Computers in Human Behavior 152 (2024) 108025

Contents lists available at ScienceDirect

Computers in Human Behavior

journal homepage: www.elsevier.com/locate/comphumbeh

Similarity between perceived selves on social media and offline and its relationship with psychological well-being in early and late adulthood☆,☆☆,☆☆☆

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ARTICLE INFO

Handling Editor: Min Jou

Keywords:
Self
Self-perception
Personality
Social media
Technology
Psychological well-being

ABSTRACT

Previous research observed that people are different on social media than in physical life. Do people's subjective perceptions of themselves match these observations and does such subjective reality matter? Little research has examined whether people perceive themselves as the same between offline and social media contexts. The present research addressed whether people perceive themselves as the same on social media as offline (Studies 1 and 2), whether such perceptions are related positively vs. negatively to psychological well-being (Study 2), and these relations across generations (Study 2)—focusing on Generation Z (early adulthood) and Baby Boomers (late adulthood). Participants (total $N = 1741$) reported perceptions of themselves specified for offline and social media contexts (e.g., Big Five personality) and submitted records of their logged mobile phone use. Study 2 participants completed measures of psychological well-being (e.g., depression, life satisfaction). Across studies, participants perceived themselves as similar but not the same between offline and social media contexts. Baby Boomers perceived themselves as more similar between offline and social media than Generation Z, even when controlling for logged mobile phone use. Perceiving oneself as similar between social media and offline showed small, negative relationships with psychological well-being in Generation Z. Some young media users may be less depressed and more satisfied with life when they perceive themselves differently online. Findings are discussed in light of widespread concern with social media use and well-being in young people, as well as the implications for theories of self-consistency in daily life.

1. Introduction

People spend a lot of time on social media. Global reports estimate that almost 2/3 of the world's population averages around 3 h daily on social media platforms (Chaffey, 2022). Even more striking than the time people spend on social media is what social media allow people to do. Mediated platforms have allowed people to present themselves differently from who they are offline (McKenna & Bargh, 2014; Postmes et al., 2001). The difference is that today's mobile social media are deeply embedded in everyday life—allowing people to present mediated selves whenever they like and wherever they are (Bailey et al., 2020; Bayer et al., 2020; Carr & Hayes, 2015). People are often different on social media than in physical life. Some even seem as if they are a different person on social media than who they are offline (Schlosser, 2020).

The focus in media and cyberpsychology research is on the relationships between social media use and various psychological and behavioral traits (e.g., see Cheng, Wang, Sigerson, & Chau, 2019; Valkenburg, 2022 for meta-reviews). An assumption of this research is that people think, feel, and behave consistently across contexts—which includes assuming people are the same on social media as they are offline. This is an understandable assumption. The trait approach assumes that people are consistent across contexts (e.g., Allport & Odbert, 1936; Costa & McCrae, 1992a; Digman, 1990; Goldberg, 1990; John & Robins,

☆ Data, code, and materials are available on OSF: https://osf.io/e8xnc/?view_only=110da7845ba343ee8b3201fedbac0455.☆☆ This research was supported by a grant from the Graduate and Professional Student Association at Arizona State University.☆☆☆ We thank Joe Bayer, Douglas Kenrick, Thao Ha, Emily Robinson, and Michael Varnum for feedback on this research.

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https://doi.org/10.1016/j.chb.2023.108025
Received 17 May 2023; Received in revised form 28 September 2023; Accepted 5 November 2023
Available online 10 November 2023

1993). However, people often think, feel, and behave differently depending on the context (Mischel & Shoda, 1995; Sheldon et al., 1997). Given the striking contrast between social media and the offline world, it seems likely that social media would be one such context where people do not think, feel, or behave as they normally would offline (McFarland & Ployhart, 2015).

