3), 326–341. https://doi.org/10.1080/13594320701363712

Imran, M. Y., Elahi, N. S., Abid, G., Ashfaq, F., & Ilyas, S. (2020). Impact of Perceived Organizational Support on Work Engagement: Mediating Mechanism of Thriving and Flourishing. *Journal of Open Innovation: Technology, Market, and Complexity, 6*(3), 82. https://doi:10.3390/joitmc6030082

International Labor Organization (1986). Psychosocial factors at work: Recognition and

    control. Report of the Joint International Labour Office and World Health

    Organization on Occupational Health, Ninth Session, Geneva, 18–24 September

    1984. *Occupational Safety and Health Series No. 56*. Geneva: ILO.

Iqbal, Q., & Ahmad, N. H. (2020). Workplace spirituality and nepotism-favouritism in

    selected ASEAN countries: the role of gender as moderator. *Journal of Asia Business*

    Studies, 14(1), 31-49. https://doi.org/10.1108/JABS-01-2018-0019

Jaccard, J., & Wan, C. K. (1996). *LISREL approaches to interaction effects in multiple*

    regression. Sage Publications, Inc.

Jackson, D. L., Gillaspy, J. A., & Purc-Stephenson, R. (2009). Reporting practices in

    confirmatory factor analysis: an overview and some recommendations. *Psychological*

    methods, 14(1), 6–23. https://doi.org/10.1037/a0014694

Jackson, S. E., Brett, J. F., Sessa, V. I., Cooper, D. M., Julin, J. A., & Peyronnin, K. (1991).

    Some differences make a difference: Individual dissimilarity and group heterogeneity

    as correlates of recruitment, promotions, and turnover. *Journal of Applied*

    Psychology, 76(5), 675–689. https://doi.org/10.1037/0021-9010.76.5.675

Jiang, H., & Luo, Y. (2018). Crafting employee trust: From authenticity, transparency to

    engagement. *Journal of Communication Management, 22(2),* 138–160.

    https://doi.org/10.1108/JCOM-07-2016-0055

Joffe, H. (2012). Thematic analysis, in D. Harper and A.R. Thompson (eds) *Qualitative*

    *Research Methods in Mental Health and Psychotherap*y. Chichester: John Wiley.

Johnson, J. V., & Lipscomb, J. (2006). Long working hours, occupational health and the

    changing nature of work organization. *American journal of industrial*

    medicine, *49*(11), 921–929. https://doi.org/10.1002/ajim.20383

Jones, B. L., Scoville, D. P., Hill, E. J., Childs, G., Leishman, J. M., & Nally, K. S. (2008). Perceived versus used workplace flexibility in Singapore: Predicting work-family fit. *Journal of Family Psychology, 22*(5), 774–783. https://doi.org/10.1037/a0013181

Jöreskog, K. G. (1993). Testing structural equation models. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 294-316). Newbury Park, CA: Sage.

Jöreskog, K. G., & Sörbom, D. (1993). LISREL 8: *Structural equation modeling with the SIMPLIS command language.* Scientific Software International; Lawrence Erlbaum Associates, Inc. *Journal of Service Industry Management, 17* (5), 444 – 473. https://doi:10.1108/09564230610689777

Joshanloo, M., Van de Vliert, E., & Jose, P. E. (2021). Four Fundamental Distinctions in Conceptions of Wellbeing Across Cultures. In: Kern, M. L., Wehmeyer, M. L. (eds) *The Palgrave Handbook of Positive Education*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-64537-3_26

Judge, T. A., & Kammeyer-Mueller, J. D. (2011). General and specific measures in organizational behavior research: Considerations, examples, and recommendations for researchers. *Journal of Organizational Behavior, 33*(2), 161–174. https://doi.org/10.1002/job.764

Judge, T. A., Bono, J. E., & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology, 85(2),* 237–249. https://doi.org/10.1037/0021-9010.85.2.237

Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The Core Self-Evaluations Scale: Development of a measure. *Personnel Psychology, 56(2),* 303–331. https://doi.org/10.1111/j.1744-6570.2003.tb00152.x

Juniper, B. (2010). *Evaluation of a novel approach to measuring well-being in the workplace* (PhD thesis). Cranfield Health, Cranfield University.

Juniper, B., Bellamy, P., & White, N. (2011). Testing the performance of a new approach to measuring employee well-being. *Leadership & Organization Development Journal, 32*(4), 344–357. https://doi.org/10.1108/01437731111134634

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33(4),* 692–724. https://doi.org/10.2307/256287

Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement, 20*, 141–151. https://doi:10.1177/001316446002000116

Kalliath, T., & Brough, P. (2008). Work-life balance: A review of the meaning of the balance construct. *Journal of Management & Organization, 14(3),* 323–327. https://doi.org/10.5172/jmo.837.14.3.323

Kamdron, T. (2005). Work motivation and job satisfaction of Estonian higher officials. *International Journal of Public Administration, 28*, 1211–1240. https://doi.org/10.1080/01900690500241085

Kashdan, T. B., Biswas-Diener, R., & King, L. A. (2008). Reconsidering happiness: the costs of distinguishing between hedonics and eudaimonia. *The Journal of Positive Psychology, 3*(4), *219–233*. https://doi.org/10.1080/17439760802303044

Keeman, A., Näswall, K., Malinen, S., & Kuntz, J. (2017). Employee Wellbeing: Evaluating a Wellbeing Intervention in Two Settings. *Frontiers in psychology*, *8*. https://doi.org/10.3389/fpsyg.2017.00505

Kenny, D. A., & McCoach, D. B. (2003). Effect of the number of variables on measures of fit in structural equation modeling. *Structural Equation Modeling, 10(3),* 333–351. https://doi.org/10.1207/S15328007SEM1003_1

Keyes, C. L. M. (1998). Social well-being. *Social Psychology Quarterly, 61*(2), 121–140. https://doi.org/10.2307/2787065

Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in

life. *Journal of Health and Social Behavior, 43*(2), 207–222.

https://doi:10.2307/3090197

Keyes, C. L. M. (2005). Mental Illness and/or Mental Health? Investigating Axioms of the

Complete State Model of Health. *Journal of Consulting and Clinical Psychology,

73*(3), 539–548. https://doi.org/10.1037/0022-006X.73.3.539

Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A

complementary strategy for improving national mental health. *American Psychologist*,

62(2), 95–108. https://doi.org/10.1037/0003-066x.62.2.95

King, L. A., Hicks, J. A., Krull, J. L., & Del Gaiso, A. K. (2006). Positive affect and the

experience of meaning in life. *Journal of Personality and Social Psychology*, *90*(1),

179–196. https://doi.org/10.1037/0022-3514.90.1.179

Klimchak, M., Ward Bartlett, A. K. and MacKenzie, W. (2020). Building trust and

commitment through transparency and HR competence: A signaling perspective.

Personnel Review, 49 (9), 1897-1917. https://doi.org/10.1108/PR-03-2019-0096

Kline, P. (1999). *The handbook of psychological testing* (2nd ed.) London: Routledge.

Kline, R. B. (2016). Principles and practice of structural equation modeling (4th ed.). New

York: Guilford Press.

Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-

esteem: A meta-analysis. *Psychological Bulletin, 125*(4), 470–500.

https://doi.org/10.1037/0033-2909.125.4.470

Knight, C., Patterson, M., & Dawson, J.F. (2017). Building work engagement: A systematic

review and meta-analysis investigating the effectiveness of work engagement

interventions. *Journal of Organizational Behavior, 38*, 792 - 812.

https://doi.org/10.1002/job.2167

Kollock, P., & Smith, M. (1996) Managing the virtual commons: cooperation and conflict in computer communities, in S. Herring (ed.). *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives.* Amsterdam: John Benjamins.

Kooij, D., de Lange, A., Jansen, P., & Dikkers, J. (2008). Older workers' motivation to continue to work: Five meanings of age: A conceptual review. *Journal of Managerial Psychology, 23(4),* 364–394. https://doi.org/10.1108/02683940810869015

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., de Vet, H. C. W., & van der Beek, A. J. (2014). Construct validity of the Individual Work Performance Questionnaire. *Journal of Occupational and Environmental Medicine, 56(3),* 331–337. https://doi.org/10.1097/JOM.0000000000000113

Koopmans, L., Coffeng, J. K., Bernaards, C. M., Boot, C. R., Hildebrandt, V. H., de Vet, H. C., & van der Beek, A. J. (2014). Responsiveness of the individual work performance questionnaire. *BMC public health, 14*, 513. https://doi.org/10.1186/1471-2458-14-513

Kopp, M. S., Stauder, A., Purebl, G., Janszky, I., & Skrabski, A. (2008). Work stress and mental health in a changing society. *European journal of public health, 18(3),* 238–244. https://doi.org/10.1093/eurpub/ckm077

Kossek, E. E., Valcour, M., & Lirio, P. (2014). *The sustainable workforce: Organizational strategies for promoting work-life balance and wellbeing*. In P. Y. Chen & C. L. Cooper (eds.), *Wellbeing: A complete reference guide. Work and wellbeing*. Wiley Blackwell. https://doi.org/10.1002/9781118539415.wbwell030

Kossek, E.E., Lautsch, B.A., & Eaton, S.C. (2005). Telecommuting, Control, and Boundary Management: Correlates of Policy Use and Practice, Job Control, and Work-Family Effectiveness. *Journal of Vocational Behavior, 68*, 347-367. https://doi:10.1016/J.JVB.2005.07.002

Kowalski, T. H. P., & Loretto, W. (2017). Well-being and HRM in the changing workplace. *The International Journal of Human Resource Management, 28*(16), 2229–2255. https://doi.org/10.1080/09585192.2017.1345205

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress, 19(3),* 192–207. https://doi.org/10.1080/02678370500297720

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individual's fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology, 58(2),* 281–342. https://doi.org/10.1111/j.1744-6570.2005.00672.x

Krueger, R. A., & Casey, M. A. (2015). *Focus Groups: A Practical Guide for Applied Research* (5th ed.). Thousand Oaks, CA: Sage.

Kuah, K. E. (1990) Confucian ideology and social engineering in Singapore. *Journal of Contemporary Asia, 20*(3), 371–383. https://doi.org/10.1080/00472339080000381

Kun, Á., Balogh, P., & Krasz, K. G. (2017). Development of the work-related well-being questionnaire based on seligman's PERMA model. Periodica Polytechnica. *Social and Management Sciences, 25(1),* 56-63. https://doi: 10.13140/RG.2.1.4492.0567

Kuntz, J. R. C., Näswall, K., & Malinen, S. (2016). Resilient employees in resilient organizations: Flourishing beyond adversity. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 9*(2), 456–462. https://doi.org/10.1017/iop.2016.39

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management, 43(6),* 1854–1884. https://doi.org/10.1177/0149206315575554

Kuster, F., Orth, U., & Meier, L. L. (2013). High self-esteem prospectively predicts better work conditions and outcomes. *Social Psychological and Personality Science, 4*(6), 668–675. https://doi.org/10.1177/1948550613479806

Kuster, F., Orth, U., & Meier, L. L. (2013). High self-esteem prospectively predicts better work conditions and outcomes. *Social Psychological and Personality Science, 4*(6), 668–675. https://doi.org/10.1177/1948550613479806

Kyriazos, T. A. (2018). Applied Psychometrics: Sample Size and Sample Power Considerations in Factor Analysis (EFA, CFA) and SEM in General. *Psychology, 9,* 2207-2230. https://doi.org/10.4236/psych.2018.98126

Kyriazos, T. and Stalikas, A. (2018) Applied Psychometrics: The Steps of Scale Development and Standardization Process. *Psychology, 9, 2531-2560*. https://doi: 10.4236/psych.2018.911145

Lahtinen E., Lehtinen, V., & Ahonen, J. (Eds). (1999). *Framework for promoting mental health in Europe. Hamina, (STAKES) National Research and Development Centre for Welfare and Health, Ministry of Social Affairs and Health, Finland*. Retrieved from https://ec.europa.eu/health/ph_projects/1996/promotion/fp_promotion_1996_frep_15_en.pdf

LaMontagne, A. D., Keegel, T., & Vallance, D. (2007). Protecting and promoting mental health in the workplace: developing a systems approach to job stress. *Health promotion journal of Australia: official journal of Australian Association of Health Promotion Professionals, 18*(3), 221–228. https://doi.org/10.1071/he07221

LaMontagne, A. D., Keegel, T., Louie, A. M., & Ostry, A. (2010). Job stress as a preventable upstream determinant of common mental disorders: A review for practitioners and policy-makers. *Advances in Mental Health, 9(1),* 17–35. https://doi.org/10.5172/jamh.9.1.17

LaMontagne, A. D., Keegel, T., Louie, A. M., Ostry, A., & Landsbergis, P. A. (2007). A systematic review of the job-stress intervention evaluation literature, 1990-2005. *International journal of occupational and environmental health, 13(3),* 268–280. https://doi.org/10.1179/oeh.2007.13.3.268

LaMontagne, A. D., Martin, A., Page, K. M., Reavley, N. J., Noblet, A. J., Milner, A. J., Keegel, T., Smith, P. M. (2014). Workplace mental health: developing an integrated intervention approach. *BMC Psychiatry, 14(1),* 131. https://doi:10.1186/1471-244X-14-131

Landis, R., Edwards, B. D., & Cortina, J. (2009). Correlated residuals among items in the estimation of measurement models". In C. E. Lance & R. J. Vandenberg (Eds.). *Statistical and methodological myths and urban legends: Doctrine, verity, and fable in the organizational and social sciences.* New York: Routledge.

Lathesh, K. R., & Vidya, D. A. (2018). A Study on Social Intelligence and its Impact on Employee Performance of Insurance Sectors in Mysuru City. *International Journal of Mechanical Engineering and Technology, 9*(1), 530–537.

Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person–job and person–organization fit. *Journal of Vocational Behavior, 59(3),* 454–470. https://doi.org/10.1006/jvbe.2001.1807

Le, H., Newman, A., Menzies, J., Zheng, C., & Fermelis, J. (2020). Work–life balance in Asia: A systematic review. *Human Resource Management Review*, 100766. https://doi:10.1016/j.hrmr.2020.100766

Lee, S., McCann, D., & Messenger, J. (2007). *Working Around the World: Trends in Working Hours, Laws and Policies in a Global Comparative Perspective.* London: Routledge.

Leong, F. T. L., Huang, J. L., & Mak, S. (2014). Protestant work ethic, Confucian values, and work-related attitudes in Singapore. *Journal of Career Assessment, 22*(2), 304–316. https://doi.org/10.1177/1069072713493985

Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among American youth*. Thousand Oaks, CA: Sage.

Leung, A., & Chaturvedi, S. (2011). Linking the fits, fitting the links: Connecting different types of PO fit to attitudinal outcomes. *Journal of Vocational Behavior, 79*, 391-402.

Lewis, S., Gambles, R., & Rapoport, R. (2007). The constraints of a 'work-life balance' approach: An international perspective. *The International Journal of Human Resource Management, 18*(3), 360–373. https://doi.org/10.1080/09585190601165577

Li, J., Yang, Z., Loerbroks, A., & Angerer, P. (2014). Compensation for disease-caused sudden death at work in China 2006–2012. *Occupational and Environmental Medicine, 71(9),* 661. DOI: 10.1136/oemed-2014-102233

Lim, J. (2017). Sustainable Health Care Financing: The Singapore Experience. *Global Policy, 8,* 103–109.

Lim, S., & Jahng, S. (2019). Determining the number of factors using parallel analysis and its recent variants. *Psychological Methods, 24(4),* 452–467. https://doi.org/10.1037/met0000230

Lim, W. (2010). A Culture of Work-Life 'Imbalance' in Singapore. *New Zealand Journal of Asian Studies, 12*(2), 22–37.

Lincoln, Y., & Guba, E. G. (1985*). Naturalistic inquiry*. Newbury Park, CA: Sage

Ling, S. C., Norslah, M., & Mohammed, A. (2013). Organizational practices and employee engagement: a case of Malaysia electronics manufacturing firms. *Business Strategy Series, 14 (1),* 3-10. https://doi.org/10.1108/17515631311295659

Litchfield, P., Cooper, C., Hancock, C., & Watt, P. (2016). Work and Wellbeing in the 21st Century. *International Journal of Environmental Research and Public Health, 13*(11), 1065. https://doi.org/10.3390/ijerph13111065

Liu, C., Spector, P. E., & Shi, L. (2007). Cross-National Job Stress: A Quantitative and

    Qualitative Study. *Journal of Organizational Behavior, 28(2),* 209–239.

    https://doi.org/10.1002/job.435

Lott, Y. (2015). Working-time flexibility and autonomy: A European perspective on time

    adequacy. European Journal of Industrial Relations, 21(3), 259-274.

    https://doi.org/10.1177/0959680114543604

Lovett, N., & Lovett, T. (2016). Wellbeing in Education: Staff Matter. *International Journal*

    of Social Science and Humanity, 6(2), 107-112.

    https://doi:10.7763/IJSSH.2016.V6.628

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states:

    comparison of the Depression Anxiety Stress Scales (DASS) with the Beck

    Depression and Anxiety Inventories. *Behaviour research and therapy, 33(3),* 335–

    343. https://doi.org/10.1016/0005-7967(94)00075-u

Low, K.C.P. (2011). Types of Singapore Corporate Culture. *Business Journal for*

Lu, L., Gilmour, R., Kao, S., & Huang, M.-T. (2006). A cross-cultural study of work/family

    demands, work/family conflict and wellbeing: The Taiwanese vs British. *The Career*

    Development International, 11(1), 9–27. https://doi.org/10.1108/13620430610642354

Lubbadeh, T. (2020). Job Burnout: A General Literature Review. *International Review of*

    Management and Marketing, 10, 7-15. https://doi:10.32479/irmm.9398

Lune, H., & Berg, B. L. (2017). *Qualitative research methods for the social sciences* (9th

    ed.). Essex, England: Pearson.

Lynch, M. F., Jr., Plant, R. W., & Ryan, R. M. (2005). Psychological Needs and Threat to

    Safety: Implications for Staff and Patients in a Psychiatric Hospital for Youth.

    Professional Psychology: *Research and Practice, 36(4),* 415–425.

    https://doi.org/10.1037/0735-7028.36.4.415

Macaskill, A. (2012). A feasibility study of psychological strengths and well-being assessment in individuals living with recurrent depression. *The Journal of Positive Psychology, 7*(5), 372–386. https://doi.org/10.1080/17439760.2012.702783

MacCallum, R. C., Roznowski, M., & Necowitz, L. B. (1992). Model modifications in covariance structure analysis: the problem of capitalization on chance. *Psychological bulletin, 111(3),* 490–504. https://doi.org/10.1037/0033-2909.111.3.490

Macey, W., & Schneider, B. (2008). The Meaning of Employee Engagement. *Industrial and Organizational Psychology, 1(1),* 3-30. https://doi:10.1111/j.1754-9434.2007.0002.x

Maharaj, S., Lees, T., & Lal, S. (2019). Negative mental states and their association to the cognitive function of nurses. *Journal of Psychophysiology, 33*(3), 207–218. https://doi.org/10.1027/0269-8803/a000223

Malhotra, N. K., & Dash, S. (2011). *Marketing research an applied orientation*. London: Pearson Publishing:

Manpower Research and Statistics Department, Ministry of Manpower. (2019). *Labour Market Report*. Retrieved from https://stats.mom.gov.sg/Pages/Labour-Market-Report-4Q-2019.aspx

Marazziti, D., Consoli, G., Picchetti, M., Carlini, M., & Faravelli, L. (2010). Cognitive impairment in major depression. *European journal of pharmacology, 626*(1), 83–86. https://doi.org/10.1016/j.ejphar.2009.08.046

Marchand, A., Durand, P., Haines, V., & Harvey, S. (2014). The multilevel determinants of workers' mental health: results from the SALVEO study. *Social Psychiatry and Psychiatric Epidemiology, 50*(3), 445–459. https://doi.org/10.1007/s00127-014-0932-y

Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher order factor models and their invariance across

groups. *Psychological Bulletin, 97(3),* 562–582. https://doi.org/10.1037/0033-2909.97.3.562

Marsh, H. W., Hau, K. T., Balla, J. R., & Grayson, D. (1998). Is More Ever Too Much? The Number of Indicators per Factor in Confirmatory Factor Analysis. *Multivariate behavioral research, 33(2),* 181–220. https://doi.org/10.1207/s15327906mbr3302_1

Marsh, H. W., Hau, K.-T., & Wen, Z. (2004). In Search of Golden Rules: Comment on Hypothesis-Testing Approaches to Setting Cutoff Values for Fit Indexes and Dangers in Overgeneralizing Hu and Bentler's (1999) Findings. *Structural Equation Modeling, 11(3),* 320–341. https://doi.org/10.1207/s15328007sem1103_2

Marsick, V., & Watkins, K. (1990). *Informal and incidental learning in the workplace*. London: Routledge.

