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Individual Differences in Age and Self-Efficacy in the Unemployed

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Abstract

This study investigated the role of age in influencing the relationships among general self-efficacy, proactive attitude, and proactive coping in unemployed people. The sample consisted of 55 male and 49 female unemployed Australians participating in Job Search Training courses. They completed the General Self-Efficacy (GSE) Scale, the Proactive Attitude (PA) Scale, and the Proactive Coping (PC) Scale. The GSE, PA, and PC scores were found to be correlated, and a moderating effect for age was found on the relationship between PA and GSE. Regression analysis indicated that the moderation process could be explained by a mediating effect of PC. The results are discussed in terms of social learning theory and implications are drawn regarding customisation of training programs for the unemployed.

Unemployment is a pervasive and ongoing societal issue which has well-documented and demonstrable negative consequences. When compared with employed people, unemployed people have higher levels of depressive affect (Feather & Davenport, 1981; Feather & O'Brien, 1986), lower levels of self-esteem (Muller, Hicks, & Winocur, 1993), and higher incidences of psychological distress (Banks & Jackson, 1982; Henwood & Miles, 1987). Winefield et al. (2002) suggested that many negative psychological outcomes of unemployment are due to the influence of the

Western work ethic which promotes the perception of a person being a

aversive, the impact on individuals' psychological well-being is not

uniform, neither is it universal.

failure if unemployed. While the experience of unemployment is generally

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Research indicates that individual differences in personality among the unemployed significantly affect the level of psychological distress they will experience (Creed, Machin, & Hicks, 1999; Creed, Muller, & Machin, 2001; Diener, Suh, Lucas, & Smith, 1999). Creed et al. (2001) found that 14 percent of the variance of psychological distress in unemployed people was attributable to the personality factor of Neuroticism, and earlier research by Larsen and Ketelaar (1991) indicated a predictive link between Extraversion and positive psychological outcomes. Whilst there have been several studies of unemployment and mental health (Creed, 1995; Creed et al., 1999; Creed & Macintyre, 2001; Muller et al., 1993; Murphy & Athanasou, 1999), unemployment and self efficacy (Nesdale & Pinter, 2000), and personality and coping (Park, 1998; Waters, 2000), this paper will focus on individual differences and self-efficacy within the unemployed population.

Idiosyncratic reactions to the experience of unemployment have been associated with a variety of individual difference variables, one of which is age (Jackson & Warr, 1984; Warr & Jackson, 1984). While considerable research has appropriately focused on the critical issues related to youth unemployment, the changes associated with globalization, redundancy, and technological development have meant that unemployment is also becoming an increasingly prevalent issue for older people. Agerelated differences in the experience of unemployment need to be identified and explored in order to avoid a "one size fits all" approach to providing relevant and effective assistance to the unemployed.

Gurney (1980) noted that for young people, employment provides a critical gateway to other transitions. Therefore, the effect of unemployment can be to frustrate these transitions due to the significance placed on attaining an independent occupation or employment status as a means of achieving adult identity and status. Winefield and Tiggemann (1989) similarly defined the problem for school leavers as lying in the frustration of expectations and failure to gain economic power. Even with the current high rates of youth unemployment, these observations continue to hold true, with

the normative experience for young people being involvement in occupations or in study or vocational training directed towards future occupational goals. Hannan, ORiain, and Whelan (1997) observed that the types of role pressures experienced by unemployed youth were different from the pressures experienced by those who were married and middle aged. Whereas young people's distress was associated with their frustrated transition into adulthood and independence, older people had additional financial strain and concerns with loss of their role as provider.

Kulik (2001) found age differences in physical health outcomes for unemployed people, with middle-aged persons reporting poorer health than younger groups. Kulik suggested that these reported differences may be due to feelings of discouragement rather to actual health conditions. Young people were in fact able to perceive some advantages to being unemployed, such as having more time to devote to themselves. Despite these differences, Kulik found no age differences in the idea of the centrality of work.