The unexamined issue of whether people perceive themselves as the same on social media as offline overlooks a potential contribution to understanding the relationship between the subjective reality of perceptions and *psychological well-being* (e.g., depression, life satisfaction). Indeed, the primary application of research on self-consistency is that, at least in individualistic cultures, the more similar a person perceives their different possible selves, the more they will experience positive psychological well-being outcomes (Donahue et al., 1993; Leary, 2003; Morse & Gergen, 1970; Sedikides et al., 2023; Slabu et al., 2014; Sokol & Serper, 2019; Swann et al., 2007). The explanation is that individualistic cultural systems value maintaining a stable, consistent self across time and contexts (Hofstede, 2001; Triandis, 2018). People in Western cultures experience positive psychological well-being when their characteristics match their cultural imperative (Caldwell-Harris & Aycicegi, 2006; Diener et al., 2018; Fulmer et al., 2010; Gebauer et al., 2020; Triandis, 2001; Triandis & Gelfand, 1998).

The question is whether positive relationships between the perceived similarity of oneself across contexts and psychological well-being will apply to social media. People may report positive outcomes in terms of psychological well-being if they see themselves as similar between offline and social media contexts, following theories of self-consistency. However, social media allow people to explore new identities, overcome constraints in their offline environment, and extend their existing social resources in ways not possible in many offline or other mediated contexts (e.g., Behm-Morawitz, 2013; Cheng et al., 2019; McFarland & Ployhart, 2015). Differences in the self between offline and social media contexts could indicate an adaptive strategy for psychological well-being. The public and researchers alike show widespread concern regarding social media and psychological well-being. Yet, the focus on social media use and psychological and behavioral traits often fails to show clear and applicable relationships to psychological well-being (Orben, 2020a; 2020b; Valkenburg, 2022). Whether people see themselves as similar between offline and social media contexts offers a way to test relationships between social media and psychological well-being drawing from existing theory on self-consistency. Given the long hours spent by billions of people in digital communities, the stakes of the perceived similarity between offline and social media selves are high in terms of the psychological and social well-being of the digital world.

The main objectives of the present research are to determine whether people perceive themselves as the same in offline and social media contexts and how such perceptions relate to psychological well-being. Below, we identify aspects of the self that broadly address the ways people may perceive themselves as similar or different between the two contexts. We also discuss what constitutes perceiving oneself as similar between offline and social media (as opposed to different). We further consider how differences in the perceived similarity between the offline and social media selves and their links to psychological well-being may vary in early and late adulthood.

1.1. Literature review

1.1.1. Perceived similarity in terms of personality traits

The present research focuses on self-perceived similarity primarily in terms of personality traits. Personality traits are the most fundamental approach to understanding who a person is across contexts (McAdams, 1995; McAdams & Pals, 2006) and make up an important aspect of how people perceive themselves (John & Robins, 1993). People report personality traits as more important for continuity in the self than memories, desires, and perceptual abilities (Strohminger & Nichols, 2014). Although trait theory assumes that people are the same across contexts (Allport & Odbert, 1936; Costa & McCrae, 1992a; Digman, 1990; Goldberg, 1990), interactionist perspectives consider how each context in a person's life may show unique patterns of their thought, feeling, and behavior (Fleeson, 2004; Mischel et al., 2002; Mischel & Peake, 1982). To address whether people perceive the personality traits of their offline self as the same as those of their social media self, the present research contextualizes measures of personality to assess people's offline and social media traits (see Robie et al., 2017; Schulze et al., 2021).

The present research focuses on people's perceptions of their *Big Five* personality traits (Goldberg, 1990; John & Robins, 1993). The Big Five represent five broad dimensions: *Openness* concerns how intellectually imaginative, aesthetically sensitive, or creative a person is; *conscientiousness* concerns how responsible, productive, and organized a person is; *extraversion* concerns how sociable, energetic, and assertive a person is; *agreeableness* concerns how compassionate, respectful, and trusting a person is; and *emotionally stability*[1] concerns how depressed, anxious, and emotional volatile a person is (Soto & John, 2017a,b). A recent review even suggests that most psychological constructs are essentially facets within the Big Five taxonomy (Bainbridge et al., 2022).