Martela, F., & Riekki, T. J. J. (2018). Autonomy, Competence, Relatedness, and Beneficence: A Multicultural Comparison of the Four Pathways to Meaningful Work. *Frontiers in Psychology, 9*. https://doi:10.3389/fpsyg.2018.01157

Martela, F., Ryan, R. M., & Steger, M. F. (2017). Meaningfulness as Satisfaction of Autonomy, Competence, Relatedness, and Beneficence: Comparing the Four Satisfactions and Positive Affect as Predictors of Meaning in Life. *Journal of Happiness Studies, 19(5),* 1261–1282. https://doi:10.1007/s10902-017-9869-7

Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. The *Journal of applied psychology, 93(3),* 498–512. https://doi.org/10.1037/0021-9010.93.3.498

Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development, 85*(1), 6–20. https://doi.org/10.1111/cdev.12205

Maxwell, G., Rankine, L., Bell, S., & MacVicar, A. (2007). The incidence and impact of flexible working arrangements in smaller businesses. *Employee Relations, 29(2),* 138-161. http://dx.doi.org/10.1108/01425450710719987

Mayrhofer, R., & Hutmacher, F. (2020). The Principle of Inversion: Why the Quantitative-Empirical Paradigm Cannot Serve as a Unifying Basis for Psychology as an Academic Discipline. *Frontiers in psychology, 11,* 596425. https://doi.org/10.3389/fpsyg.2020.596425

McNall, L. A., Masuda, A. D., & Nicklin, J. M. (2010). Flexible work arrangements, job satisfaction, and turnover intentions: the mediating role of work-to-family enrichment. *The Journal of psychology, 144(1),* 61–81. https://doi.org/10.1080/00223980903356073

Meshvara D. (2002). Mental health and mental health care in Asia. *World psychiatry : official journal of the World Psychiatric Association (WPA), 1(2)*, 118–120.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*, 61–89. https://doi.org/10.1016/1053-4822(91)90011-Z

Meyers, L. S., Gamst, G. C., & Guarino, A. J. (2017). Applied Multivariate Research: Design and Interpretation (3rd eds). Sage Publications, Thousand Oaks.

Michalos, A. C. (2008). Education, happiness and wellbeing. *Social Indicators Research, 87(3)*, 347–366. https://doi.org/10.1007/s11205-007-9144-0

Mikucka, M., & Sarracino, F. (2014). "Making economic growth and well-being compatible: the role of trust and income inequality," MPRA Paper 59695, University Library of Munich, Germany

Miller, E. (1978a). Measuring the quality of work life in General Motors. Interview with Howard C. Carlson. *Personnel, 55*, 21–26.

Mills, M. J., Fleck, C. R., & Kozikowski, A. (2013). Positive Psychology at Work: A Conceptual Review, State-of-Practice Assessment, and a Look Ahead. *The Journal of Positive Psychology, 8,* 153-164. http://dx.doi.org/10.1080/17439760.2013.776622

Morgan, D. L., Fellows, C., & Guevara, H. (2008). Emergent approaches to focus group research. In S. N. Hess-Biber & P. Leavy (eds.), *Handbook of Emergent Methods*. New York: The Guilford Press.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology, 91(6),* 1321–1339. https://doi.org/10.1037/0021-9010.91.6.1321

Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin, 105(3),* 430–445. https://doi.org/10.1037/0033-2909.105.3.430

Mundfrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum Sample Size Recommendations for Conducting Factor Analyses. *International Journal of Testing, 5(2),* 159–168. https://doi.org/10.1207/s15327574ijt0502_4

Mykletun, A., & Harvey, S. B. (2012). Prevention of mental disorders: a new era for workplace mental health. *Occupational and environmental medicine, 69*(12), 868–869. https://doi.org/10.1136/oemed-2012-100846

Nansubuga, F., & Munene, J. C. (2013). Reflecting on competences to increase role clarity

Narayan, P., & Narashiman (2014). Emotional Intelligence and Work Performance: A Conceptual Study.

Nassar-McMillan, S. C., & Borders, L. D. (2002). Use of Focus Groups in Survey Item Development. The Qualitative Report, 7(1), 1-12. https://doi.org/10.46743/2160-3715/2002.1987

Nassar-McMillan, S. C., Wyer, M., Oliver-Hoyo, M., & Ryder-Burge, A. (2010). Using Focus Groups in Preliminary Instrument Development: Expected and Unexpected Lessons Learned. *The Qualitative Report, 15(6),* 1629-1642. https://doi.org/10.46743/2160-3715/2010.1368

National Mental Health Blueprint. Retrieved March 03, 2020 from

    https://www.imh.com.sg/uploadedFiles/Publications/IMH%20National%20Mental%2

    0Health%20Blueprint.pdf

Ngui, E. M., Khasakhala, L., Ndetei, D., & Roberts, L. W. (2010). Mental disorders, health

    inequalities and ethics: A global perspective. *International review of psychiatry*

    (Abingdon, England), 22(3), 235–244. https://doi.org/10.3109/09540261.2010.485273

Niehaus, D. J., Oosthuizen, P., Lochner, C., Emsley, R. A., Jordaan, E., Mbanga, N. I.,

    Keyter, N., Laurent, C., Deleuze, J.-F., & Stein, D. J. (2004). A culture-bound

    syndrome 'amafufunyana' and a culture-specific event 'ukuthwasa': differentiated by a

    family history of schizophrenia and other psychiatric

    disorders. *Psychopathology*, *37*(2), 59–63. https://doi.org/10.1159/000077579

Nielsen, I. K., Jex, S. M., & Adams, G. A. (2000). Development and validation of scores on a

    two-dimensional Workplace Friendship Scale. *Educational and Psychological*

    Measurement, 60(4), 628–643. https://doi.org/10.1177/00131640021970655

Nielsen, K., & Miraglia, M. (2017). What works for whom in which circumstances? On the

    need to move beyond the 'what works?' question in organizational intervention

    research. *Human Relations, 70*(1), 40–62. https://doi.org/10.1177/0018726716670226

Nikoloski, Z., & Ajwad, M. I. (2014). Cognitive and non-cognitive skills affect employment

    outcomes: evidence from Central Asia. World Bank, Washington, USA. (In Press)

Njoroge, C.N., & Yazdanifard, R. (2014). The Impact of Social and Emotional Intelligence

    on Employee Motivation in a Multigenerational Workplace. *Global Journal of*

    Management and Business Research, 14(3)*,* 31-36.

Noblet, A., & LaMontagne, A. D. (2006). The role of workplace health promotion in

    addressing job stress. *Health Promotion International, 21(4),* 346–353.

    https://doi:10.1093/heapro/dal029

Noftle, E. E., & Robins, R. W. (2007). Personality predictors of academic outcomes: big five correlates of GPA and SAT scores. *Journal of personality and social psychology, 93(1),* 116–130. https://doi.org/10.1037/0022-3514.93.1.116

Nolan, S. (2012). A look at current trends and data. *Strategic HR Review, 11 (3),* 32-54. https://doi.org/10.1108/shr.2012.37211caa.012

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis. *International Journal of Qualitative Methods, 16,* 1– 13. https://doi:10.1177/1609406917733847

O'Leary, V. E., & Ickovics, J. R. (1995). Resilience and thriving in response to challenge: an opportunity for a paradigm shift in women's health. *Women's health (Hillsdale, N.J.), 1(2)*, 121–142.

O'connor, B.P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instruments, & Computers 32*, 396–402. https://doi.org/10.3758/BF03200807

OECD (2015), *Fit Mind, Fit Job: From Evidence to Practice in Mental Health and Work, Mental Health and Work*. Paris: OECD Publishing, Retrieved https://doi.org/10.1787/9789264228283-en.

Oei, T. P., Sawang, S., Goh, Y. W., & Mukhtar, F. (2013). Using the Depression Anxiety Stress Scale 21 (DASS-21) across cultures. *International journal of psychology: Journal international de psychologie, 48(6),* 1018–1029. https://doi.org/10.1080/00207594.2012.755535

Oishi, S., Diener, E. F., Lucas, R. E., & Suh, E. M. (1999). Cross-cultural variations in predictors of life satisfaction: *Perspectives from needs and values. Personality and Social Psychology Bulletin, 25(8),* 980–990. https://doi.org/10.1177/01461672992511006

Ozer, D. J., & Benet-Martínez, V. (2006). Personality and the prediction of consequential outcomes. *Annual review of psychology, 57,* 401–421. https://doi.org/10.1146/annurev.psych.57.102904.190127

Page K.M., Vella-Brodrick, D. A. (2012). From Nonmalfeasance to Beneficence: Key Criteria, Approaches, and Ethical Issues Relating to Positive Employee Health and Well-Being. In Reilly N., Sirgy M., Gorman C. (Eds). *Work and Quality of Life. International Handbooks of Quality-of-Life*. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-4059-4_25

Page, K. M., & Vella-Brodrick, D. A. (2009). The 'what', 'why' and 'how' of employee well-being: A new model. *Social Indicators Research, 90(3),* 441–458. https://doi.org/10.1007/s11205-008-9270-3

Pahlevan Sharif, S., Mostafz, I., & Guptan, V. (2018). A systematic review of structural equation modelling in nursing research. *Nurse Researcher, 26(2),* 28–31. https://doi.org/10.7748/nr.2018.

Pahlevansharif, S. and Naghavi, N. (2020). Family financial socialization, financial information seeking behavior and financial literacy among youth. *Asia-Pacific Journal of Business Administration, 12(2),* 163-181. https://doi.org/10.1108/APJBA-09-2019-0196

Pahlevansharif, S., She, L., Yeoh, K. K., & Naghavi, N. (2021). Heavy social networking and online compulsive buying: the mediating role of financial social comparison and materialism, *Journal of Marketing Theory and Practice*, https://doi:10.1080/10696679.2021.1909425

Pan, J., Ip, E. H., & Dubé, L. (2017). An alternative to post hoc model modification in confirmatory factor analysis: The Bayesian lasso. *Psychological methods, 22(4),* 687–704. https://doi.org/10.1037/met0000112

Pang, S., Liu, J., Mahesh, M., Chua, B. Y., Shahwan, S., Lee, S. P., Vaingankar, J. A., Abdin, E., Fung, D., Chong, S. A., & Subramaniam, M. (2017). Stigma among Singaporean youth: a cross-sectional study on adolescent attitudes towards serious mental illness and social tolerance in a multiethnic population. *BMJ open, 7(10),* e016432. https://doi.org/10.1136/bmjopen-2017-016432

Park, J., Kim, Y., Cheng, Y., & Horie, S. (2012). A comparison of the recognition of overwork-related cardiovascular disease in Japan, Korea, and Taiwan. *Industrial Health, 50 (1),* 17–23. DOI: 10.2486/indhealth.MS1317

Parker, G. B., & Hyett, M. P. (2011). Measurement of Well-Being in the Workplace. *The Journal of Nervous and Mental Disease, 199(6),* 394–397. https://doi:10.1097/nmd.0b013e31821cd3b9

Pastorino. E. E., & Doyle-Portillo, S. M. (2019). What is Psychology? Foundations, Applications, and Integration (4th Ed). USA: Cengage Learning.

Paterson, T. A., Luthans, F., & Jeung, W. (2014). Thriving at work: Impact of psychological capital and supervisor support. *Journal of Organizational Behavior, 35(3),* 434–446. https://doi.org/10.1002/job.1907

Pathan, A. S. K. (2018) Technological advancements and innovations are often detrimental for concerned technology companies, *International Journal of Computers and Applications, 40(4)*, 189-191. https://doi.org/10.1080/1206212X.2018.1515412

Patton, M. Q. (2015). *Qualitative evaluation and research methods* (4th ed.). Thousand Oaks, CA: Sage.

Pavlish, C., & Hunt, R. (2012). An Exploratory Study About Meaningful Work in Acute Care Nursing. *Nursing Forum, 47(2), 113–122*. https://doi:10.1111/j.1744-6198.2012.00261.x

Pavot, W., & Diener, E. (2008). The Satisfaction With Life Scale and the emerging construct

    of life satisfaction. *The Journal of Positive Psychology*, *3*(2), 137–152.

    https://doi.org/10.1080/17439760701756946

Peeters, M. C. W., & van Emmerik, H. (2008). An introduction to the work and well-being of

    older workers: From managing threats to creating opportunities. *Journal of*

    Managerial Psychology, 23(4), 353–363.

    https://doi.org/10.1108/02683940810869006

Peña-Suárez, E., Muñiz, J., Campillo-Álvarez, Á., Fonseca-Pedrero, E., & García-Cueto, E.

    (2013). Assessing organizational climate: Psychometric properties of the CLIOR

    Scale. *Psicothema, 25(1),* 137–144. https://doi:10.7334/psicothema2012.260

Pescud, M., Teal, R., Shilton, T., Slevin, T., Ledger, M., Waterworth, P., & Rosenberg, M.

    (2015). Employers' views on the promotion of workplace health and wellbeing: a

    qualitative study. *BMC public health*, *15*, 642. https://doi.org/10.1186/s12889-015-

    2029-2

Pfeffer, J. (2010). Building Sustainable Organizations: The Human Factor. *Academy of*

    Management Perspectives, 24(1), 34–45. https://doi:10.5465/amp.24.1.34

Plichta, S. B., & Kelvin, E. A. (2013). Munro's Statistical Methods for Health Care Research

    (6th eds.). Philadelphia, PA: Lippincott Williams & Wilkins.

Porath, C., Spreitzer, G., Gibson, C., & Garnett, F. G. (2012). Thriving at work: Toward its

    measurement, construct validation, and theoretical refinement. *Journal of*

    Organizational Behavior, 33(2), 250–275. https://doi.org/10.1002/job.756

Pradhan, R. K., & Hati, L. (2019). The Measurement of Employee Well-being: Development

    and Validation of a Scale. *Global Business Review*.

    https://doi.org/10.1177/0972150919859101

Prilleltensky, I. (2011). Wellness as Fairness. *American Journal of Community Psychology,*

    49(1-2), 1–21. https://doi:10.1007/s10464-011-9448-8

Psychometrika, 30(2), 179–185. https://doi:10.1007/bf02289447

Rajgopal, T. (2010). Mental well-being at the workplace. Indian Journal of Occupational and Environmental Medicine, 14(3), 63–65. https://doi: 10.4103/0019-5278.75691

Rao, S., & Ramesh, N. (2015). Depression, anxiety and stress levels in industrial workers: A pilot study in Bangalore, India. *Industrial psychiatry journal, 24*(1), 23–28. https://doi.org/10.4103/0972-6748.160927

Rawlins, B. (2008). Measuring the relationship between organizational transparency and trust. *Public Relations Journal, 2(2),* 425–439.

Raya, R. P., & Panneerselvam, S. (2013). The healthy organization construct: A review and research agenda. *Indian journal of occupational and environmental medicine, 17(3),* 89–93. https://doi.org/10.4103/0019-5278.130835

Restubog, S. L. D., Ocampo, A. C. G., & Wang, L. (2020). Taking control amidst the chaos: Emotion regulation during the COVID-19 pandemic. *Journal of Vocational Behavior, 119,* Article 103440. https://doi.org/10.1016/j.jvb.2020.103440

Riglin, L., Thapar, A., Shelton, K. H., Langley, K., Frederickson, N., & Rice, F. (2015). Profiling depression in childhood and adolescence: the role of conduct problems. *Journal of child psychology and psychiatry, and allied disciplines, 57*(4), 481–490. https://doi.org/10.1111/jcpp.12465

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15(2),* 150–163. https://doi.org/10.2307/2391486

Robinson, M. A. (2017). Using multi-item psychometric scales for research and practice in human resource management. *Human Resource Management, 57(3),* 739–750. https://doi:10.1002/hrm.21852

Rojas, M., & García Vega, J. J. (2017). Well-being in Latin America. In R. Estes & J. Sirgy (Eds.), *The pursuit of human well-being* (pp. 217–255). Cham, Switzerland: Springer International Publishing.

Rosa, H. (2003). Social Acceleration: Ethical and Political Consequences of a Desynchronized High-Speed Society. *Constellations, 10(1),* 3–33. https://doi:10.1111/1467-8675.00309

Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review, 60*(1), 141–156. https://doi.org/10.2307/2096350

Rosso, B. D., Dekas, K. H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior, 30*, 91–127. https://doi:10.1016/j.riob.2010.09.001

Ruiz-Quintanilla, S., & Blancero, D. (1996). Open door policies: Measuring impact using attitude surveys. *Human Resource Management, 35*, 269-291. https://doi.org/10.1002/(SICI)1099-050X(199623)35:3<269::AID-HRM1>3.0.CO;2-V

Russell, J. E. A. (2008). Promoting Subjective Well-Being at Work. *Journal of Career Assessment, 16(1),* 117–131. https://doi:10.1177/1069072707308142

Ryan, R. M., & Deci, E. L. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology, 52*(1), 141–166. https://doi.org/10.1146/annurev.psych.52.1.141

Ryan, R. M., & Deci, E. L. (2017). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development and Wellness*. New York: The Guilford Press.

Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being, 9*(1), 139–170. https://doi.org/10.1007/s10902-006-9023-4

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719–727. https://doi.org/10.1037/0022-3514.69.4.719

Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry, 9(1)*, 1–28. https://doi.org/10.1207/s15327965pli0901_1

Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being, 9*(1), 13–39. https://doi.org/10.1007/s10902-006-9019-0

Saks, A. M., Uggerslev, K. L., & Fassina, N. E. (2007). Socialization tactics and newcomer adjustment: A meta-analytic review and test of a model. *Journal of Vocational Behavior, 70,* 413–446. https://doi.org/10.1016/j.jvb.2006.12.004

Salanova, M., Schaufeli, W. B., Xanthopoulou, D., & Bakker, A. B. (2010). *The gain spiral of resources and work engagement: Sustaining a positive worklife*. In A. B. Bakker (eds.) & M. P. Leiter, *Work engagement: A handbook of essential theory and research*. UK: Psychology Press.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*(3), *185–211.* https://doi.org/10.2190/dugg-p24e-52wk-6cdg

Sandberg, J. G., Yorgason, J. B., Miller, R. B., & Hill, E. J. (2012). Family-to-Work Spillover in Singapore: Marital Distress, Physical and Mental Health, and Work Satisfaction. *Family Relations, 61*(1), 1–15. https://doi.org/10.1111/j.1741-3729.2011.00682.x

Sandelowski, M. (2004). Using qualitative research. *Qualitative Health Research, 14*, 1366–1386. https://doi:10.1177/1049732304269672

Saunderson, R. (2004). Survey Findings of the Effectiveness of Employee Recognition in the Public Sector. *Public Personnel Management, 33(3),* 255–275. https://doi.org/10.1177/009102600403300302

Savelsbergh, C., Gevers, J. M. P., van der Heijden, B. I. J. M., & Poell, R. F. (2012). Team Role Stress. *Group & Organization Management, 37(1),* 67–100. https://doi:10.1177/1059601111431977

Saville, P., & MacIver, R. (2017). A Very Good Question? In B. Cripps (Ed.), Psychometric Testing: Critical Perspectives (pp. 29-42). West Sussex, UK: John Wiley & Sons, Ltd.

Schaubroeck, J., Ganster, D. C., Sime, W. E., & Ditman, D. (2006). A Field Experiment Testing Supervisory Role Clarification, *Personnel Psychology, 46(1),* 1–25. https://doi:10.1111/j.1744-570.1993.tb00865.xg

Schmeichel, B. J., & Tang, D. (2015). Individual differences in executive functioning and their relationship to emotional processes and responses. *Current Directions in Psychological Science, 24*(2), 93–98. https://doi.org/10.1177/0963721414555178

Schnackenberg, A. K., & Tomlinson, E. C. (2016). Organizational transparency: A new perspective on managing trust in organization-stakeholder relationships. *Journal of Management, 42(7)*, 1784-1810. https://doi:10.1177/0149206314525202

Schotanus-Dijkstra, M., Ten Klooster, P. M., Drossaert, C. H., Pieterse, M. E., Bolier, L., Walburg, J. A., & Bohlmeijer, E. T. (2016). Validation of the Flourishing Scale in a sample of people with suboptimal levels of mental well-being. *BMC psychology, 4,* 12. https://doi.org/10.1186/s40359-016-0116-5

Schulte, P., & Vainio, H. (2010). Well-being at work--overview and perspective. *Scandinavian journal of work, environment & health, 36(5),* 422–429. https://doi.org/10.5271/sjweh.3076

Schumacker, R. E., & Lomax, R. G. (2016). *A beginner's guide to Structural Equation Modeling* (4th ed.). New York: Routledge.