Proactive Coping, Proactive Attitude, and Self-Efficacy

Coping can be defined as the continual changing of both behavioural and cognitive efforts to manage the demands of internal and external transactions (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). In a review of the "coping with unemployment" literature, Waters (2000) commented on the failure of early trait-based models of coping to take into account the variety of coping responses an individual may use

during unemployment. These static conceptualisations of coping contrasted with the dynamic definition provided by Folkman et al. (1986) and did not allow for the changing nature of coping responses over time and various situations. Results from a study conducted by Turner, Kessler, and House (1991) indicated that individuals could take a proactive approach to reducing the negative aspects of unemployment by adopting cognitive coping strategies. Proactive individuals regard the journey of their life as being determined by individual factors, not external ones, and take responsibility for changing their situation. Similarly, Schaufeli (1997) found that his sample of unemployed college graduates behaved in a proactive manner, being active agents instead of passive victims, which consequently reduced the psychological impacts of unemployment. Incorporating these ideas, Waters developed a new model which included reciprocal relationships between cognitive appraisal of stressors and the resulting coping efforts employed to deal with these stressors.

While individuals adopt a number of coping strategies to deal with difficult situations, not all are equally effective in the long term. Some coping behaviours, such as avoidance or substance use, focus on managing and relieving the affective responses to the situation. Evidence suggests that those who use these emotion-focused strategies are more likely to continue reporting negative symptoms than those who adopt a more instrumental problem-focused approach (Canny, 1996; Endler, Kantor, & Parker, 1994).

One such set of instrumental activities is defined by Greenglass, Schwarzer, Jakubiec, Fiksenbaum, and Taubert (1999) as proactive coping (PC). According to Greenglass et al., PC is multi-faceted, having both behavioural and cognitive dimensions, and occurring simultaneously in various domains of human thought, emotional, and action systems. It includes a number of strategies for setting and pursuing goals. These include initiation acknowledging and utilising information and resources; reflection envisioning success and anticipating future problems; planning – deciding how to deal with problems; and prevention - taking preventive steps in order to avoid disaster. Schwarzer (1999) described people using PC as being both autonomous and self determined, in reference to both setting and realising goals. It would seem likely that variations in PC would significantly impact on the way individuals react to the experience of unemployment.

Another construct that will be examined in this study is proactive attitude (PA). Although acknowledging that PA is related to self-efficacy and other individual difference variables such as locus of control and selfdetermination, Schwarzer (1999) asserts that PA is a conceptually distinct psychological construct. He defines PA as a belief in the existence and viability of a range of options to make both self and environmental improvements. PA facilitates motivation and action, and is expressed through resources, responsibility, values, and vision.

Individuals with a proactive attitude, according to Schwarzer (1999), believe that sufficient resources exist, external resources being goods and services, and internal resources characterised as intelligence, courage, and strength. Additionally, proactive individuals take responsibility for their own growth, responsibility for past events, and, significantly for job-seeking individuals, responsibility for making future events happen. They focus on solutions for problems regardless of attribution (Schwarzer, 1999), and being values-driven, they internalise and are guided by their personal, yet socially mediated (but not necessarily socially acceptable) values. Having a vision, Schwarzer's proactive individuals try to create meaning in life by striving for ambitious goals, and set goals in line with their vision.

A related concept is generalised self-efficacy (GSE), which Schwarzer (1993) defined as people's optimistic belief in their ability to cope with a variety of stressful or challenging situations. Efficacious people are more able to persevere in the face of challenges because they believe they can change situations and behaviours to produce more positive outcomes (Schieman & Campbell, 2001). The concept of self-efficacy was enunciated and refined by Bandura (1977), who observed that people who perceived themselves as powerless to exert influence over situations tended to be overwhelmed by apprehension, apathy, and despair. Bandura suggested that such negative perceptions could be changed, noting that all behaviours, apart from a few basic reflexes, had to be learned, either directly or through vicarious experience and observation. His social cognitive theory posited that through a process of differential reinforcement, successful behaviours could be learnt and unsuccessful behaviours unlearnt.