1.1.2. Perceiving the self as similar versus different across contexts

What counts as perceiving the self as similar versus different across contexts? Prior research offers benchmarks to evaluate perceived similarity. Early research showed weak to moderate correlations between personality expression across contexts (e.g., *r*s ranging from 0.20s to 0.30s)—particularly when contexts were situationally different from one another (Bem & Allen, 1974; Bem & Funder, 1978; Hartshorne & May 1928; Mischel, 1983; Mischel & Peake, 1982; Mischel et al., 2002; Newcomb, 1929). Nevertheless, recent research showed stronger tendencies of the Big Five to correlate (*r*s of 0.5 or higher) between personality reports specifying important social contexts of a person's life (e.g., interacting with friends vs. family vs. strangers; Church et al., 2012; Locke et al., 2017). If self-perceived personality traits of the offline and social media selves are correlated 0.5 or higher, this may suggest that people perceive social media as another context of daily life, akin to other social contexts. However, correlations below 0.5 between these offline and social media self-perceptions would suggest that people perceive social media and physical contexts quite differently—consistent with expectations of early research on computer-mediated communication (McKenna & Bargh, 2014; Postmes et al., 2001).

Prior research has shown strong correlations between self-perceptions of offline and social media personality (Bunker & Kwan, 2021). However, these correlations were based on perceptions across people (i.e., on average, how similar do people perceive themselves between offline and social media contexts). Building and extending on this prior work, the present research seeks to examine individual differences in self-perceived similarity between contexts. Examining self-perceived similarity between offline and social media at the individual difference level offers an additional way to determine effect size (i.e., "persons as effect sizes"; Grice et al., 2020). For example, the benchmark of $r = 0.5$ to determine perceived similarity may apply not only to the mean but also to the number of people who show this level of perceived similarity versus those who do not. Another contribution is that individual differences in perceived similarity may be used to predict outcomes of interest—e.g., psychological well-being. The present research considers both positive (e.g., life satisfaction) and negative (e.g., depression) indicators of psychological well-being, which represent correlated but distinct aspects of mental health (Keyes, 2007; Suldo & Shaffer, 2008).

[1] Soto and John (2017a, 2017b) use the term "negative emotionality." We refer to this dimension as "emotional stability" so that all five dimensions are labeled in the direction where a higher score is indicative of more positive self-perceptions (see Kwan et al., 2004).

1.1.3. Perceiving the offline and social media selves as similar to the global self

The present research further considers another reference point to gauge the perceived similarity between the offline and social media selves: The global self. The global self is how a person views themselves regardless of context, helping them to organize their varied behavior and experiences and assign meaning (Cervone & Shoda, 1999; Robins, 2021). Prior studies on the self-perceptions between offline and social media personality did not consider these perceptions in relation to the global self (Bunker & Kwan, 2021; Bunker et al., 2021). The question is whether people's perceptions of themselves in these two contexts independently predict their perceptions of the global self. Put differently, when people think about themselves (without any context specified) do they perceive themselves as the same as when they are thinking only about who they are offline or on social media?

1.2. Approach to comparing "offline" and "social media" contexts

The present research considers the commonalities that all social media platforms share in contrast to those shared by all offline contexts to examine the self-perceived similarity between the offline and social media contexts. This approach is consistent with recent calls to consider social media as a broader environment that shares common elements that are distinct from the offline world (Bayer et al., 2020; McFarland & Ployhart, 2015). As a starting point, this approach may be more appropriate than examining the perceived similarity between offline and social media contexts in terms of individual offline spaces (e.g., work, family) platforms (e.g., Facebook, TikTok) for three reasons:

First, when the concern is how psychological and behavioral phenomena compare to offline contexts, one may argue that the offline world should be divided into separate contexts as well (e.g., the ways people think, feel, and behave in the workplace may vary from recreational or educational spaces just as they vary between social media platforms). Identifying *specific* contexts of the overall social media landscape to compare to *all* contexts in the offline world is an unbalanced comparison. It is also unclear which specific social media and offline contexts are appropriate comparisons. Second, social media platforms constantly change. Focusing on individual platforms runs the risk of the "moving target" problem in which findings can become obsolete if the relevant feature is no longer part of the platform or the platform has changed altogether (Bayer et al., 2020). Third, focusing on particular social media platforms or offline spaces may restrict the range of people to examine perceptions of similarity between the contexts. Even a small sample of social media users may use a wide variety of social media platforms and inhabit a range of offline spaces. These reasons are not to say that investigating particular platforms or offline spaces is not worthwhile. Examining differences between offline and social media as broad contexts serves as a foundation in which future research could examine individual platforms or contexts.

1.3. Self-perceived similarity between offline and social media contexts in early and late adulthood

The present research considers self-perceived similarity between offline and social media contexts in early versus late adulthood. Most of the previous research focused on young adults like Generation Z ("Gen Z"; born 1997–2012; Dimock, 2019) because young adults tend to use social media heavily and the relationships between their use and psychological well-being are of public concern (Orben, 2020a,b; Twenge, 2017). Additionally, this focus is understandable given that emerging adults are in the process of forming critical aspects of the self and how they see themselves may influence their psychological well-being (Diehl & Hay, 2011; Lodi-Smith & Roberts, 2010). Furthermore, Gen Z is the main generation of so-called "digital natives" believed to be fluent in the digital language of computers, video games, and social media (Evans & Robertson, 2020; Prensky, 2001).

However, there is a neglect of examining people in late adulthood like Baby Boomers ("Boomers"; born 1946–1964) who are adjusting to digital technology. These so-called digital "immigrants" are believed to maintain their offline "accent": The language of older communication technologies and preference for offline interaction. It is not clear whether Boomers see themselves differently on social media than in physical contexts, and whether such differences relate to their psychological well-being.

By comparing the perceived similarity between the offline and social media selves and its links to psychological well-being in early versus late adulthood, the present research may reveal generation differences in the impact of social media use. Specifically, the present research tests whether young adults in Generation Z perceive more similarity between their offline and social media selves than Baby Boomers who represent late adulthood. Gen Z spends more time on social media than late adults like Boomers (Bolton et al., 2013). More time spent in a context is associated with a higher connection to that context (i.e., more likely to perceive the self in that context as representative of who one is; Ryder et al., 2000; Sheldon et al., 1997). One may expect Gen Z to perceive themselves as more similar between offline and social media contexts than Boomers based on generation differences in time spent on social media. The present research sought to identify generation differences in these relationships, if any.

1.4. Overview of the present research

Across two studies, the present research addressed three research questions. Fig. 1 shows a conceptual model of the main constructs and research questions of the present research.

RQ1. *Do people perceive themselves as the same between offline and social media?* We tested competing hypotheses that there would be strong (i.e., *r* of .5 or higher) vs. less than strong (i.e., *r* of less than .5) correlations between perceptions of personality traits specified for offline and social media contexts (Hypothesis 1a vs. 1b). We first tested these hypotheses in a sample of college students and an online participant pool (Study 1) followed by online participant pool samples of Generation Z and Baby Boomers (Study 2). We further tested whether Generation Z (individuals in early adulthood) perceived more similarity between their offline and social media selves than Baby Boomers (individuals in late adulthood; Hypothesis 2). We explored individual differences in the direction of the similarity (e.g., whether individuals' offline or social media self-perceived personality traits were rated higher in terms of mean levels and rank-order across individuals).

RQ2. *Do perceptions of the global self reflect perceptions of both the offline and social media selves?*

We explored whether the self-perceptions of offline and social media personality could independently predict self-perceptions of personality without a context specified (i.e., the personality of the global self).

RQ3. *Is perceived similarity between the offline and social media selves related to psychological well-being?*

Specifically, we tested competing hypotheses that the perceived similarity between the offline and social media selves would positively (vs. negatively) relate to psychological well-being (Hypotheses 3a vs. 3b; Study 2). Finally, we sought to replicate the findings using an alternative measure of perceptions of the offline and social media selves besides personality traits: Self-continuity, which we elaborate on in Study 2.