Seeman T. E. (2000). Health promoting effects of friends and family on health outcomes in older adults. *American journal of health promotion: AJHP, 14*(6), 362–370. https://doi.org/10.4278/0890-1171-14.6.362

Seligman, M. (2011). *Flourishing*. New York: Free Press

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). *Positive psychology: An introduction. American Psychologist, 55*(1), 5–14. https://doi.org/10.1037/0003-066X.55.1.5

Selwyn, J., & Wood, M. (2015). *Measuring Well-Being: A Literature Review*. University of Bristol.

http://www.coramvoice.org.uk/sites/default/files/Measuring%20Wellbeing%20FINAL.pdf

Seow, L., Vaingankar, J. A., Abdin, E., Sambasivam, R., Jeyagurunathan, A., Pang, S., Chong, S. A., & Subramaniam, M. (2016). Positive mental health in outpatients with affective disorders: Associations with life satisfaction and general functioning. *Journal of affective disorders, 190,* 499–507. https://doi.org/10.1016/j.jad.2015.10.021

Shagvaliyeva, S, & Yazdanifard, R. (2014). Impact of Flexible Working Hours on Work-Life Balance. American Journal of Industrial and Business Management, 4(1), 20-23. https://doi: 10.4236/ajibm.2014.41004.

Shahruddin S., & Daud N. (2018). Employee Engagement Determinants and Employee Retention: A Study Among Generation Y Employees in Malaysia. In: F. Noordin, A. Othman, E. Kassim (Eds). Proceedings of the 2nd Advances in Business Research International Conference. Springer, Singapore. https://doi.org/10.1007/978-981-10-6053-3_30

Sharif Nia, H., Pahlevan Sharif, S., Boyle, C., Yaghoobzadeh, A., Tahmasbi, B., Rassool, G. H., Taebei, M., & Soleimani, M. A. (2018). The Factor Structure of the Spiritual Well-Being Scale in Veterans Experienced Chemical Weapon Exposure. *Journal of religion and health, 57(2),* 596–608. https://doi.org/10.1007/s10943-017-0458-1

Sharif, S. P., Mostafiz, I., & Guptan, V. (2019). A systematic review of structural equation modelling in nursing research. *Nurse Researcher, 26(2),* 28–31. https://doi.org/10.7748/nr.2018.e1577

Shatté, A., Perlman, A., Smith, B., & Lynch, W. D. (2017). The positive effect of resilience on stress and business outcomes in difficult work environments. *Journal of Occupational and Environmental Medicine, 59(2),* 135–140. https://doi.org/10.1097/JOM.0000000000000914

Shin, J., Taylor, M. S., & Seo, M.-G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal, 55*(3), 727–748. https://doi.org/10.5465/amj.2010.0325

Shockley, K. M., & Allen, T. D. (2007). When flexibility helps: Another look at the availability of flexible work arrangements and work-family conflict. *Journal of Vocational Behavior, 71(3),* 479–493. https://doi.org/10.1016/j.jvb.2007.08.006

Sijtsma, K., & van der Ark, L.A. (2017). A tutorial on how to do a Mokken scale analysis on your test and questionnaire data. *The British journal of mathematical and statistical psychology, 70 (1),* 137-158. https://doi.org/10.1111/bmsp.12078

Silvera, D. H., Martinussen, M., & Dahl, T. I. (2001). The Tromsø Social Intelligence Scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychology, 42*(4), 313–319. https://doi.org/10.1111/1467-9450.00242

Simone, S.D. (2014). Conceptualizing Wellbeing in the Workplace. *International Journal of Business and Social Science, 5*(12), 118–122.

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive

symptoms with positive psychology interventions: a practice-friendly meta-

analysis. *Journal of clinical psychology, 65*(5), 467–487.

https://doi.org/10.1002/jclp.20593

Sirgy, M. J. (2012). *The psychology of quality of life: Hedonic well-being, life satisfaction,

and eudaimonia* (2nd ed.). Springer Science + Business Media.

Sironi, E. (2019). Job satisfaction as a determinant of employees' optimal well-being in an

instrumental variable approach. *Quality & Quantity, 53*, 1721–1742.

https://doi.org/10.1007/s11135-019-00835-3

Sivanathan, N., Arnold, K. A., Turner, N., & Barling, J. (2004). *Leading Well:*

Transformational Leadership and Well-Being. In P. A. Linley & S. Joseph (eds.),

Positive psychology in practice. John Wiley & Sons, Inc..

Skinner, N., Elton, J., Auer, J., & Pocock, B. (2014). Understanding and managing work–life

interaction across the life course: A qualitative study. *Asia Pacific Journal of Human*

Resources, 52(1), 93–109. https://doi.org/10.1111/1744-7941.12013

Slade M. (2010). Mental illness and well-being: the central importance of positive

psychology and recovery approaches. *BMC health services research, 10*, 26.

https://doi.org/10.1186/1472-6963-10-26

Smith, B. D. (2005). Job retention in child welfare: Effects of perceived organizational

support, supervisor support, and intrinsic job value. *Children and Youth Services*

Review, 27(2), 153–169. https://doi:10.1016/j.childyouth.2004.08.

Soh, J. (2012). JobsCentral Survey: More than 60% of Singapore workers complain of heavy

workload and work stress. Retrieved March 22, 2018, from

http://community.jobscentral.com.sg/node/2180

Sonnentag, S., Kuttler, I., & Fritz, C. (2010). Job stressors, emotional exhaustion, and need

for recovery: A multi-source study on the benefits of psychological detachment.

Journal of Vocational Behavior, 76(3), 355-365.

https://doi.org/10.1016/j.jvb.2009.06.005

Sparks, J. R., & Schenk, J. A. (2001). Explaining the effects of transformational leadership: An investigation of the effects of higher-order motives in multilevel marketing organizations. *Journal of Organizational Behavior, 22*, 849–869. https://doi:10.1002/job.116

Spector, P.E. (2022). *Job Satisfaction: From Assessment to Intervention* (1st ed.). Routledge. https://doi.org/10.4324/9781003250616

Spreitzer, G., & Porath, C. (2012). Creating sustainable performance. *Harvard business review, 90(1-2),* 92–152.

Spreitzer, G., Porath, C. L., & Gibson, C. B. (2012). Toward human sustainability: How to enable more thriving at work. *Organizational Dynamics, 41(2),* 155–162. https://doi.org/10.1016/j.orgdyn.2012.01.009

Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A Socially Embedded Model of Thriving at Work. *Organization Science, 16*(5), 537–549. http://doi:10.1287/orsc.1050.0153

Srivastava, M. (2011). Anxiety, Stress and Satisfaction among Professionals in Manufacturing and Service Organizations. Vision: *The Journal of Business Perspective, 15(3)*, 219–229. https://doi:10.1177/097226291101500302

Steel, Z., Marnane, C., Iranpour, C., Chey, T., Jackson, J., Patel, V., & Silove, D. (2014). The global prevalence of common mental disorders: A systematic review and meta-analysis 1980-2013. *International journal of epidemiology. 43*(2): 476–493. https://doi.org/10.1093/ije/dyu038

Steger, M. F., & Dik, B. J. (2009). If One is Looking for Meaning in Life, Does it Help to Find Meaning in Work? *Applied Psychology: Health and Well-Being, 1*(3), 303–320. https://doi.org/10.1111/j.1758-0854.2009.01018.x

Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The Work and Meaning Inventory (WAMI). *Journal of Career Assessment, 20(3),* 322–337. https://doi.org/10.1177/1069072711436160

Steger, M. F., Kashdan, T. B., & Oishi, S. (2008). Being good by doing good: Daily eudaimonic activity and well-being. *Journal of Research in Personality, 42*(1), 22–42. https://doi.org/10.1016/j.jrp.2007.03.004

Straughan, P. T., & Tadai, M. E. (2016). Addressing the implementation gap: An integrated approach to identifying barriers and facilitators to flexi work arrangements in Singapore. *Asia Pacific Journal of Human Resources*, 1-20. https://doi.org/10.1111/1744-7941.12126

Subramaniam, M., Abdin, E., Vaingankar, J. A., Shafie, S., Chua, H. C., Tan, W. M., Tan, K. B., Verma, S., Heng, D., & Chong, S. A. (2019). Tracking the mental health of a nation: Prevalence and correlates of mental disorders in the second Singapore mental health study. *Epidemiology and Psychiatric Sciences, 29*, E29. https://doi.org/10.1017/S2045796019000179

Subudhi, C. (2015). Culture and mental Illness. In A. Francis, P. Rosa, L. Sankaran, S. Rajeev (Eds.) *Social Work Practice in mental health: A cross-cultural perspective*. New Delhi: Allied Publishers Pvt. Ltd.

Suh, E., Diener, E., Oishi, S., & Triandis, H. C. (1998). *The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. Journal of Personality and Social Psychology, 74*(2), 482–493. https://doi.org/10.1037/0022-3514.74.2.482

Sullivan, C., & Lewis, S. (2001). Home-based telework, gender, and the synchronization of work and family: Perspectives of teleworkers and their co-residents. *Gender, Work and Organization, 8(2),* 123–145. https://doi.org/10.1111/1468-0432.00125

Sverko, B., Vizek-Vidovic, V. (1995). Studies of the meaning ofwork: Approaches, models, and some ofthe findings. In D. E. Super & B. Sˇverko (eds.), *Life roles, values, and careers.* San Francisco, CA: Jossey-Bass.

Swamy, D. R., Nanjundeswaraswamy, T. S., & Rashmi, S. (2015). Quality of work life: Scale development and validation. *International Journal of Caring Sciences, 8(2),* 281-300.

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Boston, LA: Pearson Education

Tambyah, S.K., & Tan, S. J. (2013). *Happiness and wellbeing: The Singapore experience*. United Kingdom: Routledge.

Tan, P. L. (2021). Stress, Fatigue, and Sexual Spontaneity Among Married Couples in a High-Stress Society: Evidence from Sex Diary Data from Singapore. *Archives of sexual behavior, 50(6),* 2579–2588. https://doi.org/10.1007/s10508-020-01848-y

Tan, W., & Chong, E. (2003). Power distance in Singapore construction organizations: implications for project managers. *International Journal of Project Management, 21(7),* 529–536. https://doi:10.1016/s0263-7863(02)00062-5

Taris, T.W., & Schaufeli, W.B. (2015). Individual well-being and performance at work: A conceptual and theoretical overview. In M. V. Veldhoven & R. Peccei (Eds.), *Well-being and Performance at Work* (pp. 15–34). New York: Psychology Press.

Tay, L., & Diener, E. (2011). Needs and subjective well-being around the world. *Journal of Personality & Social Psychology, 101(2),* 354–365. https://doi:10.1037/a0023779

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes, 5,* Article 63. https://doi.org/10.1186/1477-7525-5-63

Teo, T. S. H., Srivastava, S. C., & Jiang, L., 2008. Trust and electronic government success: An empirical study. *Journal of Information Management Systems 25(3),* 99–132. https://doi.org/10.2753/MIS0742-1222250303

Tessema, M., Ready, K., & Embaye, A. (2013). The Effects of Employee Recognition, Pay and Benefits on Job Satisfaction: Cross Country Evidence. *Journal of Business and Economics, 4 (1),* 1-13.

Thomas, S., Jenkins, R., Burch, T., Nasir, C. L., Fisher, B., Giotaki, G., Gnani, S., Hertel, L., Marks, M., Mathers, N., Millington-Sanders, C., Morris, D., Ruprah-Shah, B., Stange, K., Thomas, P., White, R., & Wright, F. (2016). Promoting Mental Health and Preventing Mental Illness in General Practice. *London journal of primary care*, *8*(1), 3–9. https://doi.org/10.1080/17571472.2015.1135659

Todorovic, J., Terzic-Supic, Z., Divjak, J., Stamenkovic, Z., Mandic-Rajcevic, S., Kocic, S., Ukropina, S., Markovic, R., Radulovic, O., Arnaut, A., Piperac, P., Mirkovic, M., & Nesic, D. (2021). Validation of the Study Burnout Inventory and the Copenhagen Burnout Inventory for the use among medical students. *International journal of occupational medicine and environmental health, 34(6),* 737–745. https://doi.org/10.13075/ijomeh.1896.01726

Tonsing, K. N. (2017). A review of mental health literacy in Singapore. *Social Work in Health Care, 57(1)*, 27–47. https://doi: 10.1080/00981389.2017.1383335.

Tov, W., & Au, E. W. M. (2013). Comparing well-being across nations: Conceptual and empirical issues. In I. Boniwell, S. David, & A. Conley (Eds.), *Oxford handbook of happiness* (pp. 448–464). Oxford, UK: Oxford University Press.

Tov, W., & Chan, D. (2012). "The Importance of Employee Well-being." *Business Times*, September 25, p. 14.

Tov, W., & Diener, E. (2009). The well-being of nations: Linking together trust, cooperation, and democracy. In E. Diener (Ed.), *Social indicators research series: Vol. 37. The*

science of well-being: The collected works of Ed Diener (p. 155–173). Springer

Science + Business Media. https://doi.org/10.1007/978-90-481-2350-6_7

Tsutsumi, A. (2019). Preventing overwork‐related deaths and disorders—needs of

continuous and multi‐faceted efforts. *Journal of Occupational Health, 61*, 265-266.

doi:10.1002/1348-9585.12062

Tugade, M. M., & Fredrickson, B. L. (2004). Resilient Individuals Use Positive Emotions to

Bounce Back From Negative Emotional Experiences. *Journal of Personality and*

Social Psychology, 86(2), 320–333. https://doi.org/10.1037/0022-3514.86.2.320

Turner, N. E. (1998). The Effect of Common Variance and Structure Pattern on Random Data

Eigenvalues: Implications for the Accuracy of Parallel Analysis. *Educational and*

Psychological Measurement, 58(4), 541–568.

https://doi.org/10.1177/0013164498058004001

Turok, I., & McGranahan, G. (2013). Urbanization and economic growth: the arguments and

evidence for Africa and Asia. *Environment and Urbanization, 25(2),* 465–482.

https://doi:10.1177/0956247813490908

Vaingankar, J. A., Subramaniam, M., Chong, S. A., Abdin, E., Orlando Edelen, M., Picco, L.,

Lim, Y. W., Phua, M. Y., Chua, B. Y., Tee, J. Y., & Sherbourne, C. (2011). The

positive mental health instrument: development and validation of a culturally relevant

scale in a multi-ethnic Asian population. *Health and quality of life outcomes, 9*, 92.

https://doi.org/10.1186/1477-7525-9-92

VanderWeele, T. J. (2017). On the promotion of human flourishing. *Proceedings of the*

National Academy of Sciences, 114(31), *8148–*

8156. https://doi.org/10.1073/pnas.1702996114

Viswanath, B., & Chaturvedi, S. K. (2012). Cultural aspects of major mental disorders: a

critical review from an Indian perspective. *Indian journal of psychological*

medicine, *34*(4), 306–312. https://doi.org/10.4103/0253-7176.108193

Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective. *Applied psychology = Psychologie appliquee, 70*(1), 16–59. https://doi.org/10.1111/apps.12290

Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology, 63*(3), 193–210. https://doi.org/10.1111/j.2044-8325.1990.tb00521.x

Warr, P. (1994). A conceptual framework for the study of work and mental health. *Work & Stress, 8*(2), 84–97. https://doi.org/10.1080/02678379408259982

Warr, P. (1999). Well-being and the workplace. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (p. 392–412). New York: Russell Sage Foundation.

Warr, P. (2007). *Work, happiness, and unhappiness*. London: Lawrence Erlbaum Associates Publishers.

Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology, 64*(4), 678–691. https://doi.org/10.1037/0022-3514.64.4.678

Waterman, A. S. (2008). Reconsidering happiness: a eudaimonist's perspective. *The Journal of Positive Psychology, 3*(4), 234–252. https://doi.org/10.1080/17439760802303002

Watkins, M. W. (2018). Exploratory Factor Analysis: A Guide to Best Practice. *Journal of Black Psychology, 44(3)*, 219–246. https://doi.org/10.1177/0095798418771807

Watson, D. (1988). Intraindividual and interindividual analyses of positive and negative affect: Their relation to health complaints, perceived stress, and daily activities. *Journal of Personality and Social Psychology, 54*(6), 1020–1030. https://doi.org/10.1037/0022-3514.54.6.1020

Watson, D., Tregaskis, O., Gedikli, C., Vaughn, O., & Semkina, A. (2018). Well-being through learning: a systematic review of learning interventions in the workplace and

their impact on well-being. *European Journal of Work and Organizational Psychology, 27(2),* 247–268. https://doi:10.1080/1359432x.2018.1435529

Weinstein, N., Ryan, R. M., and Deci, E. L. (2012). Motivation, meaning, and wellness: a self-determination perspective on the creation and internalization of personal meanings and life goals. In P. T. P. Wong, *The Human Quest for Meaning: Theories, Research, and Applications* (2nd ed.). New York, NY: Routledge.

Wessels, C., Schippers, M. C., Stegmann, S., Bakker, A. B., van Baalen, P. J., & Proper, K. I. (2019). Fostering flexibility in the new world of work: A model of time-spatial job crafting. *Frontiers in Psychology, 10*, Article 505. https://doi.org/10.3389/fpsyg.2019.00505

Weziak-Bialowolska, D., Bialowolski, P., Sacco, P. L., VanderWeele, T. J., & McNeely, E. (2020). Well-Being in Life and Well-Being at Work: Which Comes First? Evidence From a Longitudinal Study. *Frontiers in public health, 8,* 103. https://doi.org/10.3389/fpubh.2020.00103

Wheat, K., Brohan, E., & Thornicroft, G. (2010). Mental illness and the workplace: conceal or reveal? Journal of the Royal Society of Medicine, 103(3), 83-86. https://doi: 10.1258/jrsm.2009.090317

WHO. (2004). *Promoting mental health: concepts, emerging evidence, practice (Summary Report), Geneva*. Retrieved from https://www.who.int/mental_health/evidence/en/promoting_mhh.pdf

WHO. (2010). *Mental health and well-being at the workplace - protection and inclusion in challenging times. Copenhagen*. Retrieved from https://www.euro.who.int/__data/assets/pdf_file/0018/124047/e94345.pdf

Wierzbicka, A. (2004). "Happiness" in cross-linguistic & cross-cultural perspective. *Daedalus, 133*(2), 34–43. https://doi.org/10.1162/001152604323049370

Willig, C. (2013). *Introducing Qualitative Research in Psychology* (3rd ed.). UK: Open

    University Press.

Wilson, M. G., Dejoy, D. M., Vandenberg, R. J., Richardson, H. A., & McGrath, A. L.

    (2004). Work characteristics and employee health and well-being: Test of a model of

    healthy work organization. *Journal of Occupational and Organizational Psychology,*

    77(4), 565–588. https://doi.org/10.1348/0963179042596522

Winwood, P. C., Colon, R., & McEwen, K. (2013). A practical measure of workplace

    resilience: developing the resilience at work scale. *Journal of occupational and*

    environmental medicine, 55(10), 1205–1212.

    https://doi.org/10.1097/JOM.0b013e3182a2a60a

Wipfli, H., Zacharias, K.D., Hundal, N., Shigematsu, L.M., Bahl, D., Arora, M., Bassi, S., &

    Kumar, S. (2018). Workplace wellness programming in low-and middle-income

    countries: a qualitative study of corporate key informants in Mexico and India.

    Globalization and Health, 14, 46. https://doi.org/10.1186/s12992-018-0362-9

Wolf, S. (1997). Happiness and Meaning: Two Aspects of the Good Life. *Social Philosophy*

    and Policy, 14(01), 207. https://doi:10.1017/s0265052500001734

Wong, K., Chan, A., & Ngan, S. C. (2019). The Effect of Long Working Hours and Overtime

    on Occupational Health: A Meta-Analysis of Evidence from 1998 to

    2018. *International journal of environmental research and public health*, *16*(12),

    2102. https://doi.org/10.3390/ijerph16122102

Wong, S. W., & Yuen, M. (2012). Work Values of University Students in Chinese Mainland,

    Taiwan, and Hong Kong. *International Journal for the Advancement of Counselling,*

    34(4), 269–285. https://doi:10.1007/s10447-012-9155-7

Wood, N. D., Akloubou Gnonhosou, D. C., & Bowling, J. W. (2015). Combining parallel and

    exploratory factor analysis in identifying relationship scales in secondary data.

