



Connecting with close friends online: A qualitative analysis of young adults' perceptions of online and offline social interactions with friends

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ABSTRACT

Despite recognition that the internet is a critical context for friendships among youth, little is known about whether young adults perceive differences in their interactions with close friends across online and offline (i.e., face-to-face) settings. The current study sought to address this gap by qualitatively investigating young adults' perceptions of how their social interactions with friends differ across online and offline contexts. A large sample of Australian young adults ($N = 687$; 59.8% female; $M_{age} = 19.45$ years, $SD = 2.07$) were recruited for the study. The overall corpus of data analyzed included 672 responses to the open-ended question: "How do you think your interactions with your close friends online differ compared to interactions with them offline (i.e., face-to-face)?" Analyses identified 567 participants who perceived a difference between online and offline contexts and these responses were subject to thematic analyses. Two themes were identified: the *Features and Affordances of Online Contexts* (including control, non-verbal cues, and accessibility), and the *Nature of Interactions* across contexts (including the depth, intimacy, and perceived value of interactions). The current findings highlight the potential for individual characteristics to shape online experiences and are discussed in light of implications for friendship closeness in the digital era.

1. Introduction

Due to the omnipresence of the internet and social media, digital and online platforms (including text or instant messaging, and social network sites such as Facebook, Instagram, and Snapchat) have become some of the most common ways of connecting with others. This is particularly true for young adults (those aged 17 to 25), who are some of the most pervasive social users of the internet. Recent studies suggest that almost 50% of American young adults report being "almost constantly" online (Perrin & Atske, 2021). Further, research has found that among young people, daily interactions with friends are now more likely to occur via text or instant messaging than in-person (Lenhart et al., 2015), perhaps due to a shift in preferences towards digitally-mediated versus in-person communication among youth in recent years (Rideout & Robb, 2018). This is especially true throughout the ongoing COVID-19 pandemic, as technology-mediated or online communication has increased due to the need to maintain friendships and connectedness during periods of physical isolation or lockdowns (Brown & Greenfield, 2021; Scott, Stuart, Barber, O'Donnell, & O'Donnell, 2022).

Although it has been established that the internet is now a critical context for friendships among young adults, we are only beginning to understand whether interactions with close friends differ across online and offline (i.e., face-to-face) settings. Notably, little research has qualitatively assessed whether young people perceive differences in developing or maintaining their established friendships online as compared to offline, or whether perceptions of the characteristics and qualities of social interactions differ depending on where those interactions take place. The following research aims to address a gap in the literature by qualitatively investigating how young adults perceive their social interactions with close friends to differ across online and offline contexts. The next sections comprise a brief review of contemporary friendships and outcomes of online social interaction as well as describing the features that distinguish online contexts and interactions from those that occur offline.

1.1. Contemporary friendships among youth and outcomes of online social interaction

Research has reliably demonstrated the importance of close, high-

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quality friendships throughout development, and particularly in adolescence and young adulthood, for promoting positive adjustment and well-being (e.g., Hartup & Stevens, 1999; Raboteg-Saric & Sakic, 2014). A considerable amount of research has further examined young adults' friendships as they now occur both online and offline. By comparing online, offline, and overlapping (both online and offline) social networks, research has consistently demonstrated that the majority of young people interact with existing friends (those met in face-to-face settings) online as well as offline (Reich et al., 2012; Scott et al., 2021; Subrahmanyam et al., 2008).

Understandably, then, researchers have also questioned whether online social interaction is beneficial for perceptions of friendship quality and closeness among youth. The extant literature suggests that – despite risks for engagement in behaviors such as cyberbullying (Valkenburg & Peter, 2011) – when young people use social media to connect with others and strengthen offline relationships (Reich et al., 2012), there are benefits for relational closeness, quality, and well-being (Brown & Greenfield, 2021; Clark & Green, 2019; Valkenburg & Peter, 2011). For instance, Desjarlais and Joseph (2017) demonstrated that use of interactive social technologies (e.g., instant messaging services) was associated with greater close friendship quality via both online and offline self-disclosure. Interestingly, some studies also suggest that particular individuals may prefer online versus offline social interaction (for example, socially anxious youth; Caplan, 2007; Pierce, 2009), benefit from opportunities to seek social and emotional support online (Quinn, 2019), and find online social interaction easier, safer, or more comfortable than face-to-face communication (Nesi et al., 2018). Such findings suggest that online contexts and interactions may provide an important or meaningful extension to offline friendships (Yau & Reich, 2020). However, despite the accessibility of friends and potential benefits of enacting friendships online, there is little consensus in the literature on what constitutes meaningful, close interactions in the digital era (Van Zalk, 2020).

Further, although research has highlighted that youths' online interactions tend to be mainly with existing friends (as compared to unknown others), distinguishing online from offline interactions has become increasingly difficult in modern relationships (Van Zalk, 2020). There are inherent challenges in operationalizing the overlap between online and offline social networks and treating interactions across contexts as distinct, due to the fluidity of relationships across contemporary settings. As a result, there is a need to investigate the forms taken by young adults' contemporary friendships, and the implications of interacting primarily online, offline, or equally across contexts with friends. In this study, we seek to examine young adults' lived experiences of developing and maintaining friendships in the digital era, including what factors are considered important to young adults when interacting across contexts with friends, and how (or whether) young adults draw comparisons between their online and offline interactions with friends.

1.2. Features and affordances of online contexts

Researchers have long recognized that the internet is a convenient, accessible place for interaction with others and that meeting social needs may be made easier online, because of the qualities of online contexts (Walther, 1996). Specifically, online contexts are characterized by a number of unique features and affordances, meaning it is likely that interactions online may play out differently to those conducted offline. Of note, features unique to online platforms that distinguish them from face-to-face settings, including asynchronicity, availability, permanence, and non-verbal cue absence (Nesi et al., 2018) may underlie the ease with which social connection and relationship maintenance occurs online, and even transform social relationships within online settings.