The concept of self-efficacy can be effectively applied to the experience of unemployment, both for adolescents having difficulty entering the workforce, and for adults whose employment has been interrupted or curtailed. Bandura (1997) noted that efficacy is most likely to be negatively evaluated at life transition points, as people are faced with adapting to new situations and having to learn new behaviours. He asserted that loss of agency is inherent in the transition process of adolescence, as repertoires of behaviours established in childhood are superseded by more adult activities. The imposition of additional negative self-evaluations associated with unemployment can be particularly debilitating at this life stage. Older workers facing job transitions are presented with another occasion for selfassessment. Success in managing these transitions will lead to increased self-efficacy (Bandura, 1997), while experiences such as job loss are likely to weaken efficacy beliefs. Effecting positive changes in efficacy beliefs of unemployed people has been shown to influence outcomes, such as increased job-search activity (van Ryn & Vinokur, 1992). This intensification of effort was also associated with improved employment prospects (Eden & Aviram, 1993). Schwarzer (1997) promotes the conceptualisation of self-efficacy in a general sense, that is, as a broad and

stable sense of personal agency, and one that contrasts with other constructs of optimism, by explicitly referring to it as a sense of personal competence to deal with challenging situations.

This study examined the constructs of proactive coping, proactive attitude, and generalised self-efficacy as measured in a sample of unemployed people. Generalised self-efficacy is a desirable attribute for this specific group who are faced with the aversive consequences and situational disadvantages associated with unemployment, and as such, GSE was presented as an outcome variable. Schmitz and Schwarzer (1999) and Taubert (1999) found that while PC, PA, and GSE are conceptually distinct constructs, they are related. Therefore, the first hypothesis of this study was that significant relationships among PC, PA, and GSE would be evidenced for this sample.

The impact of age was also investigated. Jackson and Warr (1984) found that age had a moderating effect on psychological outcomes of unemployment, with no relationship between length of time unemployed and poor psychological health for young jobseekers or those nearing the end of their working life, but a significant relationship for those who experienced unemployment during middle age. These age variations were found to be related to the situational factors, financial strain and desire for a job. Hannan et al. (1997) also noted that the pressures of unemployment were different for different age groups. The focus of this study was on the

internal personal characteristics associated with age-related differences rather than external situational factors, and as such, particular attention was paid to the two attitudinal factors: PA, which is the belief in the existence of adequate internal and external resources to effect positive change (Schwarzer, 1999), and GSE, the belief in one's ability to cope and persevere in the face of challenges (Schwarzer & Jerusalem, 2000). While PA and GSE may be seen as reciprocal constructs, this study focused on one direction of the relationship, that is, the pathway by which PA acts as an antecedent to GSE. People first need to know they have adequate resources to face life challenges, before they can be confident of using those resources to effect changes.

Bandura's (1997) social learning theory suggests that the successful negotiation of life challenges is likely to enhance efficacy beliefs as people get older. The more opportunities that people have to effectively use resources, either personal or environmental, then the more likely they are to believe they will be able to successfully negotiate future challenges. It was therefore hypothesised that age would have a moderating effect on the relationships between PA and GSE, with PA being more strongly related to GSE for older jobseekers than for younger jobseekers.

Method

Participants

Details from 104 unemployed people were collected about age; gender; city; length of time since last work; and type, hours, and duration of most recent occupation. The sample consisted of 55 males and 49 females, aged from 18 to 57 (M = 30.80 yrs, SD = 12.04 yrs), attending Job Search Training courses. The average length of time since working full time was almost 16 months, and 24 had never worked full time. Three participants had never been employed at all.

Materials

Proactive Coping Scale (PC; Greenglass et al., 1999).

This 14-item scale measures ability to commit to and engage in the autonomous and self directed setting and attainment of challenging goals (e.g., "I visualise my dreams and try to achieve them"). A 4-point rating scale was used. Taubert (1999) reported relatively high alpha reliability coefficients of .85 (Canadian sample) and .80 (Polish Canadian sample). Overall, Taubert found the scale to have factorial validity, good construct validity, and high external validity.

Proactive Attitude Scale (PA; Schwarzer, 1999).