Marriage & Family Review, 51(5), 385–395.

https://doi.org/10.1080/01494929.2015.1059785

World Health Organization. (2019). *Burn-Out an "Occupational Phenomenon":
International Classification of Diseases.* Retrieved from

https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-
international-classification-ofdiseases

Wright, T. A. (2014). Putting Your Best "Face" Forward: The Role of Emotion-Based Well-
Being in Organizational Research. *Journal of Organizational Behavior, 35,* 1153-
1168. http://dx.doi.org/10.1002/job.1967

Wright, T. A., & Bonnet, D. G. (2007). Job Satisfaction and Psychological Well-Being as
Nonadditive Predictors of Workplace Turnover. *Journal of Management, 33,* 141-160.
http://dx.doi.org/10.1177/0149206306297582

Wu, L., Rusyidi, B., Claiborne, N., & McCarthy, M. L. (2013). Relationships between work–
life balance and job-related factors among child welfare workers. *Children and Youth
Services Review, 35(9),* 1447–1454. https://doi:10.1016/j.childyouth.2013.05.017

Wyatt, T. A. & Wah, C. Y. (2001). Perceptions of QWL: A study of Singaporean Employees
Development. *Research and Practice in Human Resource Management, 9*(2), 59–76.

Wynne, B., & Stringer, D. (1997). *A Competency Based Approach to Training and
Development.* Pitman Publishing, London.

Yang, C. (2013). Does Ethical Leadership Lead to Happy Workers? A Study on the Impact of
Ethical Leadership, Subjective Well-Being, and Life Happiness in the Chinese
Culture. *Journal of Business Ethics, 123(3),* 513–525. https://doi:10.1007/s10551-
013-1852-6

Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology & Health, 15*, 215-
228.

Yardley, L. (2008). Demonstrating validity in qualitative psychology. In J. A. Smith (eds.), *Qualitative Psychology: A practical guide to research methods* (2nd ed.). London: Sage.

Yau, Y. H., Potenza, M. N., & White, M. A. (2013). Problematic Internet Use, Mental Health and Impulse Control in an Online Survey of Adults. *Journal of behavioral addictions, 2*(2), 72. https://doi.org/10.1556/jba.1.2012.015

Yearbook of Statistics Singapore, (2017). *Department of Statistics, Ministry of Trade and Industry, Republic of Singapore*. Retrieved from https://www.singstat.gov.sg/-/media/files/publications/reference/yearbook_2017/yos2017.pdf

Yeo, S. L., & Pang, A. (2017). Asian multiculturalism in communication: Impact of culture in the practice of public relations in Singapore. *Public Relations Review. 43, (1),* 112-122.

Yeung, Y. (2011). Rethinking Asian cities and urbanization: four transformations in four decades, *Asian Geographer, 28*(1), 65–83. https://doi.org/10.1080/10225706.2011.577975

Zechmeister, I., Kilian, R., & McDaid, D. (2008). Is it worth investing in mental health promotion and prevention of mental illness? A systematic review of the evidence from economic evaluations. *BMC public health*, *8*(1), 20. https://doi.org/10.1186/1471-2458-8-20

Zhang, L. (2005). Prediction of Chinese life satisfaction: Contribution of collective self-esteem. *International Journal of Psychology, 40*(3), 189–200. https://doi.org/10.1080/00207590444000285

Zheng, C., Molineux, J., Mirshekary, S., & Scarparo, S. (2015). Developing individual and organisational work-life balance strategies to improve employee health and wellbeing. *Employee Relations, 37(3),* 354–379. https://doi:10.1108/er-10-2013-0142

Zheng, X., Zhu, W., Zhao, H., & Zhang, C. (2015). Employee well-being in organizations: Theoretical model, scale development, and cross-cultural validation. *Journal of Organizational Behavior, 36*(5), 621–644. https://doi.org/10.1002/job.1990

Zitzmann, S., & Loreth, L. (2021). Regarding an "Almost Anything Goes" Attitude Toward Methods in Psychology. *Frontiers in psychology, 12,* 612570. https://doi.org/10.3389/fpsyg.2021.612570

APPENDIX A

Study 1 Focus Group Participant Information and Consent Form

University of Southern Queensland

Participant Information for USQ Research Project Focus Group

Project Details

Title of Project: Identifying factors that influence mental wellbeing at the Singapore Workplace.

Human Research Ethics Approval Number: H19REA253

Research Team Contact Details

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This project investigates the factors that help to contribute to mental wellbeing at Singapore Workplaces.

It is expected that new aspects of mental wellbeing, as well as salient organization factors relevant to the Singapore Workplace will be identified.

The development of a new Workplace Singapore Mental Wellbeing Scale, based on this project, will form a larger Doctor of Philosophy (PhD) project of testing a conceptual model in predicting employee's outcomes at the Singapore Workplace. This will in turn inform future design and evaluate relevant interventions for employees to increase their mental wellbeing.

Participation

Your participation will involve contributing your thoughts and ideas in a group discussion (focus group) that will take approximately one to one and a half hours of your time. The focus group will take place at a place and time convenient to you (to be confirmed at a later time) together with other participants.
The focus group will begin by:

- Welcoming participants.
- Researcher to introduce himself and explaining his role.
- Ensuring that participants have read and understand the information sheet and key points of information sheet summarized.
- Ensuring that participants have completed brief demographic questionnaire, signed and returned the consent form.
- Ensuring that ground rules are provided.

This will be followed by the researcher providing a definition of mental wellbeing and questions asking you about what are likely to contribute or reduce your sense of wellbeing at your workplace.

The focus group will be audio recorded, after which the recording will be transcribed. However, any identifying information recorded will be removed at the point of transcription. Transcripts will be analyzed to identify factors that are important for mental wellbeing at the Singapore workplace.

There are no costs associated with participating in this research project, nor will you be paid for participation.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to, and you are free to withdraw from the project at any stage.

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with your employer as well as the University of Southern Queensland.

Expected Benefits

It is expected that this project will provide insight into revising the Singapore Mental Wellbeing Scale so that a new Workplace Singapore Mental Wellbeing Scale can be developed. This new scale will provide a culturally meaningful screening tool and enhance our knowledge of workplace wellbeing specifically for the Singapore workplace. This will in turn assist in future development of workplace interventions aimed at improving employee outcomes.

The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project.

Risks

This project has minimal risk and is not expected to pose any significant distress. The minimal inconvenience of time imposition for completing this survey is also expected.

However if after participating in this survey you feel a need to seek support, please feel free to contact any of the followings:1) The Chief Investigator at 1) (65) 98253159, email: U1103824@umail.usq.edu.au; 2) SOS (24 hrs) on 1800 221 4444; 3) James Cook University Psychology Clinic at 149 Sims Dr, Singapore 387380 on 6377 6825; and finally, 5)your General Practitioner (GP) for additional support.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law.
Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project.

Consent to Participate

We would like to ask you to return your signed informed consent form to the research prior to the commencement of the focus group session.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Manager of Research Integrity and Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Consent Form for USQ Research Project
Focus Group

Project Details

Title of Project: Identifying factors that influence mental wellbeing at the Singapore Workplace.

Human Research Ethics Approval Number:

Research Team Contact Details

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- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that the focus group will be audio recorded.
- Agree to maintain the confidentiality of the information discussed by other participants and researchers during the focus group.
- Understand that any data collected may be used in future research activities.
- Understand that you are free to withdraw at any time, without comment or penalty.
- Are over 18 years of age.
- Agree to participate in the project.

Participant Signature	
Date	

Please return this sheet to a research team member prior to undertaking the focus group discussion.

APPENDIX B

Study 1 Focus Group Script and Discussion Guide Questions

Identifying factors that influence mental wellbeing at the Singapore Workplace

Focus Group Discussion

Instructions:

- Welcome participants and thank them in advance for their time.

- Introduce yourself and explain your role.

- Ensure the participants have read and understand the information sheet (ask if the participants have any questions). Verbally summarise key points of <u>information sheet</u>.

- Ensure participants have completed brief <u>demographic questionnaire</u>, signed and returned the <u>consent form</u>.

- Ensure that ground rules are provided.

Scene setting script:

Good morning/afternoon/evening and welcome to our session. Thank you for taking the time to join us to talk about the factors that influence mental wellbeing at your workplace. My name is Chad and I am a PhD candidate with the University of Southern Queensland, Australia. My research is on the development of a new Workplace Singapore Mental Wellbeing Scale and to test a conceptual model in predicting employees' outcomes at the workplace.

I just want to make sure that every one of you has read and understand the information sheet provided to you earlier. Do you have any questions in regard to the information sheet?

If you have no question, I will summarise the key points of this information sheet for you again.

As outlined in the participant information sheet, what you share with me today is confidential. I will be recording our session, because I don't want to miss any of your

comments, after which the recording will be transcribed. We will use first names as identifiers in our session. However, any identifying information recorded will be removed at the point of transcription. Once this discussion is transcribed, the audio recording will be deleted. Transcripts will be analysed to identify factors that are important for mental wellbeing at the Singapore workplace.

There are no right or wrong answers but differing points of views. We value what you have to say and please feel free to share your point of view even if it differs from what others have said. I will be mindful of the time and guide the discussion accordingly. I may ask you to explain more if I am not entirely sure of what you mean by your comments. I have allocated an hour for our session.

Before I begin, I would like to provide two simple ground rules so as to ensure that our session can run as smoothly as possible. They are:

- We ask that you turn off or keep your phones in silent mode. If you cannot and must respond to a call, please do so as quietly as possible and rejoin us as quickly as possible.

- We ask that every one of you respect one another's opinion and wait for one to finish sharing before another speaks.

Do you have any questions about the ground rules?

Do you have any other questions before we begin?

Ok. Let's start by first going around by telling us your first name.

Now, before I begin to ask the focus group questions, I will first provide you a definition of mental wellbeing so you understand what that means and your responses are relevant to the definition.

Define mental wellbeing for the participants:

Definition of mental wellbeing

Mental health, as defined by the World Health Organisation, is "a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to her or his community.

Further explanation

If you have good mental wellbeing at work, you are able to:

• feel relatively confident in yourself and have positive self-esteem at work

• feel and express a range of emotions appropriately as well as understand other's emotions at work at work

• build and maintain good relationships with others at work

• feel engaged at work

 • work productively

• cope with work-related stress

• adapt and manage in times of change and uncertainty at work

*You do NOT need to have all of the examples mentioned to be considered as having a sense of wellbeing at work. However, you will need at least one of them.

For example, when working in Singapore, some of the things that make us happy at work can include feeling good about yourself at work, able to say how you feel to your colleagues, get along well and able to talk "nonsense" to your colleagues, you like your work, you can do your job well, you know how to handle your stress, and you can adjust to changes that happen at work.

Do you have any questions in regard to the definition of mental wellbeing at the workplace?

Ok. Let us now proceed to the first question:

1. What are the key factors that determine your sense of wellbeing at the workplace?

    • *What gives you a sense of wellbeing at work?*

    • *What makes you feel good at work?*

- *What is helping or has helped you at your workplace, current or past, that contributes to your sense of wellbeing?*

- *Could you give me a few examples of the things or things you are doing that contributes to your sense of wellbeing at work?*

- *Could you explain further?*

Now that you have shared your point of view about what gives you a sense of wellbeing at your workplace, I would like to move on to the second question.

2. Why do these factors, as you shared earlier, determine your sense of wellbeing at the workplace?

- *Why do they make you feel good at work for example?*

- *Just now one of you have identified that _____ is important for mental wellbeing, why do you think it is important for you at your workplace to have that?*

- *Could you give me a few examples as to why these factors that you have mentioned earlier contribute to your sense of wellbeing at work?*

- *Could you explain further?*

Now that you have shared why the factors you identified help determine your sense of wellbeing at the workplace, let us now move on to share about the opposite side of things. Here is the third question.

3. What are the key factors that will reduce your sense of wellbeing at the workplace?

- *What are some of the things that will make you feel not so good when you are at work?*

- *What has not helped or has not been helping your at your workplace, past of current, to contribute to your sense of wellbeing?*

- *Could you give me a few examples of the things or the things that you are doing actually reduce your sense of wellbeing at work?*

- *Could you explain further?*

Now, let us move on to the fourth question.

4. Why do these factors that you have mentioned reduce your sense of wellbeing?

- *Why do they make you feel not so good when you are at work?*

- *As one of you have identified _____ as a factor in reducing your sense of wellbeing at work, why does it do that?*

- *Could you give me a few examples as to why these factors you have mentioned earlier reduce your sense of wellbeing at work?*

- *Could you explain further?*

Now moving on to the fifth question.

5. What do you think are some of the outcomes that an employee might identify with or strive for at the workplace?

- *What are some of the benefits a Singaporean worker would look forward to at the workplace?*

- *What are some other things beside pay or monetary rewards that you might strive for?*

- *What else other than getting more money or bonus?*

- *Could you explain further?*

Some backup questions

If nothing is mentioned about religion or spirituality/food/family/physical health as predicted, these can be mentioned at the end to facilitate possible discussion around these areas.

You have shared a lot about what you consider as important factors for mental wellbeing at your workplace. But let us now consider some additional aspects that might help contribute to your sense of wellbeing at work:

- How about the religious or spirituality aspect? *(How about your faith or religion?)*

- How about the food-related aspect? *(How about all the food we talk about during lunch?)*

- How about your physical health? *(How about being physically healthy?)*

- How about the family aspect? *(How about family support?)*

6. As we are coming to an end of our session, is there anything else you would like to add to this discussion?

That concludes our focus group session for today. Thank you for your contributions. Your contributions have been very valuable, and I appreciate your participation. I just wanted to remind you that today's session has been recorded, and what has been shared will remain confidential, with all identifying information removed during the transcription phase of the research. Before we finish today, do you have any questions you would like to ask? Again, thank you for your time.

APPENDIX C
Ethical Clearance for Study 1

USQ

Chad Yip <u1103824@umail.usq.edu.au>

[RIMS] USQ HRE Application - H19REA253 - Expedited review outcome - Approved
1 message

human.Ethics@usq.edu.au <human.Ethics@usq.edu.au>   Wed, Nov 13, 2019 at 9:15 AM
To: U1103824@umail.usq.edu.au
Cc: Tony.Machin@usq.edu.au

Dear Chad

I am pleased to confirm your Human Research Ethics (HRE) application has now been reviewed by the University's Expedited Review process. As your research proposal has been deemed to meet the requirements of the National Statement on Ethical Conduct in Human Research (2007),
ethical approval is granted as follows:

USQ HREC ID: H19REA253
Project title: Identifying factors that influence mental wellbeing at the Singapore Workplace.
Approval date: 13/11/2019
Expiry date: 13/11/2022
USQ HREC status: Approved

The standard conditions of this approval are:

a)   responsibly conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal;.

(b)   advise the University (email:ResearchIntegrity@usq.edu.au) immediately of any complaint pertaining to the conduct of the research or any other issues in relation to the project which may warrant review of the ethical approval of the project;

(c)   promptly report any adverse events or unexpected outcomes to the University (email: ResearchIntegrity@usq.edu.au) and take prompt action to deal with any unexpected risks;

(d)   make submission for any amendments to the project and obtain approval prior to implementing such changes;

(e)   provide a progress 'milestone report' when requested and at least for every year of approval.

(f)   provide a final 'milestone report' when the project is complete;

(g)   promptly advise the University if the project has been discontinued, using a final 'milestone report'.

The additional conditionals of approval for this project are:

(a) Nil.

Please note that failure to comply with the conditions of this approval or requirements of the Australian Code for the Responsible Conduct of Research, 2018, and the National Statement on Ethical Conduct in Human Research, 2007 may result in withdrawal of approval for the project.
Congratulations on your ethical approval! Wishing you all the best for success!

If you have any questions or concerns, please don't hesitate to make contact with an Ethics Officer.

Kind regards

Human Research Ethics

University of Southern Queensland
Toowoomba – Queensland – 4350 – Australia
Phone: (07) 4631 2690
Email: human.ethics@usq.edu.au

_____

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APPENDIX D

Demographic Characteristics of Study 2 Sample

(*N* = 318)

		n	%
Gender	Female	190	59.7
	Male	128	40.3
Age	Under 21	2	0.6
	21-30	84	26.4
	31-40	103	32.4
	41-50	75	23.6
	51-60	38	11.9
	Over 60	16	5
Marital Status	Single	145	45.6
	Married	156	49.1
	Divorced	16	50
	Widow	1	0.3
Place of birth	Singapore	265	83.3
	Other	53	16.7
Length of time living in Singapore	Under 5 years	10	3.1
	5-10 years	15	4.7
	Over 10 years	293	92.1
Ethnicity (Culture)	Chinese	255	80.2
	Malay	16	5
	Indian	29	9.1

	Eurasian	5	1.6
	Other	13	4.1
Religion	Buddhism	64	20.1
	Christianity	114	35.8
	Hinduism	9	2.8
	Muslim	20	6.3
	Taoism	8	2.5
	Free Thinker	92	28.9
	Other	11	3.5
Highest level of education completed	"O" Level	18	5.7
	"A" Level	12	3.8
	Poly	29	9.1
	Bachelor's	161	50.6
	Master's and above	98	30.8

Occupation

Major Group classification

Managers	113	35.5%
Professionals	116	36.5%
Technicians and Associate Professionals	37	11.6%
Clerical Support Workers	16	5.0%
Services and Sales Workers	20	6.3%
Plant and Machine Operators and Assemblers	1	0.3%
Armed Forces Occupations	2	0.6%
Not Specified	13	4.1%

Sub-major Group Classification

Chief Executives, Senior Officials and Legislators	31	9.7%

Administrative and Commercial Managers		42	13.2%
Production and Specialised Services Managers		20	6.3%
Science and Engineering Professionals		9	2.8%
Health Professionals		16	5.0%
Teaching Professionals		23	7.2%
Business and Administration Professionals		6	1.9%
Information and Communications Technology Professionals		1	0.3%
Legal, Social and Cultural Professionals		57	17.9%
Science and Engineering Associate Professionals		5	1.6%
Health Associate Professionals		6	1.9%
Business and Administration Associate Professionals		12	3.8%
Legal, Social, Cultural and Related Associate Professionals		7	2.2%
Information and Communications Technicians		2	0.6%
Customer Services Clerks		4	1.3%
Other Clerical Support Workers		11	3.5%
Personal Services Workers		4	1.3%
Sales Workers		8	2.5%
Personal Care Workers		3	0.9%
Protective Services Workers		5	1.6%
Drivers and Mobile Plant Operators		1	0.3%
Non-commissioned Armed Forces Officers		1	0.3%
Armed Forces Occupations, Other Ranks		1	0.3%
Not Specified		43	13.5%
Employment Level	Junior Staff	87	27.4
	Senior Staff	79	24.8
	Supervisor	18	5.7
	Manager	79	24.8
	Business Owner	31	9.7

	Others	24	7.5
Employment Status	Full-time	277	87.1
	Part-time	25	7.9
	Casual/Freelance	16	5.0
Length of Employment (current workplace)	Less than 1 year	75	23.6
	1 to 2 years	61	19.1
	3 to 5 years	72	22.6
	6 to 10 years	53	16.7
	11 to 15 years	24	7.5
	16 to 20 years	13	4.1
	More than 20 years	20	6.3
Total length of employment	Less than 1 year	28	8.8
	1 to 2 years	20	6.3
	3 to 5 years	49	15.4
	6 to 10 years	53	16.7
	11 to 15 years	58	18.2
	16 to 20 years	34	10.7
	More than 20 years	76	23.9

APPENDIX E

Ethical Clearance for Study 2

USQ

Chad Yip <u1103824@umail.usq.edu.au>

[RIMS] USQ HRE Amendment - H19REA253 (v1) - Expedited review outcome - Approved

1 message

human.ethics@usq.edu.au <human.ethics@usq.edu.au>   Wed, Feb 24, 2021 at 7:35 AM
To: U1103824@umail.usq.edu.au
Cc: Tony.Machin@usq.edu.au

Dear Chad

The revisions outlined in your HRE Amendment have been deemed by the USQ Human Research Ethics Expedited Review process to meet the requirements of the National Statement on Ethical Conduct in Human Research (2007). Your project is now granted full ethical approval as follows.