Some theories support the suggestion that the distinct features of online contexts may explain how online interactions differ from those conducted offline. The transformation framework proposed by Nesi et al. (2018) argues that the friendship experiences of youth are

“fundamentally different” in online contexts (p. 269). In particular, Nesi et al. (2018) suggest that social internet use changes the frequency and immediacy of interactions with others, modifies the qualitative nature of interactions, and offers opportunities for compensatory or novel behaviors online. For example, text messaging among friends may be higher in asynchronicity (time-lapse) and therefore be more comfortable, with more time to consider responses and a delay in feedback during emotional conversations. Alternatively, the asynchronous nature of online communication may increase relationship uncertainty, and online interactions may be perceived as less ‘rich’ due to reduced non-verbal cues, relative to video chatting or face-to-face communication (Nesi et al., 2018). Indeed, some available literature suggests that face-to-face communication is more conducive to stronger emotional bonding between close friends than text-based communication (Sherman et al., 2013), and that friends perceive engaging in deeper self-disclosures when face-to-face, as compared to when communicating online (Nguyen et al., 2012). Such findings together suggest that there may be implications of online versus offline interaction for young adults' feelings of closeness within their friendships. However, mixed findings characterize the available literature, and some research suggests that online interactions do not differ substantially from offline interactions with close friends.

Despite the potential for online interactions to be perceived as less rich or satisfying than those conducted offline (Daft & Lengel, 1986), some theories and research suggest that interactions with friends across contexts may not be perceived as distinct. For instance, the social information processing theory (Walther, 1992) suggests that individuals may adapt their communicative behaviors online to connect more effectively with others over time. As a result, the quality of interactions and relationships conducted online may be comparable to those conducted offline for those who are long-term users of these technologies (Walther, 1992). In line with this suggestion, research has recently demonstrated that interactions online may be equally as intimate and meaningful as those conducted in-person, particularly with close others (Croes & Antheunis, 2021; Litt et al., 2020). Further, Yau and Reich (2018) concluded that despite differences between online and offline contexts, and the novel ways in which youth may interact with friends online (e.g., liking posts), the qualities of friendships identified in traditional or offline contexts (e.g., self-disclosure, validation, and conflict) may be demonstrated both online and offline. Such findings highlight that as interactions with friends are increasingly intertwined across online and offline contexts, they may not be interpreted as different by young adults.

As online environments provide a multitude of unique opportunities and risks for social interactions and friendships over and above what may be achieved offline, continued research (using a variety of methods and approaches) is needed to capture and reflect the complexity of contemporary friendships, and to understand how young adults perceive their friendships and the implications of interacting across contexts. To develop a rich understanding of their lived experiences, perspectives, and thoughts when interacting with friends across contemporary contexts, this research aimed to examine young adults' views of their interactions with their close friends online and offline, using qualitative survey data. Specifically, the current study posed the following research question: *How do young adults perceive their interactions with close friends to differ across online and offline social contexts?*

2. Method

2.1. Participants and procedure

A large sample of young adults ($N = 687$) were recruited from an Australian university between 2019 and 2020. Participants were recruited via an online research system of first year psychology students for partial credit in an undergraduate psychology course and were invited to participate if they were aged between 17 and 25 years and

were active social media users. After providing informed consent, participants completed an anonymous online questionnaire of approximately 30 min in duration, in their own time, as part of a larger research project on young adults' internet use, friendships, and well-being (citation omitted for review). The survey was comprised of both open and closed questions. Prior to data collection, ethical approval was obtained from the university Human Research Ethics Committee.

The overall sample of young adults ($M_{\text{age}} = 19.45$ years, $SD = 2.07$), included 411 (59.8%) respondents who identified as female. Purposive sampling was employed to recruit a relatively even gender split; as women were overrepresented in the psychology student sample, the study purposively recruited male participants in the later stages of data collection. The ethnicity of the sample was reported as 78.5% Caucasian (White), 10.9% Asian, 1.7% Indigenous Peoples (First Nations), 1.7% African, and 7.2% from other backgrounds. The majority of the sample ($N = 652$, 94.9%) were domestic students. Of the sample, 90% reported using instant messaging services (e.g., Facebook Messenger, WhatsApp, or texting) at least daily. For the purposes of this study, only the 672 participants who provided a response to the open-ended question (detailed below) were included in the initial data analysis (15 did not respond). Following the first round of coding, 105 responses were identified that described no difference between online and offline interactions with close friends (e.g., "They don't differ at all," or "We talk to each other online the same way we would talk face-to-face"). Although these responses were coded, after they were identified these 105 participants (48 female (45.7%); $M_{\text{age}} = 19.72$, $SD = 2.23$) were not included in the substantive analyses, due to responses that were unable to be coded for the study aim (how interactions with friends differed across contemporary social contexts). As such, the corpus of included data presented in the results and discussion included responses from 567 participants (352 (62.1%) female; $M_{\text{age}} = 19.34$ years, $SD = 2.05$).

2.2. Data analysis strategy

The analysis in this study focuses on responses to an open-ended question: "How do you think your interactions with your close friends online differ compared to interactions with them offline (i.e., face-to-face)?" Close friendships were described to participants as "those in which you feel most connected, comfortable and secure." An initial coding framework was developed by consulting the friendship literature and models of internet features, including cue absence and asynchronicity, outlined in the transformation framework (Nesi et al., 2018). This was followed by discussions among the research team to identify the most appropriate initial coding structure which is detailed in Appendix 1a. Following the process of codebook thematic analysis, the full corpus of data ($n = 16$, 162 words; average response length = 24.05 words; minimum = 1 word, maximum = 118 words), was analyzed by the first author in NVivo version 12. In the first round of coding, 105 participants were found to be outside the scope of the study (i.e., they identified no differences in their interactions across contexts). Therefore, the corpus of data subject to thematic analysis included responses from 567 participants with a total of 14,576 words and an average response length of 25.71 words. Instead of attempting to fit the data to the codebook, an iterative cycle of deductive (theory-driven) and inductive (data-driven) coding was undertaken, in which the coding structure was checked and discussed among all three authors at each iteration of the coding (Braun & Clarke, 2022; Fereday & Muir-Cochrane, 2006). Throughout the coding process, additional codes were identified and thematically organized into a series of themes and subthemes to encompass broader patterns of meaning. Following the generation of preliminary themes, the codebook was discussed among the research team and updated to reflect the agreed thematic structure. The full corpus of data was checked and recoded where necessary in line with the final thematic structure (see Description of Themes in Appendix 1b).