Consisting of eight items, the PA scale evaluates a person's belief in various facets such as resourcefulness, responsibility, values, and vision (e.g., "I feel driven by my personal values"). Participants were asked to rate items on a 4-point scale, with possible total scores ranging from 8 to 32. Schmitz and Schwarzer (1999) found the scale's internal consistency to be .75. Although being conceptually distinct, an association was also found between PA and GSE (r = .56).

General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 2000).

The GSE consists of 10 items relating to people's feelings of mastery in a variety of situations (e.g., "I am certain that I can accomplish my goals"). Participants were again asked to rate their agreement with each of the statements on a 4-point scale, yielding a total score range of 10 to 40. Research has shown that the GSE is a reliable scale which has convergent and discriminant validity, shown by a negative correlation with anxiety and depression and positive correlation with self esteem and optimism (Schwarzer, 1993; Schwarzer, Babler, Kwiatek, Schroder, & Zhang, 1997; Schwarzer & Born, 1997). Alpha reliability coefficients for the GSE scale were satisfactory, ranging from .75 to .90.

Procedure

Trainers in Toowoomba and Cairns administered the surveys from July to September, 2002. Clients were assured of confidentiality and that participation was voluntary. The total number of clients trained at these two offices during this period was 109, and 104 surveys were returned, representing an overall response rate of approximately 95%.

Results

Data Screening

Analyses were performed using the SPSS Version 11.0 for Windows. Data screening revealed no outliers, but there was one case with significant amounts of missing data. This case was deleted. All other data were considered suitable for further analysis.

Two new variables were computed based on the employment/unemployment questions. The first, currently working, was a dichotomous variable differentiating those who were currently working (2) and those who were not (1). A second variable, employment status, was computed based on whether people had previously ever had full time or part time employment. A value of 1 indicated that they had never worked full time, part time, or as a casual. A value of 2 indicated that they had previously worked part time or as a casual, but not full time, and a value of 3 indicated that they had previously worked full time.

Descriptive Statistics

Reliability coefficients were calculated for the GSE, PA, and PC scales. These results are presented with means and standard deviations in Table 1. Satisfactory alpha coefficients were obtained for the GSE (.82), PA (.78), and PC (.85), which supported those found by Schwarzer (1997), Schmitz and Schwarzer (1999), and Taubert (1999) respectively.

Insert Table 1 about here

The correlation matrix showing relationships between GSE, PA, PC, and the demographic variables is presented in Table 2.

Insert Table 2 about here

Significant correlations among the three scales of GSE, PA, and PC indicated strong positive relationships, GSE/PA (r = .57, p < .01), GSE/PC (r = .70, p < .01), and PA/PC (r = .73, p < .01). Previous research (Schmitz & Schwarzer, 1999; Taubert, 1999) found similar associations among the three factors and noted the importance of recognising that these scales represent theoretically distinct facets of active coping. The dimensionality of the scales was not assessed in this study, as the relatively small sample size (104) precluded factor analysis of the 32 items defining the constructs.

Significant correlations were also found between employment status and PA (r = .21, p < .05), and employment status and age (r = .43, p < .01), which indicates that a proactive attitude is associated with having been previously employed, and that those who are older are more likely to have been employed on a full time basis than younger people.

Moderating and Mediating Effects on GSE

Baron and Kenny (1986) described the different ways in which moderator and mediator variables account for differences in people's behaviour. A moderator variable affects the direction and/or strength of the relation between an independent variable (IV) and a dependent variable (DV), and is preferably not correlated with either. Mediator variables account for the relation between the IV and the DV, and explain the underlying process. Complete mediation occurs when the relation between the IV and DV becomes zero, illustrating that the effect of the IV on the DV is mediated through the third variable. The relationship is partially mediated if it is diminished, but remains significant, when the third variable is controlled (Baron & Kenny).

Previous research (Hannan et al., 1997; Jackson & Warr, 1984) had indicated that age had a moderating relationship on psychological outcomes. While for these data, age was not significantly correlated with PA or GSE, thus meeting one of the desirable criteria for a moderator (Baron & Kenny, 1986), a link with age was evidenced through the significant correlation of age with employment status (r = .43, p < .01), and between employment status and PA (r = .21, p < .05).