USQ HREC ID: H19REA253 (v1)
Project title: Identifying factors that influence mental wellbeing at the Singapore Workplace.
Approval date: 24/02/2021
Expiry date: 13/11/2022
Project status: Approved with conditions.

The standard conditions of this approval are:

(a) conduct the project strictly in accordance with the proposal submitted and ethics approval, including any amendments made to the proposal required by the USQ HREC, or affiliated University ethical review processes;

(b) advise the USQ HREC (via human.ethics@usq.edu.au) immediately of any complaint or other issue in relation to the conduct of this project which may warrant review of the ethical approval of the project;

(c) make submission for ethical review and approval of any amendments or revision to the approved project prior to implementing any changes;

(d) complete and submit a milestone (progress) report as requested, and at least for every year of approval; and

(e) complete and submit a milestone (final) report when the project does not commence within the first 12 months of approval, is abandoned at any stage, or is completed (whichever is sooner).

Additional conditions of this approval are:

(a) Nil.

Failure to comply with the conditions of approval or the requirements of the National Statement on Ethical Conduct in Human Research (2007) may result in withdrawal of ethical approval for this project.

If you have any questions or concerns, please contact an Ethics Officer.

Kind regards

Human Research Ethics

University of Southern Queensland
Toowoomba – Queensland – 4350 – Australia
Phone: (07) 4631 2690
Email: human.ethics@usq.edu.au

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APPENDIX F

Study 2 Quantitative Study Participant Information and Consent Form

University of Southern Queensland

Participant Information for USQ Research Project Survey

Title of Project: Validation of the Singapore Mental Wellbeing Scale and the newly developed Workplace Singapore Mental Wellbeing Scale within the Singapore context.

Human Research Ethics Approval Number: H19REA253

Research Team Contact Details

Principal Investigator Details

Mr. Chad Yip
PhD Candidate
Ph: +65 98253159
Email: chadyip7@gmail.com

Other Investigators Details

Prof Tony Machin
Professor (Psychology)
School of Psychology and Counselling
University of Southern Queensland,
Toowoomba. 4350. Australia.
Ph: +61 (7) 46312587
Email: tony.machin@usq.edu.au

Dr. Yong Goh
Senior Lecturer (Psychology)
School of Psychology and Counselling
University of Southern Queensland,
Ipswich Campus, 11 Salisbury Rd, Ipswich,
Queensland 4305, Australia.
Ph: +61 7 3812 6152
Email: Yong.Goh@usq.edu.au

Description

This project investigates the properties of the newly developed Workplace Singapore Mental Wellbeing Scale (Workplace SMWEB), as well as the validity of the original Singapore Mental Wellbeing Scale (SMWEB) in Singapore Workplaces.

It is expected that the newly developed dimensions in the new scale are relevant in the workplace context and can be utilized as a meaningful screening tool for mental wellbeing at the Singapore workplace. It is also expected that some dimensions in the original scale may be relevant in the workplace context.

The development of a new Workplace Singapore Mental Wellbeing Scale will form a larger Doctor of Philosophy (PhD) project of testing a conceptual model in predicting employee's outcomes at the Singapore Workplace. This will in turn inform future design and evaluate relevant interventions for employees to increase their mental wellbeing.

Participation

Your participation will involve partaking in this online survey which will require you to fill up some demographic questions as well as complete the Singapore Mental Wellbeing Scale and the newly developed Workplace Singapore Mental Wellbeing Scale in one sitting. The whole process is expected to take approximately 20 minutes. Your identity and responses will be completely anonymous and non-identifiable.

The survey will take place at a time and venue convenient to you and in privacy via the online platform.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to, and you are free to withdraw from the project at any stage.

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with your employer as well as the University of Southern Queensland.

Expected Benefits

It is expected that this project will confirm that the new Workplace Singapore Mental Wellbeing Scale can be used as a culturally meaningful screening tool. This will enhance our knowledge of workplace wellbeing specifically for the Singapore workplace. This will in turn assist in future development of workplace interventions aimed at improving employee outcomes.

The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project.

Risks

This project has minimal risk and is not expected to pose any significant distress. The minimal inconvenience of time imposition for completing this survey is also expected.

However if after participating in this survey you feel a need to seek support, please feel free to contact any of the followings:1) The Chief Investigator at 1) (65) 98253159, email: U1103824@umail.usq.edu.au; 2) SOS (24 hrs) on 1800 221 4444; 3) James Cook University Psychology Clinic at 149 Sims Dr, Singapore 387380 on 6377 6825; and finally, 5)your General Practitioner (GP) for additional support.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law.
Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project. Participants can request a copy of the final dissertation or parts of the dissertation from the researcher if they wish to look at the research results.

Consent to Participate

We would like to ask you to tick the box for consent to participate on the online platform to confirm your agreement to participate in this project.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Manager of Research Integrity and Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq,edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

University of Southern Queensland

Consent Form for USQ Research Project Questionnaire

<u>Statement of Consent</u>

By ticking the below, you are indicating that you:

- Have read and understood the information document regarding this project.

- Have had any questions answered to your satisfaction.

- Understand that if you have any additional questions you can contact the research team.

- Understand that you are free to withdraw at any time, without comment or penalty.

- Understand that you can contact the University of Southern Queensland Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.

- Are over 18 years of age.

- Agree to participate in the project.

APPENDIX G

Study 2 Quantitative Study Questionnaire

Demographic Variables

Please provide the following personal and job demographic details:

Gender: Male / Female

Age: Under 21 / 21-30 / 31-40 / 41-50 / 51-60 / Over 60

Marital Status: Single / Married / Divorced / Widow

Place of Birth: Singapore / Others: Please specify

Length of time living in Singapore: Under 5 years / 5-10 years / Over 10 years

Ethnicity (Culture): Chinese / Malay / Indian / Eurasian / Others:

Please specify

Religion: Buddhism / Christianity / Hinduism / Islam/

Taoism / Free Thinker / Others: Please specify

Highest level of education completed: "O" Level & Below / "A" Level / Poly /
Bachelor's / Master's and above

Occupation Title: _____

Employment Level: Junior Staff / Senior Staff / Supervisor /

Manager / Business Owner / Others: Please specify

Employment Status: Full-Time / Part-Time / Casual

Length of Employment:
(In Current Workplace) Less than 1 year / 1 to 2 years / 3 to 5 years / 6 to 10 years / 11 to 15 years / 16 to 20 years / More than 20 years

Length of Time since Full-Time
Employment: Less than 1 year / 1 to 2 years / 3 to 5 years / 6 to 10 years / 11 to 15 years / 16 to 20 years / More than 20 years

Introduction

The following questions are meant to be answered in relation to your workplace experience ONLY. Please answer them as truthfully as possibly.

(A) Singapore Mental Wellbeing Measure & Workplace Context Questions

We would like to know how you have been feeling, thinking and behaving over the last 2 weeks. Also, Read the following sentences carefully and tell us how you feel the statements best describe you. Circle the number near the word that best describes you.

1----------------2----------------3----------------4----------------5
Strongly   Disagree   Neither agree   Agree   Strongly
Disagree   or disagree   Agree

1. I feel balanced in myself. (EI)   1----------2----------3----------4----------5

2. I am appreciative of life. (EI)   1----------2----------3----------4----------5

3. I accept what life has to offer. (EI)   1----------2----------3----------4----------5

4. I am able to accept myself. (SE)   1----------2----------3----------4----------5

5. I am able to think clearly. (CE)   1----------2----------3----------4----------5

6. I am able to think rationally. (CE)   1----------2----------3----------4----------5

7. I am able to make good decisions. (CE)   1----------2----------3----------4----------5

8. I am able to accept reality. (EI)   1----------2----------3----------4----------5

9. I appreciate my own self-worth. (SE)   1----------2----------3----------4----------5

10. I am able to make friends. (SI)   1----------2----------3----------4----------5

11. I am able to keep company with
    others. (SI)   1----------2----------3----------4----------5

12. I am able to seek help when   1----------2----------3----------4----------5

needed. (SI)

13. I am able to offer help to others. (SI)   1----------2----------3----------4----------5

14. I am able to maintain a good
    family life. (SI)   1----------2----------3----------4----------5

15. I feel peace. (EI)   1----------2----------3----------4----------5

16. I seek for self-
    development/growth/cultivation(SE)   1----------2----------3----------4----------5

17. I am alert. (CE)   1----------2----------3----------4----------5

18. I am not depressed. (EI)   1----------2----------3----------4----------5

19. I am optimistic about the future. (RI)   1----------2----------3----------4----------5

20. I am able to cope with life's (RI)
    challenges.   1----------2----------3----------4----------5

21. I am resilient under life's crises. (RI)   1----------2----------3----------4----------5

22. I stand firm under stress(RI)   1----------2----------3----------4----------5

23. I am spiritual. (RI)   1----------2----------3----------4----------5

24. I am content. (EI)   1----------2----------3----------4----------5

25. I am happy. (EI)   1----------2----------3----------4----------5

26. I am calm. (EI)   1----------2----------3----------4----------5

27. I have the strong support of my
    family and friends. (SI)   1----------2----------3----------4----------5

28. I can handle most situations. (RI)   1----------2----------3----------4----------5

29. I am able to contribute positively
    to the world (e.g. environment,   1----------2----------3----------4----------5

work, community). (SE)

30. I believe that life is a continued   1----------2----------3----------4----------5
    development of myself. (SE)

31. I accept what life has to offer while working. 1----------2----------3----------4----------5
    (EI)

32. I am able to make friends at my workplace.(SI)1----------2----------3----------4----------5

33. I am able to keep company with my   1----------2----------3----------4----------5
    colleagues. (SI)

34. I am able to offer help to my colleagues. (SI) 1----------2----------3----------4----------5

35. I am able to maintain a work life   1----------2----------3----------4----------5
    balance with my colleagues. (SI)

36. I seek for self-development/growth/cultivation 1----------2----------3----------4----------5
    at work. (SE)

37. I am able to cope with challenges at work. (RI) ----------2----------3----------4----------5

38. I am resilient under work's crises. (RI)   1----------2----------3----------4----------5

39. I have the strong support of my work peers   1----------2----------3----------4----------5
    and my organisation. (SI)

(B) Workplace Singapore Mental Wellbeing Measure

1. Meaningful Work

	Absolutely Untrue	Mostly Untrue	Neither True nor Untrue	Mostly True	Absolutely True	NA
	1	2	3	4	5	
1. I have found a meaningful career.						
2. I view my work as contributing to my personal growth.						
3. My work really makes no difference to the world.						
4. I understand how my work contributes to my life's meaning.						
5. I have a good sense of what makes my job meaningful.						
6. I know my work makes a positive difference in the world.						
7. My work helps me better understand myself.						
8. I have discovered work that has a satisfying purpose.						
9. My work helps me make sense of the world around me.						
10. The work I do serves a greater purpose.						

2. Person-organisation Fit

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	NA
1. The relation between the job description and the tasks I carry out is good.						
2. I feel that my work allows me to do my best in a particular area.						
3. My job lets me use my skills and abilities.						
4. My job fits with my career goals.						
5. My abilities fit the demands of this job.						
6. I have the right skills and abilities for doing this job.						
7. There is a good match between the requirements of this job and my skills.						
8. My personality is a good match for this job.						
9. I am the right type of person for this type of work.						

3. Role Clarity

	Strongly Disagree	Disagree	Neither agree nor disagree 3	Agree	Strongly agree	NA
	1	2		4	5	
1. The goals of my work are clearly defined.						
2. My job is well defined.						
3. I know what my work responsibilities are.						
4. I know exactly what is expected of me at work.						
5. Explanation is clear as what has to be done at work.						

4. Autonomy

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	NA
1. My job allows me to make my own decisions about how to schedule my work.						
2. My job allows me to decide on the order in which things are done on the job.						
3. My job allows me to plan how I do my work.						
4. My job gives me a chance to use my personal initiative or judgment in carrying out the work.						
5. My job allows me to make a lot of decisions on my own.						
6. My job provides me with significant autonomy in making decisions.						
7. My job allows me to make decisions about what methods I use to complete my work.						
8. My job gives me considerable opportunity for independence and freedom in how I do the work.						
9. My job allows me to decide on my own how to go about doing my work.						

5. Work-Life Balance

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	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	NA
	1	2	3	4	5	
1. There is a good fit between my **personal life** and work life.						
2. There is a good fit between my **family life** and work life.						
3. There is a good fit between my job and my personal health.						
4. I am able to do my job and not burn out.						
5. I have sufficient emotional energy for the job.						
6. My work offers schedule flexibility.						
7. It is easy to take time off during our work to take care of personal or family matters.						
8. My organization allows a flexi-time option.						

6. Learning and Professional Development

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	NA
1. If I need help because of a heavy workload, I am given the necessary means.						
2. The contribution of new ideas is encouraged.						
3. It is easy to find help when needed.						
4. The job has the right level of challenge.						
5. My work offers opportunities for improving knowledge and skills.						
6. Training programs in our organization help employees to achieve the required skill for performing the job effectively.						
7. My organization offers sufficient opportunities to develop my own abilities.						
8. My organization provides resources to facilitate my performance.						

7. Employee Recognition

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	NA
	1	2	3	4	5	
1. My efforts are adequately rewarded.						
2. My boss values the order and accuracy in my work.						
3. My bosses value the ideas I put forward for improving the job.						
4. My suggestions about the job are listened to.						
5. In my job, innovative contributions are appreciated.						
6. My work is adequately valued.						
7. My efforts receive the recognition they deserve.						
8. When I do something well, my boss congratulates me.						

8. Support from boss

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	NA
1. My boss encourages me when I have problems so that I can solve them.						
2. I really feel supported by my bosses.						
3. My boss is approachable.						
4. My boss genuinely cares about me.						
5. My boss gives me help when I need it.						
6. My boss provides the help I need to complete my required tasks.						
7. My boss helps me learn and improve.						
8. My boss is supportive of any on-the-job-training I attend.						
9. My boss is available to me when I ask for help.						
10. My boss helps me prevent and address burn-out.						

9. Co-worker relationship

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	NA
1. I have the opportunity to get to know my colleagues.						
2. I am able to work with my colleagues to collectively solve problems.						
3. In my organization, I have the chance to talk informally and visit with others.						
4. Communication among employees is encouraged by my organization.						
5. I have **the opportunity** to develop close friendships at my workplace.						
6. I have **formed** strong friendships at work.						
7. I socialize with colleagues outside of the workplace.						
8. I can confide in people at work.						
9. I feel I can trust many colleagues a great deal.						
10. Being able to see my colleagues is one reason why I look forward to my job.						

10. Accomplishment

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	NA
1. In my work, I have a feeling of success and accomplishment.						
2. I feel capable and effective in my work on a day-to-day basis.						
3. My daily work activities give me a sense of direction and meaning.						
4. My work brings a sense of satisfaction.						
5. My job allows me to recraft your job to suit your strengths.						
6. My work offers challenges to advance my skills.						

11. Transparency

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	NA
1. My organization provides enough information to discharge my responsibilities.						
2. There are much defined channels for information exchange and transfer.						
3. My boss shares important information.						
4. The goals and results obtained are shared with the employees.						
5. The orders received are consistent.						
6. My organization communicates every new change that takes place.						
7. Communication and information flow between the departments is satisfactory.						

12. Fairness

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	NA
1. Where I work, there are fair privileges.						
2. My organization does a good job of linking rewards to job performance.						
3. Promotions are handled fairly.						
4. Procedures at your organisation have been **free of bias**.						
5. Procedures at your organisation been **applied consistently**.						
6. Your outcome reflects what you have contributed to your organisation.						
7. Your organisation has treated you with respect.						
8. Your organisation has treated you with dignity.						

13. Organizational Support

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	NA
	1	2	3	4	5	
1. My organization is committed to my **personal safety** in the office.						
2. **Physical workspace** is satisfactory.						
3. Help is available from my organization when I have a problem.						
4. My organization really cares about my well-being.						
5. My organization is willing to offer assistance to help me perform my job to the best of my ability.						
6. My organization is complimentary of my accomplishments at work.						
7. My organization cares about my general satisfaction at work.						

APPENDIX H

Study 2 Quantitative Study USQ Online Questionnaire

USQ

Assessing mental wellbeing within the Singapore workplace

Human Research Ethics Approval Number - H19REA253

Description

This project investigates the properties of the newly developed Workplace Singapore Mental Wellbeing Scale (SWMWEB), as well as the validity of the original Singapore Mental Wellbeing Scale (SMWEB) in Singapore Workplaces.

It is expected that the newly developed dimensions in the new scale are relevant in the workplace context and can be utilized as a meaningful screening tool for mental wellbeing at the Singapore workplace. It is also expected that some dimensions in the original scale may be relevant in the workplace context.

The development of a new Workplace Singapore Mental Wellbeing Scale will form a larger Doctor of Philosophy (PhD) project of testing a conceptual model in predicting employee's outcomes at the Singapore Workplace. This will in turn inform future design and evaluate relevant interventions for employees to increase their mental wellbeing.

Participation

Your participation will involve partaking in this online survey which will require you to fill up some demographic questions as well as complete the Singapore Mental Wellbeing Scale and the newly developed Workplace Singapore Mental Wellbeing Scale in one sitting. The whole process is expected to take approximately 20 minutes. Your identity and responses will be completely anonymous and non-identifiable.

The survey will take place at a time and venue convenient to you and in privacy via the online platform.
Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to, and you are free to withdraw from the project at any stage.
Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with your employer as well as the University of Southern Queensland.

Expected Benefits

It is expected that this project will confirm that the new Workplace Singapore Mental Wellbeing Scale can be used as a culturally meaningful screening tool. This will enhance our knowledge of workplace wellbeing specifically for the Singapore workplace. This will in turn assist in future development of workplace interventions aimed at improving employee outcomes.

The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project.

Risks

This project has minimal risk and is not expected to pose any significant distress. The minimal inconvenience of time imposition for completing this survey is also expected.
However if after participating in this survey you feel a need to seek support, please feel free to contact any of the followings:1) The Chief Investigator at 1) (65) 98253159, email: U1103824@umail.usq.edu.au; 2) SOS (24 hrs) on 1800 221 4444; 3) James Cook University Psychology Clinic at 149 Sims Dr, Singapore 387380 on 6377 6825; and finally, 5)your General Practitioner (GP) for additional support.

USQ

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law.
Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project. Participants can request a copy of the final dissertation or parts of the dissertation from the researcher if they wish to look at the research results.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Manager of Research Integrity and Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

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Consent to Participant

By clicking "submit", you are indicating that you:

☐ Have read and understood the information document regarding this project.

☐ Have had any questions answered to your satisfaction.

☐ Understand that if you have any additional questions you can contact the research team.

☐ Understand that you are free to withdraw at any time, without comment or penalty.

☐ Understand that you can contact the University of Southern Queensland Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.

☐ Are over 18 years of age.

☐ Agree to participate in the project

Click on policy link below to consent to the survey before proceeding! ☐

Next

Assessing mental wellbeing within the Singapore workplace   0%

Demographic

✳ What is your gender?

ℹ Choose one of the following answers

○ Female

○ Male

Previous   Next

Assessing mental wellbeing within the Singapore workplace   3%

Demographic

✳ What is your age?

ℹ Choose one of the following answers

○ Under 21

○ 21-30

○ 31-40

○ 41-50

○ 51-60

○ Over 60

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USQ

Assessing mental wellbeing within the Singapore workplace   6%

Demographic

❋ What is your marital status?

ⓘ Choose one of the following answers

○ Single

○ Married

○ Divorced

○ Widow

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USQ

Assessing mental wellbeing within the Singapore workplace   10%

Demographic

❋ What is your place of birth?

ⓘ Choose one of the following answers

○ Singapore

○ Other: [   ]

| Previous | Next |

USQ

Assessing mental wellbeing within the Singapore workplace   13%

Demographic

❋ What is your length of time living in Singapore?

ⓘ Choose one of the following answers

○ Under 5 years

○ 5-10 years

○ Over 10 years

| Previous | Next |

USQ

Demographic

✳ what is your ethnicity (culture)?

ⓘ Choose one of the following answers

○ Chinese

○ Malay

○ Indian

○ Eurasian

○ Other: [＿＿＿＿＿]

[Previous]   [Next]

USQ

Demographic

✳ What is your religion?