3. Results and discussion

The current study aimed to explore young adults' perceptions of their interactions with close friends across online and offline contexts, and to identify key differences within social interactions across contemporary settings. Throughout the coding process, a total of 886 coding references were identified, as young adults often described more than one difference in interactions across contexts. These coding references, and the proportion of coding references, are used herein to assess young adults' endorsement of the themes. Two distinct yet interrelated themes were generated, each with three subthemes: (1) *Features and Affordances of Online Contexts*, and (2) the perceived *Nature of Interactions* across online and offline settings (see Fig. 1). The first theme comprised 347 coding references (39.16% of young adults' responses), whereas the second theme comprised 539 references (60.84%). In the following sections, each of these themes and the associated subthemes will be discussed in relation to existing literature on young adults' friendships, and social media and internet use.

3.1. Theme 1: Features and affordances of online contexts

Broadly, this theme outlines perceived differences in young adults' interactions and self-expressions across online and offline contexts as they relate to known features and affordances of online settings (Walther, 1996). The *Features and Affordances* theme was the smaller of the two themes. Young adults in this study who identified differences in their interactions with close friends specifically reflected on three key features and affordances: (1) perceptions of enhanced *control* over their interactions online, (2) the presence or absence of *non-verbal cues* in online versus offline communication, and (3) the *accessibility* and convenience of online interactions.

3.1.1. Control

Enhanced control over social interactions and self-presentation has previously been recognized in cyberpsychology literature as an affordance unique to online or digitally-mediated communication settings (Kamalou et al., 2019; Schouten et al., 2007; Scott, Stuart, & Barber, 2022). As such, it is unsurprising that some young adults' ($n = 85$ references, 24.50% of the *Features and Affordances* theme) described perceptions of enhanced control online that stemmed from the asynchronous nature of many forms of online communication. Asynchronicity and perceptions of control were described as arising from the immediacy of interactions and responses across contexts (or, more specifically, a delay in response time online), and from the ability to choose when or how to reply to others online:

Online you have time to make decisions and think before you speak, you have the opportunity to reply within your own time, and you may not be placed on the spot where you have to reply immediately. (Female, 18 years).

This comment highlights what is well-known in available literature: most often, particularly in text-based communication, online interactions do not occur in "real-time" (Nesi et al., 2018). Indeed, the notion that face-to-face settings have "immediate responses," and that "online interactions are much slower due to reply time," was core to this subtheme.

The ability to choose how and when to reply to friends (or even choosing *who* to reply to) online was considered a key difference in interactions across online and offline contexts. One participant stated, "I feel more control in the situation [online] because I can choose what I do and don't want to say," (Female, 20 years). Participants also described that taking time to think about what they wanted to say online allowed them to come up with "better answers," and to choose how to respond "appropriately" to friends. These findings confirm past research that has found the editability of online communication allows individuals to carefully think about the information they share and to optimize their

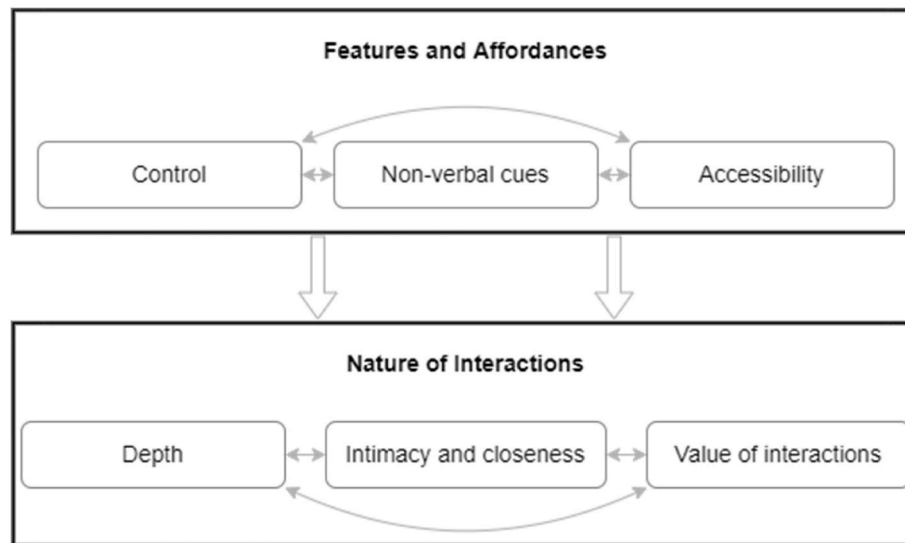


Fig. 1. Thematic map of perceived differences in young adults' interactions with close friends across online and offline contexts.

self-presentation and self-disclosure online (Fox & McEwan, 2017; Valkenburg & Peter, 2011). Further making use of the control afforded within online settings, some young adults elected to not respond to friends at all, particularly during challenging or uncomfortable interactions: "Offline can be a lot more awkward and confrontational compared to online where you can ignore people and leave them on 'read'," (Male, 20 years). Taken together, young adults' perceptions of enhanced control within online interactions appear to be important for managing, crafting, curating, and sometimes avoiding interactions with others. Further, in an extension of past research that has predominantly considered social interactions with casual friends or new acquaintances, we highlight that for many young adults, perceptions of asynchronicity as affording more time and control online were also considered important within interactions with close friends. Our findings indicate that many young adults use strategic and considered approaches to their interactions with close friends online.

3.1.2. Non-verbal cues

The most common topic endorsed by young adults within the *Features and Affordances* theme ($n = 136$ references, 39.19% of theme) was the presence or absence of non-verbal cues, supporting previous computer mediated communications research (e.g., Daft & Lengel, 1986; Nesi et al., 2018; Walther, 1996). Understandably, many young adults in the current study noted the absence of facial expressions, gestures, and tone within online versus offline communication with friends, and concluded that, "Much more information can be communicated in offline interaction. Online is very word/language based," (Male, 21 years).

Importantly, young adults described implications of reduced non-verbal cues online as impacting the ease with which they could interact and connect with friends, express themselves, interpret messages, and share information. For instance, some participants described interacting offline as easier, "better," or preferable to online: "Face-to-face is purely verbals and non-verbals, and much easier to pick up on accurate [cues] in conversations," (Female, 18 years). Further, young adults described the presence of non-verbal cues in offline communication as necessary for effectively progressing conversations and adding depth to interactions, for assessing friends' reactions to their messages, for the ability to express and interpret emotions, and for "the feeling of being close to each other." As outlined by one participant,

While online, it is difficult to gauge a sense of their reaction, even more so if by text or message. I find more difficulty speaking with people online than offline because of it. (Male, 17 years).