If age has a moderating role in the PA/GSE relationship, this could be demonstrated by the existence of a significant interaction effect of age and PA (Baron & Kenny, 1986). The moderation effect can also be

demonstrated more simply by showing that the correlation between PA and GSE is different across age groups. Before using the interaction method, this more simple approach was taken. The sample was divided into older and younger participants using a median split method and separate correlations were carried out for both groups. In each case, PA and GSE were significantly correlated, but the relationship for the younger group (r = .41,p < .01), was weaker than that for the older group (r = .73, p < .01). The difference between these two correlations was tested using Fisher's z, and proved to be significant (z = 2.39, p < .05).

The apparent moderation effect of age was then also tested by the hierarchical regression technique in which the interaction term, consisting of the product of age and PA deviation scores, was entered at the second step of the regression, following the entry of the first order variables at step one. Deviation rather than raw scores were used for this analysis to avoid multicollinearity problems, and were derived by finding the difference between each score and the group mean (Aiken & West, 1991). The inclusion of the interaction term did significantly add to the prediction of GSE ($\Delta R^2 = .05$, p < .01), indicating the presence of a moderation effect, that is, that the influence of PA on GSE varied significantly according to the age of the respondents (See Figure 1).

Insert Figure 1 about here

In order to explain the process underlying this age-patterned difference, further analyses were conducted to examine for variables that might act as mediators in the relationship between PA and GSE. A possible candidate was the variable, employment status. It is likely that past experiences in obtaining full time work would have an impact on the translation of an attitude about viable options (PA) into efficacy beliefs about an individual's ability to achieve positive employment outcomes. Inspection of the correlation data supported this possible link. Another variable to be considered was PC. Proactive coping is goal-oriented, purposeful behaviour, and as such, PC is also likely to impact on the relationship between people's attitudes about opportunity and their beliefs of personal agency. These two possible mediation effects were tested by first establishing that PA was a significant predictor of GSE, and then by seeing if this relationship was reduced to insignificance by the inclusion of the proposed mediators into the regression (Baron & Kenny, 1986). As step one, GSE was regressed onto PA, and the relationship was found to be significant ($\beta = .57, p < .01$).

In order to test for a mediating effect of employment status, GSE was then simultaneously regressed onto PA and employment status. No mediating effect was found, the relationship between PA and GSE remaining significant ($\beta = .57$, p < .001). However, when testing with PC, by simultaneously regressing GSE onto PA and PC, the link between PA

and GSE was in fact reduced to insignificance ($\beta = .11$, p > .05), providing evidence for a complete mediating effect for PC. The mediating effect was further tested and confirmed using the Sobel test (p < .001; Preacher & Leonardelli, 2001). The two mediation models tested above are summarised in Figure 2.

Insert Figure 2 about here

It was acknowledged in the introduction that the relationships among these variables may be bidirectional, and alternative models may also be proposed to define their interrelationship. A number of competing models were tested using the methods described above, using PA as a mediator between PC and GSE, and using PC as an outcome rather than an antecedent variable. None of these alternative models demonstrated a significant mediation effect, thus providing additional support for the hypothesised causal direction of the model presented in Figure 2(d).

Discussion

Strong correlations were found between the three psychological variables, proactive coping, proactive attitude, and general self-efficacy, providing support for hypothesis one. The results also supported hypothesis two by revealing that age exerted a moderating influence on the relationship between proactive attitude and general self-efficacy. This accorded with

findings in earlier unemployment research (Jackson & Warr, 1984) of moderating effects for age. Jackson and Warr suggested that this moderating relationship was due to financial factors such as poverty and financial stress. Hannan et al. (1997) similarly reported fewer financial strains for unemployed young people than older unemployed people. While acknowledging that these situational influences undoubtedly impose strain on those who are unemployed, this current project's focus was on the dispositional influences of the unemployment experience, and looked for ways in which these factors may also account for some of the differences in outcomes and experiences across age levels.