ⓘ Choose one of the following answers

○ Buddhism

○ Christianity

○ Hinduism

○ Muslim

○ Taoism

○ Free Thinker

○ Other: [＿＿＿＿＿]

[Previous]   [Next]

Assessing mental wellbeing within the Singapore workplace   23%

Demographic

✱ what is your highest level of education completed?

ⓘ Choose one of the following answers

- ○ "O" Level
- ○ "A" Level
- ○ Poly
- ○ Bachelor's
- ○ Master's and above

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Assessing mental wellbeing within the Singapore workplace   26%

Demographic

✱ What is your occupation title?

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Assessing mental wellbeing within the Singapore workplace   30%

Demographic

✱ What is your employment level?

ⓘ Choose one of the following answers

- ○ Junior Staff
- ○ Senior Staff
- ○ Supervisor
- ○ Manager
- ○ Business Owner
- ○ Other:

Previous   Next

Assessing mental wellbeing within the Singapore workplace   33%

Demographic

✱ What is your employment status?

ⓘ Choose one of the following answers

○ Full-Time

○ Part-Time

○ Casual/Freelance

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Assessing mental wellbeing within the Singapore workplace   36%

Demographic

✱ What is your length of employment (in current workplace)?

ⓘ Choose one of the following answers

○ Less than 1 year

○ 1 to 2 years

○ 3 to 5 years

○ 6 to 10 years

○ 11 to 15 years

○ 16 to 20 years

○ More than 20 years

Previous   Next

Assessing mental wellbeing within the Singapore workplace   40%

Demographic

✱ What is your total length of employment since full-time employment?

ⓘ Choose one of the following answers

○ Less than 1 year

○ 1 to 2 years

○ 3 to 5 years

○ 6 to 10 years

○ 11 to 15 years

○ 16 to 20 years

○ More than 20 years

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USQ

Singapore Mental Wellbeing Measure & Workplace Context Questions

The following questions are meant to be answered in relation to your workplace experience MAINLY. We would like to know how you have been feeling, thinking and behaving over the last 2 weeks. Please answer them as truthfully as possibly.

*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel balanced in myself. (EI)	○	○	○	○	○
I am appreciative of life. (EI)	○	○	○	○	○
I accept what life has to offer. (EI)	○	○	○	○	○
I am able to accept myself. (SE)	○	○	○	○	○
I am able to think clearly. (CE)	○	○	○	○	○
I am able to think rationally. (CE)	○	○	○	○	○
I am able to make good decisions. (CE)	○	○	○	○	○
I am able to accept reality. (EI)	○	○	○	○	○
I appreciate my own self-worth. (SE)	○	○	○	○	○
I am able to make friends. (SI)	○	○	○	○	○

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USQ

Singapore Mental Wellbeing Measure & Workplace Context Questions

The following questions are meant to be answered in relation to your workplace experience MAINLY. We would like to know how you have been feeling, thinking and behaving over the last 2 weeks. Please answer them as truthfully as possibly.

*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am able to keep company with others. (SI)	○	○	○	○	○
I am able to seek help when needed. (SI)	○	○	○	○	○
I am able to offer help to others. (SI)	○	○	○	○	○
I am able to maintain a good family life. (SI)	○	○	○	○	○
I feel peace. (EI)	○	○	○	○	○
I seek for self-development/growth/cultivation. (SE)	○	○	○	○	○
I am alert. (CE)	○	○	○	○	○
I am not depressed. (EI)	○	○	○	○	○
I am optimistic about the future. (RI)	○	○	○	○	○
I am able to cope with life's challenges (RI)	○	○	○	○	○

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Singapore Mental Wellbeing Measure & Workplace Context Questions

The following questions are meant to be answered in relation to your workplace experience MAINLY. We would like to know how you have been feeling, thinking and behaving over the last 2 weeks. Please answer them as truthfully as possibly.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am resilient under life's crises. (RI)	○	○	○	○	○
I stand firm under stress. (RI)	○	○	○	○	○
I am spiritual. (RI)	○	○	○	○	○
I am content. (EI)	○	○	○	○	○
I am happy. (EI)	○	○	○	○	○
I am calm. (EI)	○	○	○	○	○
I have the strong support of my family and friends. (SI)	○	○	○	○	○
I can handle most situations. (RI)	○	○	○	○	○
I am able to contribute positively to the world (e.g. environment, work, community). (SE)	○	○	○	○	○
I believe that life is a continued development of myself. (SE)	○	○	○	○	○

Previous   Next

Singapore Mental Wellbeing Measure & Workplace Context Questions

The following questions are meant to be answered in relation to your workplace experience MAINLY. We would like to know how you have been feeling, thinking and behaving over the last 2 weeks. Please answer them as truthfully as possibly.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I accept what life has to offer while working.(EI)	○	○	○	○	○
I am able to make friends at my workplace. (SI)	○	○	○	○	○
I am able to keep company with my colleagues. (SI)	○	○	○	○	○
I am able to offer help to my colleagues. (SI)	○	○	○	○	○
I am able to maintain a work life balance with my colleagues. (SI)	○	○	○	○	○
I seek for self-development/growth/cultivation at work. (SE)	○	○	○	○	○
I am able to cope with challenges at work. (RI)	○	○	○	○	○
I am resilient under work's crises. (RI)	○	○	○	○	○
I have the strong support of my work peers and my organization. (SI)	○	○	○	○	○

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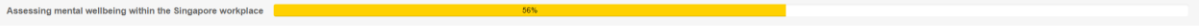
Meaningful Work

	Untrue	Somewhat Untrue	Neutral	Somewhat True	True	NA
I have found a meaningful career.	○	○	○	○	○	○
I view my work as contributing to my personal growth.	○	○	○	○	○	○
My work really makes no difference to the world.	○	○	○	○	○	○
I understand how my work contributes to my life's meaning.	○	○	○	○	○	○
I have a good sense of what makes my job meaningful.	○	○	○	○	○	○
I know my work makes a positive difference in the world.	○	○	○	○	○	○
My work helps me better understand myself.	○	○	○	○	○	○
I have discovered work that has a satisfying purpose.	○	○	○	○	○	○
My work helps me make sense of the world around me.	○	○	○	○	○	○
The work I do serves a greater purpose.	○	○	○	○	○	○

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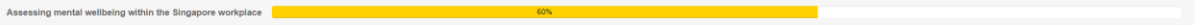
Person-organization Fit

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
The relation between the job description and the tasks I carry out is good.	○	○	○	○	○	○
I feel that my work allows me to do my best in a particular area.	○	○	○	○	○	○
My job lets me use my skills and abilities.	○	○	○	○	○	○
My job fits with my career goals.	○	○	○	○	○	○
My personality is a good match for this job.	○	○	○	○	○	○
I have the right skills and abilities for doing this job.	○	○	○	○	○	○
There is a good match between the requirements of this job and my skills.	○	○	○	○	○	○
My personality is a good match for this job.	○	○	○	○	○	○
I am the right type of person for this type of work.	○	○	○	○	○	○

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USQ

Assessing mental wellbeing within the Singapore workplace   53%

Role Clarity

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
The goals of my work are clearly defined.	○	○	○	○	○	○
My job is well defined.	○	○	○	○	○	○
I know what my work responsibilities are.	○	○	○	○	○	○
I know exactly what is expected of me at work	○	○	○	○	○	○
Explanation is clear as what has to be done at work.	○	○	○	○	○	○

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USQ

Assessing mental wellbeing within the Singapore workplace   66%

Autonomy

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
My job allows me to make my own decisions about how to schedule my work.	○	○	○	○	○	○
My job allows me to decide on the order in which things are done on the job.	○	○	○	○	○	○
My job allows me to plan how I do my work.	○	○	○	○	○	○
My job gives me a chance to use my personal initiative or judgment in carrying out the work.	○	○	○	○	○	○
My job allows me to make a lot of decisions on my own.	○	○	○	○	○	○
Now tick the **Strongly Agree** option.	○	○	○	○	○	○
My job provides me with significant autonomy in making decisions.	○	○	○	○	○	○
My job allows me to make decisions about what methods I use to complete my work.	○	○	○	○	○	○
My job gives me considerable opportunity for independence and freedom in how I do the work.	○	○	○	○	○	○
My job allows me to decide on my own how to go about doing my work.	○	○	○	○	○	○

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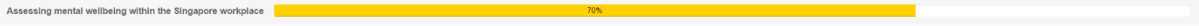
Work-Life Balance

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
There is a good fit between my **personal life** and work life.	○	○	○	○	○	○
There is a good fit between my **family life** and work life.	○	○	○	○	○	○
There is a good fit between my job and my personal health.	○	○	○	○	○	○
I am able to do my job and not burn out.	○	○	○	○	○	○
I have sufficient emotional energy for the job.	○	○	○	○	○	○
My work offers schedule flexibility	○	○	○	○	○	○
It is easy to take time off during our work to take care of personal or family matters.	○	○	○	○	○	○
My organization allows a flexi-time option.	○	○	○	○	○	○

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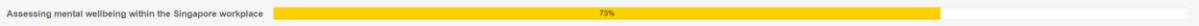
Learning and Professional Development

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
If I need help because of a heavy workload, I am given the necessary means.	○	○	○	○	○	○
The contribution of new ideas is encouraged.	○	○	○	○	○	○
It is easy to find help when needed.	○	○	○	○	○	○
The job has the right level of challenge.	○	○	○	○	○	○
My work offers opportunities for improving knowledge and skills.	○	○	○	○	○	○
Training programs in our organization help employees to achieve the required skill for performing the job effectively.	○	○	○	○	○	○
My organization offers sufficient opportunities to develop my own abilities.	○	○	○	○	○	○
My organization provides resources to facilitate my performance.	○	○	○	○	○	○

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USQ

Assessing mental wellbeing within the Singapore workplace   76%
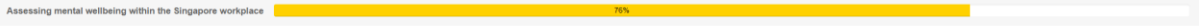
Employee Recognition

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
My efforts are adequately rewarded.	○	○	○	○	○	○
My boss values the order and accuracy in my work.	○	○	○	○	○	○
My bosses value the ideas I put forward for improving the job.	○	○	○	○	○	○
My suggestions about the job are listened to.	○	○	○	○	○	○
In my job, innovative contributions are appreciated.	○	○	○	○	○	○
My work is adequately valued.	○	○	○	○	○	○
My efforts receive the recognition they deserve.	○	○	○	○	○	○
When I do something well, my boss congratulates me.	○	○	○	○	○	○

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USQ

Assessing mental wellbeing within the Singapore workplace   80%

Support from boss

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
My boss encourages me when I have problems so that I can solve them.	○	○	○	○	○	○
I really feel supported by my bosses.	○	○	○	○	○	○
My boss is approachable.	○	○	○	○	○	○
My boss genuinely cares about me.	○	○	○	○	○	○
My boss gives me help when I need it.	○	○	○	○	○	○
My boss provides the help I need to complete my required tasks.	○	○	○	○	○	○
My boss helps me learn and improve.	○	○	○	○	○	○
My boss is supportive of any on-the-job-training I attend.	○	○	○	○	○	○
My boss is available to me when I ask for help.	○	○	○	○	○	○
My boss helps me prevent and address burn-out.	○	○	○	○	○	○

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Co-worker Relationship

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
I have the opportunity to get to know my colleagues.	○	○	○	○	○	○
I am able to work with my colleagues to collectively solve problems.	○	○	○	○	○	○
Now tick the **NA** option.	○	○	○	○	○	○
In my organization, I have the chance to talk informally and visit with others.	○	○	○	○	○	○
Communication among employees is encouraged by my organization.	○	○	○	○	○	○
I have the **opportunity** to develop close friendships at my workplace.	○	○	○	○	○	○
I have **formed** strong friendships at work.	○	○	○	○	○	○
I socialize with colleagues outside of the workplace.	○	○	○	○	○	○
I can confide in people at work.	○	○	○	○	○	○
I feel I can trust many colleagues a great deal.	○	○	○	○	○	○
Being able to see my colleagues is one reason why I look forward to my job.	○	○	○	○	○	○

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Assessing mental wellbeing within the Singapore workplace   86%

Accomplishment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
In my work, I have a feeling of success and accomplishment.	○	○	○	○	○	○
I feel capable and effective in my work on a day-to-day basis.	○	○	○	○	○	○
My daily work activities give me a sense of direction and meaning.	○	○	○	○	○	○
My work brings a sense of satisfaction.	○	○	○	○	○	○
My job allows me to recraft my job to suit my strengths.	○	○	○	○	○	○
My work offers challenges to advance my skills.	○	○	○	○	○	○

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Transparency

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
My organization provides enough information to discharge my responsibilities.	○	○	○	○	○	○
There are much defined channels for information exchange and transfer.	○	○	○	○	○	○
My boss shares important information.	○	○	○	○	○	○
The goals and results obtained are shared with the employees.	○	○	○	○	○	○
The orders received are consistent.	○	○	○	○	○	○
My organization communicates every new change that takes place.	○	○	○	○	○	○
Communication and information flow between the departments is satisfactory.	○	○	○	○	○	○

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Fairness

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
Where I work, there are fair privileges.	○	○	○	○	○	○
My organization does a good job of linking rewards to job performance.	○	○	○	○	○	○
Promotions are handled fairly.	○	○	○	○	○	○
Procedures at your organization have been **free of bias**.	○	○	○	○	○	○
Procedures at your organization been applied **consistently**.	○	○	○	○	○	○
Your outcome reflects what you have contributed to your organization.	○	○	○	○	○	○
Your organization has treated you with respect.	○	○	○	○	○	○
Your organization has treated you with dignity.	○	○	○	○	○	○

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Organisational Support

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
My organization is committed to my **personal safety** in the office.	○	○	○	○	○	○
Physical workspace is satisfactory.	○	○	○	○	○	○
Help is available from my organization when I have a problem.	○	○	○	○	○	○
My organization really cares about my wellbeing.	○	○	○	○	○	○
My organization is willing to offer assistance to help me perform my job to the best of my ability.	○	○	○	○	○	○
My organization is complimentary of my accomplishments at work.	○	○	○	○	○	○
My organization cares about my general satisfaction at work.	○	○	○	○	○	○

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APPENDIX I

Study 2 Quantitative Study Parallel Analysis Results

Raw Data Eigenvalues, & Mean & Percentile Random Data Eigenvalues

Root	Raw Data	Means	Prcntyle
1.000000	44.705770	2.123268	2.240366
2.000000	5.548893	2.003758	2.098482
3.000000	4.539400	1.915637	2.005078
4.000000	3.894101	1.840757	1.912558
5.000000	2.762682	1.779223	1.842914
6.000000	2.268509	1.717719	1.774239
7.000000	2.132889	1.666657	1.725099
8.000000	1.874071	1.609807	1.659871
9.000000	1.616277	1.564015	1.608369
10.000000	1.449517	1.510201	1.553931
11.000000	1.306279	1.463602	1.516435
12.000000	1.157259	1.415869	1.465671
13.000000	1.105047	1.374316	1.414516
14.000000	1.038594	1.335688	1.382094
15.000000	.859045	1.295746	1.338421
16.000000	.820775	1.259176	1.295749
17.000000	.782442	1.221456	1.260916
18.000000	.716075	1.183257	1.228971
19.000000	.676082	1.149690	1.189831
20.000000	.639865	1.114936	1.156644
21.000000	.625509	1.080117	1.115389
22.000000	.584767	1.046871	1.085578
23.000000	.559079	1.015861	1.052280
24.000000	.539043	.985560	1.024899
25.000000	.529620	.954404	.988210
26.000000	.476159	.924247	.960449
27.000000	.472904	.895081	.933019

28.000000	.425144	.865432	.899422
29.000000	.407419	.835624	.872898
30.000000	.392512	.806934	.835238
31.000000	.357200	.779198	.810115
32.000000	.352957	.752904	.787593
33.000000	.323236	.726166	.759810
34.000000	.313246	.701202	.731045
35.000000	.288055	.674976	.703863
36.000000	.273399	.649979	.672524
37.000000	.264315	.626608	.653217
38.000000	.246399	.601229	.626803
39.000000	.233385	.576719	.602931
40.000000	.218411	.555250	.580851
41.000000	.207624	.530165	.554309
42.000000	.198042	.507866	.532482
43.000000	.191547	.485395	.505074
44.000000	.184799	.463840	.492013
45.000000	.180449	.443288	.464130
46.000000	.164127	.423284	.445272
47.000000	.155877	.402416	.427126
48.000000	.142650	.381550	.404565
49.000000	.130991	.360059	.383306
50.000000	.118629	.340556	.367016
51.000000	.108119	.320393	.343534
52.000000	.104492	.301966	.324541
53.000000	.102467	.282291	.304845
54.000000	.094726	.263798	.284598
55.000000	.085589	.244744	.268263
56.000000	.080472	.225990	.247224
57.000000	.072891	.207388	.225240
58.000000	.066596	.189522	.207835
59.000000	.061120	.172038	.191393

60.000000	.053727	.154420	.179003
61.000000	.044273	.136464	.158364
62.000000	.037863	.119303	.136467
63.000000	.032746	.101492	.119616
64.000000	.026666	.085387	.103527
65.000000	.022565	.070134	.089806
66.000000	.018438	.054034	.074152
67.000000	.010826	.039040	.057394
68.000000	.007135	.022596	.043078
69.000000	.001663	.005351	.024959
70.000000	-.002582	-.008918	.012026
71.000000	-.008430	-.023286	-.005146
72.000000	-.013873	-.036521	-.018140
73.000000	-.016581	-.052709	-.035372
74.000000	-.022807	-.066583	-.049787
75.000000	-.024982	-.080110	-.061107
76.000000	-.026929	-.094756	-.078594
77.000000	-.032087	-.107474	-.092718
78.000000	-.034992	-.120783	-.106211
79.000000	-.036041	-.133920	-.120281
80.000000	-.039902	-.146901	-.133975
81.000000	-.043407	-.159322	-.143484
82.000000	-.048148	-.171550	-.159914
83.000000	-.053817	-.185258	-.171592
84.000000	-.055162	-.197566	-.183487
85.000000	-.059161	-.209449	-.197225
86.000000	-.060342	-.221683	-.209031
87.000000	-.066960	-.233423	-.220280
88.000000	-.069783	-.245343	-.234537
89.000000	-.073278	-.256394	-.244675
90.000000	-.075584	-.267254	-.256693
91.000000	-.079181	-.278322	-.266451

92.000000	-.083564	-.290078	-.279006
93.000000	-.087093	-.301270	-.293002
94.000000	-.087887	-.311646	-.303258
95.000000	-.088801	-.322040	-.313538
96.000000	-.093843	-.333642	-.324722
97.000000	-.096413	-.343422	-.332988
98.000000	-.101399	-.353275	-.343653
99.000000	-.102765	-.363473	-.354776
100.000000	-.108339	-.373996	-.365439
101.000000	-.114144	-.384462	-.374081
102.000000	-.115871	-.395018	-.386691
103.000000	-.119678	-.405445	-.396637
104.000000	-.130677	-.418813	-.407798

------ END MATRIX -----

APPENDIX J

Demographic Characteristics of Study 3 Sample

(*N* = 303)

		n	%
Gender	Female	180	59.4
	Male	123	40.6
Age	Under 21	4	1.3
	21-30	98	32.3
	31-40	110	36.3
	41-50	53	17.5
	51-60	29	9.6
	Over 60	9	3.0
Marital Status	Single	177	58.5
	Married	108	35.6
	Divorced	18	5.9
	Widow	0	0
Place of birth	Singapore	250	82.5
	Other	53	17.5
Length of time living in Singapore	Under 5 years	19	6.3
	5-10 years	18	5.9
	Over 10 years	266	87.8
Ethnicity (Culture)	Chinese	238	78.5
	Malay	17	5.6
	Indian	23	7.6

	Eurasian	10	3.3
	Others	15	5.0
Religion	Buddhism	63	20.8
	Christianity	105	34.7
	Hinduism	8	2.6
	Muslim	25	8.3
	Taoism	12	4.0
	Free Thinker	82	27.1
	Others	8	2.5
Highest level of education completed	"O" Level	15	5.0
	"A" Level	12	4.0
	Poly	30	9.9
	Bachelor's	173	57.1
	Master's and above	73	24.0

Occupation

Major Group classification

Managers	121	39.9%
Professionals	139	45.9%
Technicians and Associate Professionals	5	1.7%
Clerical Support Workers	5	1.7%
Services and Sales Workers	17	5.6%
Not Specified	16	5.2%

Sub-major Group Classification

Chief Executives, Senior Officials and Legislators	27	8.9%
Administrative and Commercial Managers	53	17.5%

Production and Specialised Services Managers		19	6.3%
Science and Engineering Professionals		18	5.9%
Health Professionals		19	6.3%
Teaching Professionals		21	6.9%
Business and Administration Professionals		35	11.6%
Information and Communications Technology Professionals		1	0.3%
Legal, Social and Cultural Professionals		48	15.8%
Information and communications technicians		1	0.3%
Health Associate Professionals		1	0.3%
Legal, Social, Cultural and Related Associate Professionals		3	1.0%
Information and Communications Technicians		1	0.3%
Customer Services Clerks		1	0.3%
Other Clerical Support Workers		4	1.3%
Personal Services Workers		14	4.6%
Sales Workers		2	0.7%
Hospitality, Retail and Other Services Managers		4	1.3%
Not Specified		31	10.4%

Employment Level	Junior Staff	93	30.7
	Senior Staff	70	23.1
	Supervisor	23	7.6
	Manager	77	25.4
	Business Owner	18	5.9
	Others	22	7.3

Employment Status	Full-time	278	91.7
	Part-time	19	6.3
	Casual/Freelance	6	2.0

Length of Employment (current workplace)	Less than 1 year	81	26.7
	1 to 2 years	59	19.6
	3 to 5 years	70	23.1
	6 to 10 years	51	16.8
	11 to 15 years	21	6.9
	16 to 20 years	7	2.3
	More than 20 years	14	4.6
Total length of employment	Less than 1 year	26	8.6
	1 to 2 years	29	9.6
	3 to 5 years	37	12.2
	6 to 10 years	65	21.5
	11 to 15 years	60	19.8
	16 to 20 years	29	9.6
	More than 20 years	57	18.7

APPENDIX K

Ethical Clearance for Study 3

USQ

Chad Yip <u1103824@umail.usq.edu.au>

[RIMS] USQ HRE Amendment - H19REA253 (v2) - Expedited review outcome - Approved
1 message

human.ethics@usq.edu.au <human.ethics@usq.edu.au>   Fri, Jan 14, 2022 at 12:40 PM
To: U1103824@umail.usq.edu.au
Cc: Tony.Machin@usq.edu.au

Dear Chad

The revisions outlined in your HRE Amendment have been deemed by the USQ Human Research Ethics Expedited Review process to meet the requirements of the National Statement on Ethical Conduct in Human Research (2007). Your project is now granted full ethical approval as follows.