Indeed, some young adults reported being more expressive and emotional offline because they perceived "no real emotion in the conversation" online. Participants simultaneously described difficulties with interpreting emotion during online interactions, and reported being "more conscious about [friends'] feelings" in face-to-face settings, as they were able to better understand, and to empathize with, their friends' perspectives in-person.

To overcome challenges associated with reduced non-verbal cues, some young adults outlined the importance of succinct communication online: "It is important to be to the point because you are unable to convey emotion and can come across in a bad light," (Male, 23 years). Yet there were also concerns over the interpretation of their messages and emotions online, with worries that others may misinterpret or misunderstand communications due to the lack of vocal tone and clarity within text-based online messages. As described by one young adult, "If we are not video chatting or something like that, things that we say (actually write) could be misunderstood," (Female, 20 years). Similarly, other young adults described messages online as often being 'misread' or 'misleading', compared to offline interaction that were seen as "a more straightforward way of communicating."

As a result, although some young adults described engaging in self-disclosure or showing support to friends online, others described online interactions (and misinterpretation of messages) as causing tension, conflict, or arguments within their close friendships. One participant explicitly outlined,

With my everyday friends, I find that we argue more online, we are less empathetic and care less about our friends online. Things are also constantly taken out of context. (Female, 17 years).

For this reason, participants often described preferring face-to-face interactions and the inherent ability and ease of expressing empathy, emotion, and interest through their gestures and tone offline.

However, to overcome the lack of non-verbal cues, to express themselves, or to better understand the tone and emotion within messages, a number of young adults reported relying on compensatory communication behaviors (such as emojis) online, in line with existing literature (e.g., Mittmann et al., 2022):

Online I try to show more emotion through punctuation and emojis so that my point is better expressed. In person, I can use facial expressions and body language therefore I don't have to be as expressive or enthusiastic when talking. (Female, 19 years).

Past research suggests that messages with emojis are interpreted as

more self-expressive and emotional than those without emojis (Völker & Mannheim, 2021), and may support emotional bonding with friends during instant messaging conversations (Sherman et al., 2013). Beyond bonding with friends, the current results suggest that young adults may adapt their behaviors online in an attempt to ensure accurate emotional expression is achieved, to express enthusiasm and interest in their interactions, and to achieve the relational benefits of online communication with friends. Young adults' discussions of non-verbal cues within online contexts ultimately highlight that there are a number of ways to navigate the competing demands and challenges presented by online social interactions.

3.1.3. Accessibility

Within the *Features and Affordances* theme, many references ($n = 126$, 36.31%) described young adults' perspectives that online contexts provided a convenient, flexible, and easily accessible method of interacting with friends. For example, young adults described their interactions with friends online as being "brief yet constant," perhaps because "the internet is available 24/7." As recent research confirms that many young adults are almost constantly online (Perrin & Atske, 2021), friends may be perceived to be within reach online, at any time, and in any setting.

Online interactions were described as a means of maintaining friendships, to keep in contact with friends, or were used as a "small substitute in between seeing friends." This was particularly true in instances where busy or conflicting schedules limited opportunities to interact with friends offline. For example, as described by one participant,

My close friends and I all have busy lives with different schedules and thus it is easier to catch up online a few times a week rather than trying to organize a time we can all make face-to-face. (Female, 20 years).

When young adults discussed "catching up" with friends online, they described frequently "checking in," or "updating each other on important/funny things that have happened." Past research has similarly suggested that the regular discussion of everyday life, including mundane and superficial topics, is important for sustaining and maintaining relationships (Duck et al., 1991). Further, researchers have more recently posited that the frequent disclosure of mundane information online may facilitate greater intimacy among friends, as disclosures about daily life "still require vulnerability" (Yau & Reich, 2018, p. 345). As such, the current findings indicate that frequent use of the internet to interact with friends to discuss everyday topics may serve an important relational purpose.

Online settings may also remove barriers for communicating with friends (Nesi et al., 2018) and provide a space for interaction to compensate for reduced, restricted, or inaccessible in-person connections. In the current study, the accessibility of friends online appeared to be especially relevant to young adults who found themselves moving away from home and transitioning into college or university, for work after finishing school, or to travel (Subrahmanyam et al., 2008). Thus, in addition to touching base with friends, young adults described online interactions as important for maintaining long-distance friendships and ensuring that their relationships remain meaningful and close, despite geographical distance:

Since I moved interstate and don't get to see any of my mates I grew up with face-to-face, I have found that my online interactions have changed and become a lot more meaningful and connected. (Female, 19 years).

In line with this comment, recent research suggests that technology-mediated interactions (such as texting) are associated with higher relationship satisfaction and feelings of understanding in long-distance relationships, or in instances of limited face-to-face contact (Holtzman et al., 2021; Pollmann et al., 2021). Importantly, the current findings suggest that online contexts may make maintaining friendships less

reliant on regular face-to-face contact (Schneider et al., 2020), as they provide opportunities to continue long-distance friendships in meaningful ways.

Despite the potential for online contexts to provide an alternative to offline interactions, however, some young adults described the accessibility of friends online, and the convenience of online interaction, as detrimental to perceptions of interpersonal closeness. As such, some participants described only using online interactions to make face-to-face plans with close friends, and explicitly outlined a clear preference for face-to-face interactions: "Unless a friend or family member is far away, I will always opt for physical meeting rather than try and talk online," (Female, 25 years).

In the current study, a substantial number of young adults described online interactions as being brief, or "goal-directed," for purposes of sending information, or to arrange face-to-face catchups. Available research has also documented young adults' use of the internet and social network sites to make plans with friends (Subrahmanyam et al., 2008). In line with such research, our results suggest that – although some young adults do interact online for social interaction and convenient relationship maintenance purposes – many others actively pursue face-to-face interactions with friends (where possible) and use the internet to facilitate and easily plan offline contact with close friends: "Online interactions are only a means to hang out with friends in person," (Male, 18 years). As outlined by one participant, "Rarely do I have a proper conversation with friends online when I can offline," (Male, 18 years). Accordingly, face-to-face interactions were perceived by some young adults as more valuable for relationship and intimacy development, and thus, were used with the intention to "actually develop relationships with friends." The perceived nature of young adults' interactions with friends as related to depth, intimacy and closeness, and the value of interactions, is discussed in the following theme.