A significant finding of this study was that PA was more highly correlated with GSE for older unemployed people than it was for their younger counterparts. That is, while older people who adhere to beliefs in a potential for change, and who acknowledge responsibility for their own progress and development, are able to translate these ideas into beliefs about their own efficacy to make such changes, younger people are less able to make that connection. In order to understand the way in which this age variation occurred, it was necessary to search for mediating variables which could be investigated as process variables. Theory suggested two possible variables – employment status and PC. It seemed plausible, and consistent with social learning theory, that employment status could impact on GSE. This variable indicated whether a person had been employed full-time, parttime only, or not at all. It could be expected that the link between PA and GSE might be higher for those who had previously been successful in obtaining full-time work than for those who had not. While intuitively appealing, this relationship was not demonstrated for these data.

The second variable to be investigated as a possible mediator between PA and GSE was the behavioural concept, proactive coping. In this case, PC was found to mediate the influence exerted by PA on GSE. Greenglass et al. (1999) defined PC as self-starting behaviour. While PA is important for achieving life goals, and has implications for motivation and action (Schwarzer, 1999), it is predominantly through the actual instigation of and persistence with appropriate actions that self-efficacy is achieved. Bandura (1997) noted that the success with which future challenges are managed depends largely on personal efficacy built upon the experience of previous success. It is through doing, that we know that we can do. Bandura further stressed this point by stating that being able to achieve desired goals or prevent undesired outcomes provided people with the incentive they needed to take further control over their lives.

The fact that the cognitive attribute of PA is more readily converted into GSE for older people than younger ones can then be explained by the role of the behavioural construct, PC. Lifelong learning occurs as individuals negotiate and capitalise upon the various crises and opportunities that come their way. With this learning come opportunities for self-appraisal and the development of self-efficacious beliefs. Bandura (1997) describes people as being both producers and products of social systems, as they engage in "agentic transactions" (p. 6) of adaptation and change to deal with ongoing life circumstances. Through this engagement with social systems, many skills, including those described by Taubert (1999) as proactive coping skills, are gained and refined over the life span.

Results of this study can be used in the development of training and development courses for the unemployed. With increasing funding pressures on organisations providing assistance to the unemployed, it becomes increasingly important to target and customise assistance in order to maximise results. Unemployed persons with low self-efficacy will benefit from interventions in the form of cognitive reappraisals and behavioural modifications that increase feelings of personal control and self efficacy, as well as suitable coping strategies, in order to increase their well-being during unemployment.

GSE is a highly relevant construct to be addressed when providing assistance to the unemployed. In Australia, cognitive-behaviour based courses for unemployed people have been used to good effect and benefits accrued have been shown to be enduring (Creed, 1995; Creed et al., 1999). Studies by van Ryn and Amiran (1992) and Eden and Aviram (1993) also demonstrated the centrality of the role of GSE in hastening the process of employment. Eden and Aviram observed that increases in GSE as a result of training were associated with intensified job-seeking efforts and therefore increased success in obtaining work.

However, it is important to recognise that GSE training is not a panacea for all unemployed people. In fact, Eden and Aviram (1993) included the caveat that GSE training was wasted on those who already had high efficacy levels. Results of this study would suggest that it is also important to adapt courses according to the age and experience of participants. As age differences in relating attitude to efficacy is attributable to differences in behavioural proactive coping strategies, the focus of courses should be different for different age levels. For older people, it is important for them to recognise and utilise the skills they have already acquired through their previous experiences of job-seeking and employment. For younger people it will be beneficial to provide skills training in those particular coping strategies that are likely to provide them with the outcomes they desire.

There are some limitations of the study associated with the types of measures used. All the data are based on self-reports, and as such are susceptible to problems of common method error variance. The strength of the study is also limited by the lack of indicators of actual behaviours. It is suggested that measures of job search activities, including number of contacts made, or number of job applications submitted be included in future studies. These data, while still self-report, would reduce the impact of error variance by including a more objective measure of some specific behaviours.