USQ HREC ID: H19REA253 (v2)
Project title: Identifying factors that influence mental wellbeing at the Singapore Workplace.
Approval date: 14/01/2022
Expiry date: 13/11/2022
Project status: Approved with conditions.

The standard conditions of this approval are:

(a) conduct the project strictly in accordance with the proposal submitted and ethics approval, including any amendments made to the proposal required by the USQ HREC, or affiliated University ethical review processes;

(b) advise the USQ HREC (via human.ethics@usq.edu.au) immediately of any complaint or other issue in relation to the conduct of this project which may warrant review of the ethical approval of the project;

(c) make submission for ethical review and approval of any amendments or revision to the approved project prior to implementing any changes;

(d) complete and submit a milestone (progress) report as requested, and at least for every year of approval; and

(e) complete and submit a milestone (final) report when the project does not commence within the first 12 months of approval, is abandoned at any stage, or is completed (whichever is sooner).

Additional conditions of this approval are:

(a) Nil.

Failure to comply with the conditions of approval or the requirements of the National Statement on Ethical Conduct in Human Research (2007) may result in withdrawal of ethical approval for this project.

If you have any questions or concerns, please contact an Ethics Officer.

Kind regards

Human Research Ethics

University of Southern Queensland
Toowoomba – Queensland – 4350 – Australia
Email: human.ethics@usq.edu.au
_____

This email (including any attached files) is confidential and is

for the intended recipient(s) only. If you received this email by

mistake, please, as a courtesy, tell the sender, then delete this

email.

APPENDIX L

Study 3 Quantitative Study Participant Information and Consent Form

University of Southern Queensland

Participant Information for USQ Research Project Survey

Title of Project: Assessing mental wellbeing within the Singapore workplace.

Human Research Ethics Approval Number: H19REA253

Research Team Contact Details

Principal Investigator Details

Mr. Chad Yip
PhD Candidate
Ph: +65 98253159
Email: chadyip7@gmail.com

Other Investigators Details

Prof Tony Machin
Honorary Professor
School of Psychology and Counselling
University of Southern Queensland,
Toowoomba. 4350. Australia.
Email: tony.machin@usq.edu.au

Dr. Yong Goh
Senior Lecturer (Psychology)
School of Psychology and Counselling
University of Southern Queensland,
Ipswich Campus, 11 Salisbury Rd, Ipswich,
Queensland 4305, Australia.
Ph: +61 7 3812 6152
Email: Yong.Goh@usq.edu.au

Description

This project involves testing a conceptual model in predicting employee outcomes at the Singapore Workplace with the newly developed Singapore Workplace Mental Wellbeing Scale.

It is expected that there will be a positive relationship between workplace mental wellbeing and positive employee outcomes including work performance and social-psychological functioning and a negative relationship between workplace mental wellbeing and negative employee outcomes including burnout and symptoms of depression, anxiety and stress.

It is expected that the newly developed Singapore Workplace Mental Wellbeing Scale is relevant in the workplace context and can be utilized as a meaningful screening tool for mental wellbeing at the Singapore workplace. This will in turn inform future design and evaluate relevant interventions for employees to increase their mental wellbeing.

Participation

Your participation will involve partaking in this online survey which will require you to fill up some demographic questions as well as complete a set of questionnaires in one sitting. The whole process is expected to take approximately 20 minutes. Your identity and responses will be completely anonymous and non-identifiable.

The survey will take place at a time and venue convenient to you and in privacy via the online platform.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to, and you are free to withdraw from the project at any stage.

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with your employer as well as the University of Southern Queensland.

Expected Benefits

It is expected that this project will confirm that the newly developed Singapore Workplace Mental Wellbeing Scale can be used as a culturally meaningful screening tool. This will enhance our knowledge of workplace wellbeing specifically for the Singapore workplace. This will in turn assist in future development of workplace interventions aimed at improving employee outcomes.

The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project.

Risks

This project has minimal risk and is not expected to pose any significant distress. The minimal inconvenience of time imposition for completing this survey is also expected.

However if after participating in this survey you feel a need to seek support, please feel free to contact any of the followings:1) The Chief Investigator at 1) (65) 98253159, email: U1103824@umail.usq.edu.au; 2) SOS (24 hrs) on 1800 221 4444; 3) James Cook University Psychology Clinic at 149 Sims Dr, Singapore 387380 on 6377 6825; and finally, 5)your General Practitioner (GP) for additional support.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law.
Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project. Participants can request a copy of the final dissertation or parts of the dissertation from the researcher if they wish to look at the research results.

Consent to Participate

We would like to ask you to tick the box for consent to participate on the online platform to confirm your agreement to participate in this project.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Manager of Research Integrity and Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

<u>Statement of Consent</u>

By ticking the below, you are indicating that you:

- Have read and understood the information document regarding this project.

- Have had any questions answered to your satisfaction.

- Understand that if you have any additional questions you can contact the research team.

- Understand that you are free to withdraw at any time, without comment or penalty.

- Understand that you can contact the University of Southern Queensland Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.

- Are over 18 years of age.

- Agree to participate in the project.

APPENDIX M

Study 3 Quantitative Study Questionnaire

Demographic Variables

Please provide the following personal and job demographic details:

Gender: Male   / Female

Age: Under 21 / 21-30 / 31-40 / 41-50 / 51-60 / Over 60

Marital Status: Single / Married / Divorced / Widow

Place of Birth: Singapore / Others: Please specify

Length of time living in Singapore: Under 5 years / 5-10 years / Over 10 years

Ethnicity (Culture):   Chinese / Malay / Indian / Eurasian / Others:

Please specify

Religion: Buddhism / Christianity / Hinduism / Islam/

Taoism / Free Thinker / Others: Please specify

Highest level of education completed: "O" Level & Below / "A" Level / Poly / Bachelor's / Master's and above

Occupation Title: _____

Employment Level: Junior Staff / Senior Staff / Supervisor /

Manager / Business Owner / Others: Please specify

Employment Status: Full-Time / Part-Time / Casual

Length of Employment:
(In Current Workplace) Less than 1 year / 1 to 2 years / 3 to 5 years / 6 to 10 years / 11 to 15 years / 16 to 20 years / More than 20 years

Length of Time since Full-Time
Employment: Less than 1 year / 1 to 2 years / 3 to 5 years / 6 to 10 years / 11 to 15 years / 16 to 20 years / More than 20 years

(C)   Singapore Mental Wellbeing Measure (Short)

We would like to know how you have been feeling, thinking and behaving over the last 2 weeks. Also, Read the following sentences carefully and tell us how you feel the statements best describe you. Circle the number near the word that best describes you.

```
1----------------2----------------3----------------4----------------5
Strongly        Disagree   Neither agree    Agree      Strongly
Disagree                    or disagree                  Agree
```

1. I appreciate my own self-worth. (AS)   1----------2----------3----------4----------5

2. I believe that life is a continued development   1----------2----------3----------4----------5
of myself. (AS)

3. I am able to accept myself. (AS)   1----------2----------3----------4----------5

4. I am able to offer help to others. (SI)   1----------2----------3----------4----------5

5. I am able to make friends. (SI)   1----------2----------3----------4----------5

6. I am able to seek help when needed. (SI)   1----------2----------3----------4----------5

7. I am appreciative of life. (EI)   1----------2----------3----------4----------5

8. I am happy. (EI)   1----------2----------3----------4----------5

9. I am calm. (EI)   1----------2----------3----------4----------5

10 I am spiritual. (EI)   1----------2----------3----------4----------5

11. I am content. (EI)   1----------2----------3----------4----------5

12. I am able to accept reality (EI)   1----------2----------3----------4----------5

13. I am optimistic about the future. (RI)   1----------2----------3----------4----------5

14. I am able to cope with life s challenges. (RI) 1----------2----------3----------4----------5

15. I am able to make good decisions. (CE)   1----------2----------3----------4----------5

16 I am able to think clearly (CE)   1----------2----------3----------4----------5

(D)   Singapore Workplace Mental Wellbeing Measure

1. Support from boss

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	1	2	3	4	5
1. My boss gives me help when I need it.					
2. My boss provides the help I need to complete my required tasks.					
3. My boss helps me learn and improve.					
4. My boss genuinely cares about me.					
5. My boss encourages me when I have problems so that I can solve them.					
6. My boss is available to me when I ask for help.					
7. My boss is approachable.					
8. I really feel supported by my bosses.					
9. My boss helps me prevent and address burn-out.					
10. My boss is supportive of any on-the-job-training I attend.					
11. My boss shares important information.					

2. Fairness

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	1	2	3	4	5
1. Promotions are handled fairly.					
2. Procedures at your organisation have been **free of bias**.					
3. My organisation does a good job of linking rewards to job performance.					
4. Procedures at your organisation been **applied consistently**.					
5. Your outcome reflects what you have contributed to your organisation.					
6. Where I work, there are fair privileges.					
7. Communication and information flow between the departments is satisfactory.					
8. My efforts are adequately rewarded.					
9. My organisation communicates every new change that takes place.					
10. The orders received are consistent.					
11. The goals and results obtained are shared with the employees.					

3. Autonomy

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	1	2	3	4	5
1. My job allows me to make decisions about what methods I use to complete my work.					
2. My job allows me to decide on the order in which things are done on the job.					
3. My job allows me to make a lot of decisions on my own.					
4. My job allows me to decide on my own how to go about doing my work.					
5. My job gives me considerable opportunity for independence and freedom in how I do the work.					
6. My job allows me to plan how I do my work.					
7. My job provides me with significant autonomy in making decisions.					
8. My job allows me to make my own decisions about how to schedule my work.					
9. My job gives me a chance to use my personal initiative or judgment in carrying out the work.					

4. Meaningful Work

	Absolutely Untrue	Mostly Untrue	Neither True nor Untrue	Mostly True	Absolutely True
	1	2	3	4	5
1. The work I do serves a greater purpose.					
2. I know my work makes a positive difference in the world.					
3. My work helps me make sense of the world around me.					
4. I have discovered work that has a satisfying purpose.					
5. I have a good sense of what makes my job meaningful.					
6. I understand how my work contributes to my life's meaning					
7. My work helps me better understand myself.					
8. I have found a meaningful career.					
9. My work really makes no difference to the world.					
10. I view my work as contributing to my personal growth					

5. Co-worker relationship

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. I have **formed** strong friendships at work.					
2. I can confide in people at work.					
3. I socialize with colleagues outside of the workplace.					
4. I have **the opportunity** to develop close friendships at my workplace.					
5. Being able to see my colleagues is one reason why I look forward to my job.					
6. I have the opportunity to get to know my colleagues.					
7. I feel I can trust many colleagues a great deal.					
8. I am able to work with my colleagues to collectively solve problems.					
9. In my organization, I have the chance to talk informally and visit with others.					

6. Role Clarity

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. My job is well defined.					
2. Explanation is clear as what has to be done at work.					
3. The goals of my work are clearly defined					
4. I know what my work responsibilities are.					
5. I know exactly what is expected of me at work.					
6. The relationship between the job description and the tasks I carry out is good.					

7. Work-Life Balance

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. There is a good fit between my **personal life** and work life.					
2. There is a good fit between my **family life** and work life.					
3. There is a good fit between my job and my personal health.					
4. I am able to do my job and not burn out.					
5. I have sufficient emotional energy for the job.					

8. Learning and Professional Development

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. Training programs in our organization help employees to achieve the required skill for performing the job effectively.					
2. My organization offers sufficient opportunities to develop my own abilities.					
3. My organization provides resources to facilitate my performance.					
4. My work offers opportunities for improving knowledge and skills.					
5. The job has the right level of challenge.					
6. My organisation provides enough information to discharge my responsibilities.					

9. Person-organisation Fit

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. I am the right type of person for this type of work.					
2. I have the right skills and abilities for doing this job.					
3. My personality is a good match for this job.					
4. There is a good match between the requirements of this job and my skills.					

10. Employee Engagement

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	1	2	3	4	5
1. My organization is committed to my **personal safety** in the office.					
2. Help is available from my organization when I have a problem.					
3. Communication among employees is encouraged by my organisation.					
4. **Physical workspace** is satisfactory.					
5. My organisation has treated me with dignity.					
6. My organisation has treated me with respect.					
7. My job lets me use my skills and abilities.					

11. Employee Recognition

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. My boss values the ideas I put forward for improving the job.					
2. My boss values the order and accuracy in my work.					
3. In my job, innovative contributions are appreciated.					
4. When I do something well, my boss congratulates me.					
5. My work is adequately valued.					
6. My suggestions about the job are listened to.					
7. My efforts receive the recognition they deserve.					
8. The contribution of new ideas is encouraged.					

12. Flexi-Work Time

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. My organisation allows a flexi-time option.					
2. My work offers schedule flexibility.					
3. It is easy to take time off during my work to take care of personal and family matters.					

13. Accomplishment

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. My daily work activities give me a sense of direction and meaning.					
2. My job allows me to recraft my job to suit my strengths.					
3. My work offers challenges to advance my skills.					
4. My work brings a sense of satisfaction.					
5. In my work, I have a feeling of success and accomplishment.					
6. I feel capable and effective in my work on a day-to-day basis.					

14. Organisation Engagement

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1. My organization is complimentary of my accomplishments at work.					
2. My organisation cares about my general satisfaction at work.					
3. My organisation is willing to offer assistance to help me perform my job to the best of my ability.					
4. The organisation really cares about my wellbeing.					

15. The Individual Work Performance Measure

	Seldom 1	Sometimes 2	Regularly 3	Often 4	Always 5
1. I managed to plan my work so that I finished it on time.					
2. I kept in mind the work result I needed to achieve.					
3. I was able to set priorities.					
4. I was able to carry out my work efficiently.					
5. I managed my time well.					
6. On my own initiative, I started new task when my old tasks were completed.					
7. I took on challenging tasks when they were available.					
8. I worked on keeping my job-related knowledge up-to-date.					
9. I worked on keeping my work skills up-to-date.					
10. I came up with creative solutions for new problems.					
11. I took on extra responsibilities.					
12. I continually sought new challenges in my work.					
13. I actively participated in meetings and/or consultations.					
	Never 1	Seldom 2	Sometimes 3	Regularly 4	Often 5

14. I complained about minor work-related issues at work.					376
15. I made problems at work bigger than they were.					
16. I focused on the negative aspects of situation at work instead of the positive aspects.					
17. I talked to colleagues about the negative aspects of my work.					
18. I talked to people outside the organization about the negative aspects of my work.					

16. Copenhagen Burnout Measure

	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
1. How often do you feel tired?					
2. How often are you physically exhausted?					
3. How often are you emotionally exhausted?					
4. How often do you think: ''I can't take it anymore''?					
5. How often do you feel worn out?					
6. How often do you feel weak and susceptible to illness?					
7. Do you feel worn out at the end of the working day?					
8. Are you exhausted in the morning at the thought of another day at work?					
9. Do you feel that every working hour is tiring for you?					
10. Do you have enough energy for family and friends during leisure time? (Reverse scoring)					
11. Is your work emotionally exhausting?					
12. Does your work frustrate you?					

13. Do you feel burnt out because of your work?					378
14. Do you find it hard to work remotely at home?					
15. Does it drain your energy to work remotely at home?					
16. Do you find it frustrating to work remotely at home?					
17. Do you feel that you give more than you get back when you work remotely at home?					
18. Are you tired of working remotely at home?					
19. Do you sometimes wonder how long you will be able to continue working remotely at home?					

17. Job Satisfaction Measure

	Strongly Disagree	Disagree	Undecided	Agree	Strongly agree
	1	2	3	4	5
1. I feel fairly satisfied with my present job.					
2. Most days I am enthusiastic about my work					
3. Each day at work seems like it will never end (R).					
4. I find real enjoyment in my work.					
5. I consider my job to be rather unpleasant (R).					

18. The flourishing Scale

	Strongly Disagree	Disagree	Slightly Disagree	Mixed or neither agree nor disagree	Slightly agree	Agree	Strongly Agree
	1	2	3	4	5	6	7
1. I lead a purposeful and meaningful life.							
2. My social relationships are supportive and rewarding.							
3. I am engaged and interested in my daily activities.							
4. I actively contribute to the happiness and well-being of others.							
5. I am competent and capable in the activities that are important to me							
6. I am a good person and live a good life							
7. I am optimistic about my future							
8. People respect me							

19. DASS21

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you **over the past week**. There are no right or wrong answers. Do not spend too much time on any statement.
The rating scale is as follows:
0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree or a good part of time
3 Applied to me very much or most of the time

1 (s)	I found it hard to wind down	0	1	2	3
2 (a)	I was aware of dryness of my mouth	0	1	2	3
3 (d)	I couldn't seem to experience any positive feeling at all	0	1	2	3
4 (a)	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5 (d)	I found it difficult to work up the initiative to do things	0	1	2	3
6 (s)	I tended to over-react to situations	0	1	2	3
7 (a)	I experienced trembling (e.g. in the hands)	0	1	2	3
8 (s)	I felt that I was using a lot of nervous energy	0	1	2	3
9 (a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10 (d)	I felt that I had nothing to look forward to	0	1	2	3
11 (s)	I found myself getting agitated	0	1	2	3

12 (s)	I found it difficult to relax	0	1	2	3
13 (d)	I felt down-hearted and blue	0	1	2	3
14 (s)	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15 (a)	I felt I was close to panic	0	1	2	3
16 (d)	I was unable to become enthusiastic about anything	0	1	2	3
17 (d)	I felt I wasn't worth much as a person	0	1	2	3
18 (s)	I felt that I was rather touchy	0	1	2	3
19 (a)	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20 (a)	I felt scared without any good reason	0	1	2	3
21 (d)	I felt that life was meaningless	0	1	2	3

APPENDIX N

Study 3 Quantitative Study USQ Online Questionnaire

Assessing Mental Wellbeing within the Singapore Workplace

Assessing Mental Wellbeing within the Singapore Workplace

UNIVERSITY OF SOUTHERN QUEENSLAND
AUSTRALIA

Human Research Ethics Approval Number - H19REA253

Description

This project involves testing a conceptual model in predicting employee outcomes at the Singapore Workplace with the newly developed Singapore Workplace Mental Wellbeing Scale.