3.2. Theme 2: Nature of interactions

When describing how their interactions with close friends differed across contexts, many young adults reflected on perceived differences in the nature or essence of their interactions with friends as related to several key qualities of close friendships. Indeed, the *Nature of Interactions* theme was the larger of the two themes identified, with 539 coding references. Three subthemes comprise the *Nature of Interactions* theme: (1) the *depth* of conversation with friends across online and offline settings, (2) feelings of *intimacy and closeness* across contexts, and (3) the perceived *value* of interactions with close friends online and offline. Interestingly, this theme is arguably the clearest in terms of the distinction between contexts; young adults who discussed the nature of their interactions with friends most often reported that their interactions with friends were more authentic, enjoyable, intimate, and meaningful or valuable *offline* as compared to online.

3.2.1. Depth

One of the most common distinctions between online and offline interactions was the perceived depth of conversation across settings ($n = 229$ references, 42.49% of the *Nature of Interactions* theme). Almost all young adults who reflected on the depth of their interactions described conversations as being *deeper* or *richer* offline: "I find that talking to my friends offline usually leads to far more deep conversations than if I were to talk to them online," (Female, 18 years). Conversely, online interactions were described as being "shallow" and "superficial." One participant explained,

The online communication is pretty superficial in terms of just basic updates of each other's lives and what we have been doing. Compared to offline or face-to-face interactions where there is a lot more depth to conversations. (Female, 24 years).

Few participants offered any explanation for *why* their interactions were perceived as lacking depth online, however, another participant

suggested, “I feel you interact more when you are physically with the person compared to it being through a screen.” (Female, 18 years).

The perception of depth may, therefore, be linked to the amount of communication in online versus offline settings. Non-verbal cues and control, discussed above, may explain how much young adults disclose within online interactions and the efficiency with which individuals can communicate online. More specifically, “*slower*” interactions and the reduction of non-verbal cues in online communication may result in more superficial interactions, particularly if young adults perceive that their friends are unavailable or uninterested when conversing online. Hence, a number of young adults in the current research indicated that they were typically more “*vocal*” in interactions offline, when they could “*more effectively*” engage with friends. An additional explanation for the perceived lack of depth of online interactions may be that the topics of conversation differ from online to offline when communicating with friends.

As abovementioned, many young adults described communicating online to keep in touch with friends, to share routine experiences, or to make plans to connect offline. Thus, conversations primarily consist of brief updates, rather than intimate conversations (Duck et al., 1991). Indeed, participants described the topics discussed online as different to the “*real-world*” discussions held offline, in which friends would “*talk about more relevant topics such as life, and work.*” By associating the typical topics of conversation across online and offline settings with the depth of interactions, young adults may assume that having more serious conversations offline promotes deeper connections with friends than frequent (or even “*constant*”) mundane, online interactions.

Online interactions may also be perceived as casual or shallow because young adults’ understandings or expectations of effort and engagement differ in face-to-face versus online communication. Many young adults in the current study expressed not applying effort within online interactions and may have assumed that their friends shared similar approaches to communicating online: “*I’m less chatty online as I can’t be bothered to text,*” (Female, 21 years), and “*I put less effort in online than I do in person,*” (Male, 22 years). Further, some young adults described feelings of distraction online, relative to offline: “*I’m more engaged and enthusiastic offline, but distracted and more disconnected with interactions online,*” (Male, 20 years), and portrayed online interactions as less engaging, “*annoying,*” or even “*boring.*” For instance,

If I have my friends sat in front of me, I am more invested in what they are talking about whereas in online interactions, if I don’t want to invest in what they’re saying I don’t have to. (Female, 24 years).

This comment suggests that elements of offline communication foster feelings of engagement within, and commitment to, interactions, whereas online settings may allow young adults to withdraw or disengage when interacting with others. Within online interactions, there may be an expectation that friends are media multitasking (engaging with multiple forms of media simultaneously) when interacting online. Approximately 40% of adolescents report frequently engaging in media multitasking when using the computer (Rideout et al., 2010). Accordingly, it appears that expectations for engagement within face-to-face interactions are higher than what is expected online:

Whilst interacting [online] it’s socially acceptable – or most of the time socially normal – to not read the message straight away and to be seen doing something else or filtering through your feed. This differs to in person where we chat and expect full attention. (Male, 19 years).

Not only were online contexts perceived as allowing for a lack of attentiveness or distraction when compared to offline interactions, but some common technologies also used to interact (such as instant messaging) were described as constraining the depth of information that could be conveyed online. To minimize the effort required for interactions with close friends, many young adults often turned to offline contexts: “*For me personally and my 5 close friends, online is too much effort*

so we just save our conversations for in person,” (Female, 18 years). Another participant also echoed this opinion, stating “*I feel less engaged in the conversation [online] and therefore, sometimes resort to calls or end up meeting offline to talk about important or long topics,*” (Female, 18 years). As such, although young adults describe frequently and easily engaging with friends online, the time and energy invested into offline interactions, alongside the inherent attention and effort involved within interactions in face-to-face contexts may mean that offline interactions are perceived as deeper, richer, and more intimate.

3.2.2. Intimacy and closeness

The perceived depth of interactions with friends offline may have flow-on effects for young adults’ closeness to friends. Indeed, 82 references (15.21% of the theme) were made that represented young adults’ perceptions of closeness to friends in online versus offline contexts, including feelings of intimacy, connectedness, and support. In all cases that described a difference in closeness, young adults outlined that face-to-face interactions were more connected, “*emotionally invested,*” and intimate than those conducted online. Some young adults explicitly stated that “*online chatting creates a barrier*” to connecting with close friends, and that online interactions may foster a sense of “*disconnection*” rather than connectedness to friends. Moving beyond interactions with friends, some participants further described that their friendship as a whole felt weaker online due to the lack of physical connection with friends in online contexts.