This study has focused on one individual difference variable, age, and one set of psychological constructs – proactive attitude, proactive coping, and general self-efficacy – and their influence on the experience of unemployment. While the results are useful in terms of adding value to training programs and personal development interventions with young people, it is acknowledged that there are a number of other factors which could be productively explored in order to help people further cope with unemployment and/or successfully obtain employment. Future research in this area will continue to identify both situational and dispositional individual difference variables which can influence people's reactions to the experience of unemployment. Accurate identification of these factors has several important implications, not only in terms of ascertaining those who are more likely to benefit from training, but also for the development, content, design, and facilitation of training interventions. Rather than relying on the idiosyncratic ability or personal ideologies of the trainers or their institutions, providers can explicitly modify their training to meet known individual needs.

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Table 1 Means, Standard Deviations, and Alpha Coefficients for the General Self-Efficacy, Proactive Attitude, and Proactive Coping scales (N = 103)

Scale	No. of items	М	SD	α	<i>M</i> *	SD*	α*
General Self-Efficacy	10	31.13	3.96	.82	30.06	4.75	.90
Proactive Attitude	8	25.51	3.75	.78	25.17	5.86	.75
Proactive Coping	14	41.73	6.17	.85	42.61	6.40	.85

Note. *Descriptive data as provided by Schwarzer (1997) for GSE; by

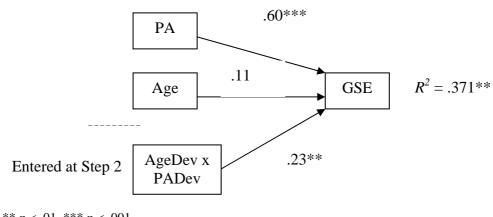
Schmitz and Schwarzer (1999) for PA; and by Taubert (1999) for PC.

Table 2 Correlational Data for Demographic Variables, the GSE, PA, and PC scales (N = 103)

	Age	Sex	EmS	C/W	EdL	GSE	PA	PC
Age	1.00							
Sex	26**	1.00						
EmS	.43**	11	1.00					
C/W	07	.06	17	1.00				
EdL	.24*	.04	09	.27**	1.00			
GSE	.11	06	.10	.13	.14	1.00		
PA	.18	.04	.21*	.10	.09	.57**	1.00	
PC	.13	03	.17	.04	.03	.70**	.73**	1.00

Note. EmS = employment status, C/W = currently working, EdL = highest level of education, GSE = General Self-Efficacy, PA = Proactive Attitude, PC = Proactive Coping

^{*} *p* < .05, ** *p* < .01.



** *p* < .01, *** *p* < .001

Figure 1. Model showing Beta coefficients from test of the moderating effect of age on the PA/GSE relationship.

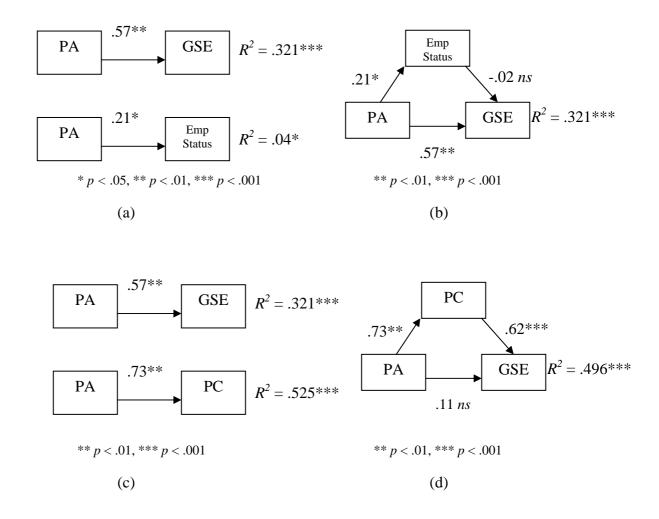


Figure 2. (a) Model showing Beta coefficients from the regression of Emp Status and GSE on PA.

- (b) No mediation effect for Emp Status.
- (c) Model showing Beta coefficients from the regression of PC and GSE on PA.
- (d) Mediated and direct effects of PA on GSE.