It is expected that there will be a positive relationship between workplace mental wellbeing and positive employee outcomes including work performance and social-psychological functioning and a negative relationship between workplace mental wellbeing and negative employee outcomes including burnout and symptoms of depression, anxiety and stress.

It is expected that the newly developed Singapore Workplace Mental Wellbeing Scale is relevant in the workplace context and can be utilized as a meaningful screening tool for mental wellbeing at the Singapore workplace. This will in turn inform future design and evaluate relevant interventions for employees to increase their mental wellbeing.

Participation

Your participation will involve partaking in this online survey which will require you to fill up some demographic questions as well as complete a set of questionnaires in one sitting. The whole process is expected to take approximately 20 minutes. Your identity and responses will be completely anonymous and non-identifiable.

The survey will take place at a time and venue convenient to you and in privacy via the online platform.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to, and you are free to withdraw from the project at any stage.

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with your employer as well as the University of Southern Queensland.

Expected Benefits

It is expected that this project will confirm that the newly developed Singapore Workplace Mental Wellbeing Scale can be used as a culturally meaningful screening tool. This will enhance our knowledge of workplace wellbeing specifically for the Singapore workplace. This will in turn assist in future development of workplace interventions aimed at improving employee outcomes.

The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project.

Risks

This project has minimal risk and is not expected to pose any significant distress. The minimal inconvenience of time imposition for completing this survey is also expected.

However if after participating in this survey you feel a need to seek support, please feel free to contact any of the followings:1) The Chief Investigator at 1) (65) 98253159, email: U1103824@umail.usq.edu.au; 2) SOS (24 hrs) on 1800 221 4444; 3) James Cook University Psychology Clinic at 149 Sims Dr, Singapore 387380 on 6377 6825; and finally, 5) your General Practitioner (GP) for additional support.

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law. Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. The data collected will be used for current and future analyses to address the various questions as set within the parameter of this research project. Participants can request a copy of the final dissertation or parts of the dissertation from the researcher if they wish to look at the research results.

Consent to Participate

We would like to ask you to tick the box for consent to participate on the online platform to confirm your agreement to participate in this project.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Manager of Research Integrity and Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Research Team Contact Details

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University of Southern Queensland

Consent to Participant

By clicking "submit", you are indicating that you:
☐ Have read and understood the information document regarding this project.
☐ Have had any questions answered to your satisfaction.
☐ Understand that if you have any additional questions you can contact the research team.
☐ Understand that you are free to withdraw at any time, without comment or penalty.
☐ Understand that you can contact the University of Southern Queensland Ethics Coordinator on +61 7 4631 1839 or email researchintegrity@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.
☐ Are over 18 years of age.
☐ Agree to participate in the project

Click on policy link below to consent to the survey before proceeding! ☐

Next

Assessing Mental Wellbeing within the Singapore Workplace   0%

Demographic

● What is your gender?

❶ Choose one of the following answers

○ Female

○ Male

[Previous]   [Next]

Assessing Mental Wellbeing within the Singapore Workplace   2%

Demographic

● What is your age?

❶ Choose one of the following answers

○ Under 21

○ 21-30

○ 31-40

○ 41-50

○ 51-60

○ Over 60

[Previous]   [Next]

Assessing Mental Wellbeing within the Singapore Workplace   5%

Demographic

● What is your marital status?

❶ Choose one of the following answers

○ Single

○ Married

○ Divorced

○ Widow

[Previous]   [Next]

Assessing Mental Wellbeing within the Singapore Workplace   7%

Demographic

☀ What is your place of birth?

ⓘ Choose one of the following answers

○ Singapore

○ Other: [   ]

[Previous]   [Next]

Assessing Mental Wellbeing within the Singapore Workplace   10%

Demographic

☀ What is your length of time living in Singapore?

ⓘ Choose one of the following answers

○ Under 5 years

○ 5-10 years

○ Over 10 years

[Previous]   [Next]

Assessing Mental Wellbeing within the Singapore Workplace   12%

Demographic

☀ what is your ethnicity (culture)?

ⓘ Choose one of the following answers

○ Chinese

○ Malay

○ Indian

○ Eurasian

○ Other: [   ]

[Previous]   [Next]

Demographic

● What is your religion?

❶ Choose one of the following answers

○ Buddhism

○ Christianity

○ Hinduism

○ Islam

○ Taoism

○ Free Thinker

○ Other: [   ]

[Previous]   [Next]

Demographic

● What is your highest level of education completed?

❶ Choose one of the following answers

○ "O" Level & Below

○ "A" Level

○ Poly

○ Bachelor's

○ Master's and above

[Previous]   [Next]

Demographic

● What is your occupation title?

[   ]

[Previous]   [Next]

USQ

Assessing Mental Wellbeing within the Singapore Workplace   22%

Demographic

● What is your employment level?

❶ Choose one of the following answers

○ Junior Staff

○ Senior Staff

○ Supervisor

○ Manager

○ Business Owner

○ Other: [   ]

[Previous]   [Next]

USQ

Assessing Mental Wellbeing within the Singapore Workplace   25%

Demographic

● What is your employment status?

❶ Choose one of the following answers

○ Full-Time

○ Part-Time

○ Casual

[Previous]   [Next]

USQ

Assessing Mental Wellbeing within the Singapore Workplace   27%

Demographic

● What is your length of employment (in current workplace)?

❶ Choose one of the following answers

○ Less than 1 year

○ 1 to 2 years

○ 3 to 5 years

○ 6 to 10 years

○ 11 to 15 years

○ 16 to 20 years

○ More than 20 years

[Previous]   [Next]

Demographic

* What is your total length of employment since full-time employment?

ⓘ Choose one of the following answers

- ○ Less than 1 year
- ○ 1 to 2 years
- ○ 3 to 5 years
- ○ 6 to 10 years
- ○ 11 to 15 years
- ○ 16 to 20 years
- ○ More than 20 years

Previous   Next

Singapore Mental Wellbeing Measure & Workplace Context Questions

The following questions are meant to be answered in relation to your workplace experience MAINLY. We would like to know how you have been feeling, thinking and behaving over the last 2 weeks. Please answer them as truthfully as possibly.

*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I appreciate my own self-worth. (SE)	○	○	○	○	○
I believe that life is a continued development of myself. (SE)	○	○	○	○	○
I am able to accept myself. (SE)	○	○	○	○	○
I am able to offer help to others. (SI)	○	○	○	○	○
I am able to make friends. (SI)	○	○	○	○	○
I am able to seek help when needed. (SI)	○	○	○	○	○
I am appreciative of life. (EI)	○	○	○	○	○
I am happy. (EI)	○	○	○	○	○
I am calm. (EI)	○	○	○	○	○
I am spiritual. (EI)	○	○	○	○	○

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Singapore Mental Wellbeing Measure & Workplace Context Questions

The following questions are meant to be answered in relation to your workplace experience MAINLY. We would like to know how you have been feeling, thinking and behaving over the last 2 weeks. Please answer them as truthfully as possibly.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am content. (EI)	○	○	○	○	○
I am able to accept reality. (EI)	○	○	○	○	○
I am optimistic about the future. (RI)	○	○	○	○	○
I am able to cope with life's challenges. (RI)	○	○	○	○	○
I am able to make good decisions. (CE)	○	○	○	○	○
I am able to think clearly. (CE)	○	○	○	○	○

Previous   Next

Support from boss

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My boss gives me help when I need it.	○	○	○	○	○
My boss provides the help I need to complete my required tasks.	○	○	○	○	○
My boss helps me learn and improve.	○	○	○	○	○
My boss genuinely cares about me.	○	○	○	○	○
My boss encourages me when I have problems so that I can solve them.	○	○	○	○	○
My boss is available to me when I ask for help.	○	○	○	○	○
My boss is approachable.	○	○	○	○	○
I really feel supported by my boss.	○	○	○	○	○
My boss helps me prevent and address burnout.	○	○	○	○	○
My boss is supportive of any on-the-job-training I attend.	○	○	○	○	○
My boss shares important information.	○	○	○	○	○

Previous   Next

USQ

Assessing Mental Wellbeing within the Singapore Workplace   40%

Fairness

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Promotions are handled fairly.	○	○	○	○	○
Procedures at my organization have been free of bias.	○	○	○	○	○
My organization does a good job of linking rewards to job performance.	○	○	○	○	○
Procedures at my organization have been applied consistently.	○	○	○	○	○
My outcome reflects what I have contributed to my organization.	○	○	○	○	○
Where I work, there are fair privileges.	○	○	○	○	○
Communication and information flow between the departments is satisfactory.	○	○	○	○	○
My efforts are adequately rewarded.	○	○	○	○	○
My organization communicates every new change that takes place.	○	○	○	○	○
The orders received are consistent.	○	○	○	○	○
The goals and results obtained are shared with the employees.	○	○	○	○	○

Previous   Next

USQ

Assessing Mental Wellbeing within the Singapore Workplace   42%

Autonomy

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My job allows me to make decisions about what methods I use to complete my work.	○	○	○	○	○
My job allows me to decide on the order in which things are done on the job.	○	○	○	○	○
My job allows me to make a lot of decisions on my own.	○	○	○	○	○
My job allows me to decide on my own how to go about doing my work.	○	○	○	○	○
My job gives me considerable opportunity for independence and freedom in how I do the work.	○	○	○	○	○
My job allows me to plan how I do my work.	○	○	○	○	○
My job provides me with significant autonomy in making decisions.	○	○	○	○	○
My job allows me to make my own decisions about how to schedule my work.	○	○	○	○	○
My job gives me a chance to use my personal initiative or judgment in carrying out the work.	○	○	○	○	○

Previous   Next

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Meaningful Work

	Absolutely Untrue	Mostly Untrue	Neither True nor Untrue	Mostly True	Absolutely True
The work I do serves a greater purpose.	○	○	○	○	○
I know my work makes a positive difference in the world.	○	○	○	○	○
My work helps me make sense of the world around me.	○	○	○	○	○
I have discovered work that has a satisfying purpose.	○	○	○	○	○
I have a good sense of what makes my job meaningful.	○	○	○	○	○
I understand how my work contributes to my life's meaning.	○	○	○	○	○
My work helps me better understand myself.	○	○	○	○	○
I have found a meaningful career.	○	○	○	○	○
My work really makes no difference to the world. (R)	○	○	○	○	○
I view my work as contributing to my personal growth.	○	○	○	○	○

Previous   Next

Co-worker Relationship

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have formed strong friendships at work.	○	○	○	○	○
I can confide in people at work.	○	○	○	○	○
I socialize with colleagues outside of the workplace.	○	○	○	○	○
I have the opportunity to develop close friendships at my workplace.	○	○	○	○	○
Being able to see my colleagues is one reason why I look forward to my job.	○	○	○	○	○
I have the opportunity to get to know my colleagues.	○	○	○	○	○
I feel I can trust many colleagues a great deal.	○	○	○	○	○
I am able to work with my colleagues to collectively solve problems.	○	○	○	○	○
In my organization, I have the chance to talk informally and visit with others.	○	○	○	○	○

Previous   Next

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Role Clarity

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My job is well defined.	○	○	○	○	○
It is clear as to what has to be done at work.	○	○	○	○	○
The goals of my work are clearly defined.	○	○	○	○	○
I know what my work responsibilities are.	○	○	○	○	○
I know exactly what is expected of me at work.	○	○	○	○	○
The relationship between the job description and the tasks I carry out is good.	○	○	○	○	○

Previous   Next

Work-Life Balance

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There is a good fit between my personal life and work life.	○	○	○	○	○
There is a good fit between my family life and work life.	○	○	○	○	○
There is a good fit between my job and my personal health.	○	○	○	○	○
I am able to do my job and not burnout.	○	○	○	○	○
I have sufficient emotional energy for the job.	○	○	○	○	○

Previous   Next

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VUSQ
Resume later   Exit and clear survey
Assessing Mental Wellbeing within the Singapore Workplace   55%

Learning and Professional Development

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Now tick the **Neutral** option for this item ONLY.	○	○	○	○	○
Training programs in our organization help employees to achieve the required skill for performing the job effectively.	○	○	○	○	○
My organization offers sufficient opportunities to develop my own abilities.	○	○	○	○	○
My organization provides resources to facilitate my performance.	○	○	○	○	○
My work offers opportunities for improving knowledge and skills.	○	○	○	○	○
The job has the right level of challenge.	○	○	○	○	○
My organization provides enough information to discharge my responsibilities.	○	○	○	○	○

Previous   Next

VUSQ
Resume later   Exit and clear survey
Assessing Mental Wellbeing within the Singapore Workplace   57%

Person-Organization Fit

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am the right type of person for this type of work.	○	○	○	○	○
I have the right skills and abilities for doing this job.	○	○	○	○	○
My personality is a good match for this job.	○	○	○	○	○
There is a good match between the requirements of this job and my skills.	○	○	○	○	○

Previous   Next

VUSQ
Resume later   Exit and clear survey
Assessing Mental Wellbeing within the Singapore Workplace   60%

Employee Engagement

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My organization is committed to my personal safety in the office.	○	○	○	○	○
Help is available from my organization when I have a problem.	○	○	○	○	○
Communication among employees is encouraged by my organization.	○	○	○	○	○
Physical workspace is satisfactory.	○	○	○	○	○
My organization has treated me with dignity.	○	○	○	○	○
My organization has treated me with respect.	○	○	○	○	○
My job lets me use my skills and abilities.	○	○	○	○	○

Previous   Next

Employee Recognition

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My boss values the ideas I put forward for improving the job.	○	○	○	○	○
My boss values the order and accuracy in my work.	○	○	○	○	○
In my job, innovative contributions are appreciated.	○	○	○	○	○
When I do something well, my boss congratulates me.	○	○	○	○	○
My work is adequately valued.	○	○	○	○	○
My suggestions about the job are listened to.	○	○	○	○	○
My efforts receive the recognition they deserve.	○	○	○	○	○
The contribution of new ideas is encouraged.	○	○	○	○	○

Previous   Next

Flextime Work

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My organization allows a flexi-time option.	○	○	○	○	○
My work offers schedule flexibility.	○	○	○	○	○
It is easy to take time off during my work to take care of personal and family matters.	○	○	○	○	○

Previous   Next

Accomplishment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My daily work activities give me a sense of direction and meaning.	○	○	○	○	○
My job allows me to recraft my job to suit my strengths.	○	○	○	○	○
My work offers challenges to advance my skills.	○	○	○	○	○
My work brings a sense of satisfaction.	○	○	○	○	○
In my work, I have a feeling of success and accomplishment.	○	○	○	○	○
I feel capable and effective in my work on a day-to-day basis.	○	○	○	○	○

Previous   Next

Organization Support

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My organization is complimentary of my accomplishments at work.	○	○	○	○	○
My organization cares about my general satisfaction at work.	○	○	○	○	○
My organization is willing to offer assistance to help me perform my job to the best of my ability.	○	○	○	○	○
The organization really cares about my wellbeing.	○	○	○	○	○
Now tick the **Disagree** option for this item ONLY.	○	○	○	○	○

Previous   Next

Individual Work Performance

	Seldom	Sometimes	Regularly	Often	Always
I managed to plan my work so that I finished it on time.	○	○	○	○	○
I kept in mind the work result I needed to achieve.	○	○	○	○	○
I was able to set priorities.	○	○	○	○	○
I was able to carry out my work efficiently.	○	○	○	○	○
I managed my time well.	○	○	○	○	○

Previous   Next

Individual Work Performance

	Seldom	Sometimes	Regularly	Often	Always
On my own initiative, I started new task when my old tasks were completed.	○	○	○	○	○
I took on challenging tasks when they were available.	○	○	○	○	○
I worked on keeping my job-related knowledge up-to-date.	○	○	○	○	○
I worked on keeping my work skills up-to-date.	○	○	○	○	○
I came up with creative solutions for new problems.	○	○	○	○	○
I took on extra responsibilities.	○	○	○	○	○
I continually sought new challenges in my work.	○	○	○	○	○
I actively participated in meetings and/or consultations.	○	○	○	○	○

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Individual Work Performance

	Never	Seldom	Sometimes	Regularly	Often
I complained about minor work-related issues at work.	○	○	○	○	○
I made problems at work bigger than they were.	○	○	○	○	○
I focused on the negative aspects of situation at work instead of the positive aspects.	○	○	○	○	○
I talked to colleagues about the negative aspects of my work.	○	○	○	○	○
I talked to people outside the organization about the negative aspects of my work.	○	○	○	○	○

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Burnout

	Never	Seldom	Sometimes	Often	Always
Do you feel worn out at the end of the working day?	○	○	○	○	○
Are you exhausted in the morning at the thought of another day at work?	○	○	○	○	○
Do you feel that every working hour is tiring for you?	○	○	○	○	○
Do you have enough energy for family and friends during leisure time? (R)	○	○	○	○	○
Is your work emotionally exhausting?	○	○	○	○	○
Does your work frustrate you?	○	○	○	○	○
Do you feel burnt out because of your work?	○	○	○	○	○

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Burnout

	Never	Seldom	Sometimes	Often	Always
Do you find it hard to work remotely at home?	○	○	○	○	○
Does it drain your energy to work remotely at home?	○	○	○	○	○
Do you find it frustrating to work remotely at home?	○	○	○	○	○
Do you feel that you give more than you get back when you work remotely at home?	○	○	○	○	○
Are you tired of working remotely at home?	○	○	○	○	○
Do you sometimes wonder how long you will be able to continue working remotely at home?	○	○	○	○	○

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Burnout

	Never	Seldom	Sometimes	Often	Always
How often do you feel tired?	○	○	○	○	○
How often are you physically exhausted?	○	○	○	○	○
How often are you emotionally exhausted?	○	○	○	○	○
How often do you think: "I can't take it anymore"?	○	○	○	○	○
How often do you feel worn out?	○	○	○	○	○
How often do you feel weak and susceptible to illness?	○	○	○	○	○

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Job Satisfaction

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel fairly satisfied with my present job.	○	○	○	○	○
Most days I am enthusiastic about my work.	○	○	○	○	○
Each day at work seems like it will never end. (R)	○	○	○	○	○
I find real enjoyment in my work.	○	○	○	○	○
I consider my job to be rather unpleasant. (R)	○	○	○	○	○

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Flourishing

	Strongly disagree	Disagree	Slightly disagree	Neither agree or disagree	Slightly agree	Agree	Strongly agree
I lead a purposeful and meaningful life.	○	○	○	○	○	○	○
My social relationships are supportive and rewarding.	○	○	○	○	○	○	○
I am engaged and interested in my daily activities.	○	○	○	○	○	○	○
I actively contribute to the happiness and well-being of others.	○	○	○	○	○	○	○
I am competent and capable in the activities that are important to me.	○	○	○	○	○	○	○
I am a good person and live a good life.	○	○	○	○	○	○	○
I am optimistic about my future.	○	○	○	○	○	○	○
People respect me.	○	○	○	○	○	○	○

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USQ

DASS21

Please read each statement and choose a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

0 = Did not apply to me at all

1 = Applied to me to some degree, or some of the time

2 = Applied to me to a considerable degree or a good part of time

3 = Applied to me very much or most of the time

	0	1	2	3
I found it hard to wind down. (S)	○	○	○	○
I was aware of dryness of my mouth. (A)	○	○	○	○
I couldn't seem to experience any positive feeling at all. (D)	○	○	○	○
I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion). (A)	○	○	○	○
I found it difficult to work up the initiative to do things. (D)	○	○	○	○
I tended to over-react to situations. (S)	○	○	○	○
I experienced trembling (e.g. in the hands). (A)	○	○	○	○

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USQ

DASS21

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	0	1	2	3
I felt that I was using a lot of nervous energy. (A)	○	○	○	○
I was worried about situations in which I might panic and make a fool of myself. (A)	○	○	○	○
I felt that I had nothing to look forward to. (D)	○	○	○	○
I found myself getting agitated. (S)	○	○	○	○
I found it difficult to relax. (S)	○	○	○	○
I felt down-hearted and blue. (D)	○	○	○	○
I was intolerant of anything that kept me from getting on with what I was doing. (S)	○	○	○	○

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USQ

DASS21

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	0	1	2	3
I felt I was close to panic. (A)	○	○	○	○
I was unable to become enthusiastic about anything. (D)	○	○	○	○
I felt I wasn't worth much as a person. (D)	○	○	○	○
I felt that I was rather touchy. (S)	○	○	○	○
I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat). (A)	○	○	○	○
I felt scared without any good reason. (A)	○	○	○	○
I felt that life was meaningless. (D)	○	○	○	○

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