When describing the nature of their interactions, young adults often described the features of online versus offline social contexts (e.g., reduced non-verbal cues) as playing an important role in their experiences of offline interactions as being more intimate and meaningful. For example, one participant explained:

The connection is definitely more emotional and intimate with face-to-face interactions. You can respond more appropriately to visual cues, body language, and facial expression with offline interactions which helps us feel closer, and also physical closeness – e.g., hugging, laughing together, playfulness. (Female, 24 years).

The current findings are in contrast to recent research which suggests that daily online interactions with friends do not differ from those conducted offline in terms of intimacy (Croes & Antheunis, 2021), or that computer-mediated communication is positively associated with greater relationship intimacy and interaction quality when accounting for in-person communication (Boyle & O’Sullivan, 2016). Online contexts have – for some time now – been considered an effective extension of interactions and relationships offline (Reich et al., 2012; Subrahmanyam et al., 2008; Yau & Reich, 2020). However, the current findings suggest that, without physical closeness to friends and the ability for real-time, rich communication, some young adults may perceive their interactions (and even their friendships) online to be less intimate, strong, or close than those offline (particularly when they have access to friends in face-to-face settings). Indeed, historical studies have described that interaction within face-to-face contexts promotes greater emotional bonding among friends, when compared to instant messaging communication (Sherman et al., 2013). Further, Kumar and Epley (2021) recently outlined that interactions including voice elements (i.e., phone, video chat, and voice chat) create stronger social bonds when compared to text-based interactions. Together, the communication medium used, perception of physical closeness and enjoyment, and the perceived depth of conversations may contribute to assessments of offline interactions as often enhancing relational intimacy and bonding with friends, when compared to online interactions.

3.2.3. Perceived value of interactions

Despite increasingly blurred boundaries between our online and offline lives, preferences for offline interactions may be associated with beliefs that online interactions are “*less real*” or valuable than those conducted offline. Almost half of the references ($n = 228, 42.30\%$)

within the *Nature of Interactions* theme were associated with the perceived value of interactions with close friends across contexts. When reflecting on their interactions with close friends, many young adults described how “*authentic*,” “*truthful*,” “*open*,” “*personal*,” “*real*,” “*sincere*,” and “*genuine*” their interactions and friendships were online versus offline. Almost all participants who reflected on the authenticity of their interactions agreed that “*Face-to-face interactions are more real and authentic*,” (Female, 19 years), whereas “*Online can be superficial and fake*,” (Female, 19 years).

Perhaps unsurprisingly, some young adults questioned the strength and substance of their online interactions with friends; “*I find it easier to make conversation online, but the connection doesn't feel real*,” (Female, 22 years). The perception of interactions feeling inauthentic was explained by one participant, who expressed that “*Online will always have that missing factor of face-to-face rather than a screen*,” (Male, 19 years). Social presence is the degree to which others are perceived as “*real*” or nearby within interactions and stems from the salience of interaction partners and the richness of communication settings in which social interactions take place (Fox & McEwan, 2017; Gunawardena, 1995). Social presence theory outlines that different forms of communication media vary in their “*ability to provide a sense of immediacy and intimacy*” within interactions (Keil & Johnson, 2002, p. 296), with richer media allowing greater warmth and affection (Sherman et al., 2013). In support of social presence theory (Gunawardena, 1995), the current results suggest that online interactions may feel less intimate, real, and authentic than face-to-face communication due to the sense of physical or psychological distance from close friends.

Related to the perceived authenticity of online interactions, many young adults described substantial differences in the meaningfulness – in terms of how “*rewarding*,” “*valuable*,” or “*fulfilling*” – online interactions were. As above, almost all participants who discussed meaningfulness expressed that their interactions with friends *offline* were more meaningful, rewarding, and valuable than those conducted online. For example, some young adults stated, “*Face-to-face interactions are more important to me*,” (Female, 19 years), and “*Online interactions are not as meaningful as offline interactions*,” (Female, 18 years).

Such findings may be illuminated by considering the recent study of Litt et al. (2020). The researchers quantitatively and qualitatively explored what shapes meaningful interactions within the digital era, and concluded that planned and synchronous (i.e., real-time) interactions were rated as more meaningful than spontaneous and asynchronous interactions, respectively (Litt et al., 2020). By considering the current results in which young adults placed considerable emphasis on the asynchronous nature of online communication, and described using online interactions to organize face-to-face or “*real*” time with friends, it follows that their in-person interactions may be perceived as more meaningful. In the current study, some young adults described that although online interactions are convenient and easy, they are not as rewarding as those in face-to-face settings. This may be because “*Very few memorable moments are created online compared to offline*,” (Male, 17 years). As one participant clearly stated,

When online, I find my interactions to be less than fulfilling in comparison to face-to-face. While I am still able to maintain a relationship online, the real-life connection is necessary. (Male, 18 years).

Recent literature has similarly concluded that although digital or online interactions keep partners (and friends) connected, such interactions may not contribute to perceptions of understanding, meaning, and relationship satisfaction in the same way that face-to-face interactions do (Pollmann et al., 2021).

Despite a widespread agreement among participants that online interactions were less meaningful than those offline, young adults acknowledged the value of online interactions, particularly in the absence of face-to-face meetings with friends. For example, some young adults described their online interactions as comparable to offline in

terms of meaningfulness when online communication was their ‘only option’ for connecting with friends:

The interactions with my friends online can sometimes have less meaning than being face-to-face, however, it is sometimes our only means of communication, so conversations are still meaningful. (Female, 17 years).

We therefore suggest that some young adults may use online contexts and interactions as a means for engaging in meaningful interactions with friends, particularly when offline interactions are limited. For instance, there are various interactive activities online that may foster a sense of connection within friendships. A number of youth highlighted that their interactions online were unique and important as they engaged in games and gaming with friends. One participant described:

The conversations are a lot more centered on the person (e.g., well-being, what they're doing) when face-to-face, whereas online it has more to do with the game if we're gaming or the memes in the group chat. (Male, 18 years).

Obtaining a sense of enjoyment from activities with friends across contexts was important to young adults, with interactions across online and offline settings described as “*enjoyable*,” “*fun*,” “*humorous*,” and “*pleasant*.” On one hand, participants described interactions with friends *offline* as more enjoyable and fun, with some explicitly describing being “*happier*” within face-to-face versus online interactions. Perceptions of offline interactions as more enjoyable were often linked to the ability to engage in physical activities with friends or were a result of spending physical time together. Thus, feelings of physical and social presence within interactions had implications for the perceived authenticity and enjoyment of interactions with friends: “*When I am with my friends in-person we are doing more activities and having more fun*,” (Male, 18 years), and “*Offline interactions are often times more enjoyable as you can actually do things together*,” (Female, 20 years).