1.4.1. Transparency and openness

In reporting on the studies below, we follow Transparency and Openness Promotion guidelines (Nosek et al., 2015) and Journal Article Reporting Standards for quantitative research in psychology (Appelbaum et al., 2018). To that end, data, analysis code, and research materials are available at: https://osf.io/e8xnc/?view_only=110da7845ba343ee8b3201fedbac0455.

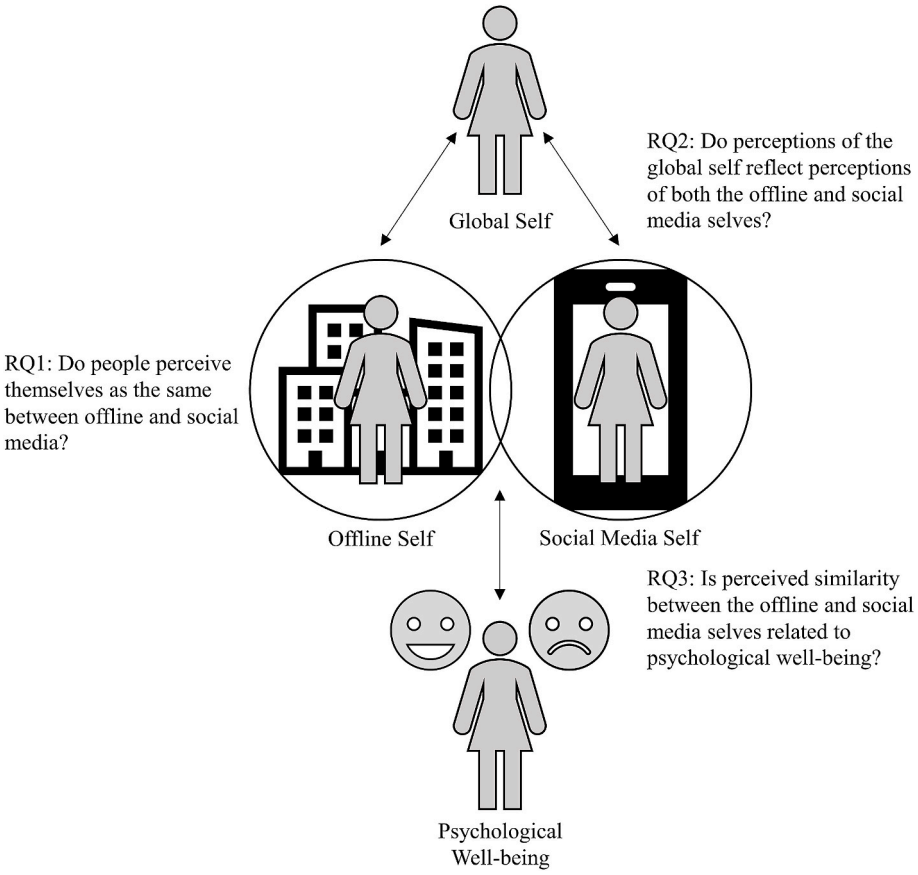

Fig. 1. Conceptual model.

Data were analyzed using R, version 4.2.0 (R Core Team, 2023). The data reported were part of a larger preregistered project on offline and social media psychology. However, the analyses reported in this article are original and have not been published previously. The study design and hypotheses for the present research are reported in the larger project's preregistration (see RQ1, RQ2, and the generation hypothesis in RQ3; https://osf.io/2hjb8?view_only=747811f777ca4e8abfd24e62c488933d). The IRB board at Arizona State University approved the studies.