On the other hand, young adults explained that online interactions offered a different sense of enjoyment, as they were more often joke-based and humorous than those held offline. This was a result of the novel opportunities for interaction online (Nesi et al., 2018), such as gaming and sharing relatable content including memes or entertaining posts with friends: “*Online interactions are usually to share memes, pictures, etc. – more joking around*,” (Female, 20 years). To date, little research has detailed how young adults perceive enjoyment and humor to differ in their interactions across contemporary contexts. The current findings suggest that some young adults may perceive social interactions as enjoyable and entertaining across both online and offline settings. However, different opportunities for engagement with friends online and offline appear to explain differences in young adults’ perceptions of their interactions as enjoyable and fun. Therefore, it may be suggested that young adults selectively interact with friends across online and offline settings, depending on their goals for entertainment or desires for physical connection.

3.3. Interrelationships between subthemes

Overall, young adults in the current study who outlined differences in their interactions with close friends described the nature of their interactions as less rich, intimate, engaging, authentic, and meaningful online, relative to offline. With such clear distinctions, research must endeavor to understand *why* young adults interact with friends online, especially if online interactions are perceived as less fulfilling or valuable than those in face-to-face settings. Importantly, the current study, in line with existing research, suggests that online contexts are convenient, accessible, and offer important opportunities for frequent, enjoyable, everyday interactions with friends. As outlined by one participant, “*It is easier to feel connected with people offline, however it is easier to remain connected with online friendships*,” (Female, 18 years).

Beyond the accessibility of online communication, some youth

reported that their thoughts and feelings differ in digital and online (versus offline) contexts, as a result of the features and affordances of online settings. Further, depending on individual needs and characteristics, young adults may experience more gratification when interacting online, as opposed to offline, with friends. In some cases, young adults expressed feeling *at ease* (i.e., less anxious, awkward, or nervous) when interacting or engaging in self-expression *“behind the comfort of the computer screen”* online:

While I value offline interactions with my close friends, communicating online relieves certain anxieties and pressures for me. Online interaction seems easiest as it's a much more comfortable environment, particularly since it's one of your own making. (Female, 18 years).

Others similarly described feelings of confidence as an outcome of the controllability of online communication: *“I am more confident and can say things more easily as I have more time to think of what to say and to curate the ‘right response’ which relieves some social stresses,”* (Female, 19 years). These comments together suggest that although some young adults perceive obstacles to effective communication within online interactions, others find comfort and relish in the ability to strategically or selectively present themselves and their emotions online.

Available research demonstrates that socially anxious youth in particular may experience less anxiety when interacting with others online, relative to offline (Yen et al., 2012), possibly due to enhanced control over social interaction and perceptions of safety afforded by online contexts (Kamalou et al., 2019; Valkenburg & Peter, 2009). In the current study, one participant explicitly described, *“Online I feel able to express myself more freely, more easily, largely due to struggling with maintaining eye contact,”* (Male, 25 years). One explanation for feelings of comfort and ease during online self-expression and self-disclosures may be that when the non-verbal cues that characterize offline communication are reduced or removed online, young adults perceive themselves as visually anonymous (i.e., unable to be physically detected as the source of information; Clark-Gordon et al., 2019; Misoch, 2015). Perceptions of visual anonymity are suggested to facilitate online self-disclosure (Valkenburg & Peter, 2011), and have previously been linked with greater online self-disclosure among shy individuals (Brunet & Schmidt, 2008).

Throughout our analysis, it became apparent that both perceived invisibility or anonymity, and the time afforded within interactions online, as *“opposed to having a few seconds to respond in person,”* explained how social interaction anxiety may be reduced online. As described by one participant, *“Online interactions allow me to feel less anxiety and put more thought into my responses as opposed to real-time conversation,”* (Male, 19 years). As such, more socially anxious individuals may benefit from the range of social opportunities online (Quinn, 2019), seek social support online to compensate for a lack of in-person support (O'Day & Heimberg, 2021), or use online interactions to complement those conducted in offline settings (Weidman et al., 2012). It is important to note, however, that both perceptions of control online and reduced non-verbal cues within online settings may be beneficial to all youth, irrespective of social anxiety levels.

Online contexts may offer a space in which young adults feel less inhibited and more confident within social interactions, than they do offline. Indeed, in the current study, some participants described experiencing greater confidence in online, relative to offline, settings: *“I'm more confident [online] because there is little embarrassment you can get from online,”* (Male, 18 years), and *“There's no awkward moments that are hard to recover from online,”* (Male, 18 years). Feelings of confidence and comfort in the online (as opposed to offline) environment may be associated with experiences of online disinhibition. Online disinhibition is defined as the experience or perception of reduced inhibitions online, such that a person may think, act, or feel differently in the online environment than they would in offline interactions (Stuart & Scott, 2021). In this study, numerous participants reflected feelings of disinhibition online in a variety of ways. For example, one participant stated,

“I feel like I can say anything to my friends in online interactions but not face-to-face,” (Female, 23 years). Further, young adults described being more *“open,” “free,” “honest,” “assertive,” “cheeky,”* and even more *“harsh”* or *“opinionated”* online, relative to offline. By considering factors such as social anxiety and experiences of online disinhibition, comfort, and confidence across contexts, researchers may be able to determine who is likely to benefit most from online interactions, and whether individual differences can explain the clear contradictions in young adults' experiences of modern-day interactions with close friends.

4. General discussion and conclusion

This research aimed to explore how young adults perceive their interactions with close friends to differ across online and offline social contexts. Engaging a large sample of young adults, our results highlight that although the features and affordances of online contexts play an important role in explaining how interactions with friends differ online, young adults more often identified and endorsed key differences in the nature of their interactions with friends across settings. We demonstrated that online contexts provide an important and accessible means of maintaining friendships without the need to be physically present (Johnson et al., 2008; Reich et al., 2012; Valkenburg & Peter, 2011). Online interactions offer opportunities to stay in touch with friends (near and far), to share content, humor, and to engage in various shared activities like gaming. Recent research suggests that many young adults interact with their friends equally across online and offline contexts, or predominantly online (Scott et al., 2021), perhaps due to the opportunities for frequent, everyday interactions outlined in the current work. Further, we highlight that online settings may reduce the constraints some young adults feel when communicating with friends in face-to-face contexts (Quinn, 2019), and offer a comfortable space for interactions characterized by greater confidence and reduced inhibitions.

Although the convenience and accessibility of online settings for relationship maintenance and communication with friends was clear, not all young adults shared the opinion that online interactions were easy or conducive to meaningful social engagement with close friends. Theoretical perspectives such as social information processing theory (Walther, 1992) and the hyperpersonal model of computer-mediated communication (Walther, 1996) suggest that the depth of relational communication online – particularly among new acquaintances – may be comparable to, or even exceed that achieved in face-to-face settings over time. However, in the current study and in a contribution to available literature, we highlight that many young adults shared a perception that online interactions were unable to match the depth of offline interactions among *close friends*. Specifically, many young adults considered offline interactions with their close friends to be more valuable, authentic, engaging, and intimate than those conducted online. Therefore, the current findings may not align with the suggestions of past theories due to differences in emotional engagement within, or expectations of, interactions with close friends versus acquaintances.

It is important to consider the results of the current study in light of distinctions between different types of friendships and relationships. The current study was interested in the *close* friendships of young adults – characterized by high levels of interaction, involvement, and intimacy – as opposed to casual friendships or acquaintance relationships (Bryant & Marmo, 2012). Past research has outlined that both greater relationship intimacy and interacting with a best friend are positive predictors of the perceived quality of both texting and face-to-face interactions (Subrahmanyam et al., 2020). Further, individuals report expecting that multiple forms of Facebook communication (e.g., sending private messages, commenting on photos) are used when connecting with close friends versus casual friends or acquaintances online (Bryant & Marmo, 2012). Taken together, such findings suggest that individuals may expect more effort and higher quality interactions from their close friendships across both online and offline contexts. It became evident through our analyses that many young adults in established close

friendships did indeed expect dedicated time, energy, and effort within their interactions with friends. However, offline interactions were often perceived as promoting deeper and richer communication with close friends than what can be achieved online. Interesting avenues for future research may include exploration of whether the identified differences in social interactions with close friends across online and offline settings have implications for the perceived quality of close friendships, or to understand *when* young adults perceive online social interaction to be beneficial or detrimental to feelings of relational closeness. Further, researchers should endeavor to engage with young people to better understand how they define intimacy and meaningfulness in their various relationships across contexts.

Many available studies of contemporary friendships among youth ignore the overlap between online and offline social networks, fail to measure the nuances of online communication, and consequently discount the lived experiences of young people and the complexity of contemporary social engagement. Researchers have recently outlined a need to consider factors such as the positive or negative valence of interactions with friends when measuring friendship closeness, and, when young adults interact with friends online, to distinguish between different types of interactions that may occur (e.g., liking friends' posts versus direct messaging; Pouwels et al., 2021). Furthermore, engaging with friends online may take public (e.g., posting, liking) or private (e.g., direct messaging) forms (Valkenburg et al., 2021), each of which may have different implications for perceptions of intimacy, engagement, and meaningfulness within interactions.

Interestingly, throughout our analyses, a number of tensions were noted in young adults' experiences and perceptions of online versus offline interactions. For example, while some young adults suggested that reduced non-verbal cues were damaging for the ability to express and interpret emotion online, others reported being more open and comfortable when expressing emotion or personal information in online settings. Additionally, some young adults described taking steps to express themselves clearly and effectively, or to limit misinterpretation online. Finally, some young adults reported no differences in their interactions with close friends across online and offline contexts at all. An additional recommendation for future research would be to explore whether individual characteristics or familiarity with online contexts explain whether young adults do or do not perceive differences across settings when interacting with close friends.

We contribute novel findings to the literature by identifying contradictions in young adults' experiences of online and offline interactions with friends. It is possible that such opposing views of online interaction (and the potential challenges of online interactions) may be explained by different life stages, individual differences in interaction tendencies, the attributes and sociality of friends, experience with communicating online, or digital and social media literacy. More specifically, the ability to utilize social media effectively and efficiently for communication with others is critical for fostering satisfying and meaningful interactions (Daneels & Vanwynsberghe, 2017). As online communication is ubiquitous among youth (ACMA, 2019; Smith & Anderson, 2018), digital literacy among youth may be assumed. However, young adults who interact with friends more often in offline settings may not possess the same levels of social media literacy as compared to their peers who interact more often online. Future research should, therefore, explore individual-level factors that may underpin young adults' perceptions of online social engagement.

The findings of the current study are strengthened by the large sample available for analyses. There was also considerable richness provided in the responses. While not as detailed as might have been found with interview data, many young adults offered deep and detailed accounts, including new understandings of contemporary social interactions from our open-ended survey question. However, our findings must be considered in light of limitations. First, our sample was comprised of young adult university students who self-identified as frequent users of the internet and social network sites. As such, our key

results may not be representative of all experiences, such as those of individuals at different ages, or with less access to (and familiarity with) the internet and online social contexts. Second, the open-ended survey question asked young adults about their interactions with *close* friends across contexts, and although we provided a definition of close friends, we were unable to ascertain to what extent participants reflected on their close versus casual friendships when responding. Such information may be clarified in future research using interviews, that include opportunities for clarifying participants' responses or asking follow-up questions.

The boundaries between our online and offline or "*real-world*" lives are increasingly blurred in the digital era. Indeed, researchers have recently posited that social engagement "no longer resembles social interactions as we used to know them" (Van Zalk, 2020, p. 3). However, the majority of young adults in the current study outlined substantial differences in their interactions across contexts with friends, and our results suggest that youth may see some disadvantages of navigating social engagement within online settings. Importantly, it seems that many young adults perceive greater meaning, satisfaction, and support within face-to-face versus online interactions with close friends. Though, at the same time, our findings demonstrate that young adults are frequently in contact with friends online, and that online contexts *can* facilitate intimate, meaningful communication among friends (particularly when offline interactions are limited). It is imperative that researchers continue to explore the intricacies of young adults' interactions across online and offline settings to better understand the digital lives of young people and what it means to be close and connected with contemporary friends.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.chbr.2022.100217>.

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