2. Study 1

2.1. Method

2.1.1. Participants

Study 1 included two samples of participants. Sample 1 consisted of 1125 college students recruited through a university psychology course during the fall of 2021 and received course credit for their participation. College students spend a considerable amount of time on social media (Bolton et al., 2013) and they comprise a relatively homogenous sample in terms of education level, age, and digital experiences (Bodford et al., 2021; Kim, 2019; Peterson, 2001). Thus, this sample serves to lay the ground for replication in other populations that may not be as immersed in social media. After removing participants who did not correctly answer an attention check question, the final sample consisted of 1081 participants. Participants identified as 55.4% women; 43.8% men; 0.7% non-binary; $M_{age} = 19.17$; $SD_{age} = 1.89$; 54.9% White/Caucasian, 18.8% Latino/Latina, 11.1% Asian/Asian American, 5.1% Black/African America, 3.9% South Asian/Indian, 2.3% Middle Eastern/Middle Eastern American, 0.9% American Indian, 3.0% multiple ethnic or racial backgrounds or specified a background not listed. Socioeconomic breakdown showed the samples to be 7.0% working class, 11.8% lower-middle class, 36.9% middle class, 38.2% upper middle class, and 6.0% upper class.

Sample 2 sought to replicate the findings in a non-college student sample. Sample 2 consisted of 261 participants recruited through Prolific Academic (an online participant pool) during the spring of 2022 and received 2.17 USD for their participation. Relative to other online participant platforms, Prolific Academic participants are more likely to pass attention checks, read instructions, and work slowly enough to read item content (Douglas et al., 2023). Only 1 participant did not correctly answer an attention check question, yielding a final sample of 260. Participants identified as 77.7% women; 21.9% men; 0.4% non-binary; $M_{age} = 42.48$; $SD_{age} = 11.74$; 90.0% White/Caucasian, 1.2% Latino/Latina, 2.3% Asian/Asian American, 2.3% Black/African America, 1.2% South Asian/Indian, 3.1% multiple ethnic or racial backgrounds or specified a background not listed. Socioeconomic breakdown showed the samples to be 35.8% working class, 30.8% lower-middle class, 31.9% middle class, 1.5% upper middle class, and 0% upper class.

All participants completed the study online via Qualtrics survey software. Sample sizes were determined by resource constraints (i.e., maximum number of participants and funds available). Power analysis showed that both Samples could detect small effect sizes with 0.80 power (Sample 1: $r = 0.085$; Sample 2: $r = 0.173$) and thus test the hypotheses of the study.

Participants in all samples completed measures of personality specified for offline and social media contexts and the global self. Table 1 overviews the methods used for each sample, which are described in more detail below.

2.1.2. Design

All of the participants reported perceptions of the personality of their

Table 1
Overview of methods in present research.

Study	1		2	
Sample	1	2	3	4
Participants	Student (n = 1081; M_{age} = 19.17)	Prolific (n = 260; M_{age} = 42.48)	Prolific (n = 199; M_{age} = 22.12)	Prolific (n = 201; M_{age} = 63.78)
Self-perceptionm easure(s)	BFI-2	BFI-2-S	BFI-2-S SMSC	BFI-2-S SMSC
Psychological well-being measure(s)	–	–	CES-D RLSS SE	CES-D RLSS SE

Note. Sample sizes reflect final samples after participants who failed an attention check were removed. BFI-2 = 60 item Big Five Inventory 2 (Soto and John, 2017a). BFI-2-S = 30 item Big Five Inventory 2 (Soto and John, 2017b). SMSC = Social Media Self Continuity (adapted from Aron et al., 1992; Bixter et al., 2020). CES-D = Center for Epidemiologic Studies Depression Scale (Eaton et al., 2004; Radloff, 1977). RLSS = Riverside Life Satisfaction Scale (Diener et al., 1985). SE = Single Item Self Esteem Scale (Robins et al., 2001).

offline, social media, and global selves. The presentation order of all personality reports was counterbalanced to address potential order effects. That is, the study used a two-factor mixed design. The first factor (context) was within-subjects with three levels: Participants filled out measures of self-perceived personality specified for offline contexts, social media contexts, and without a specified context (global self). The second factor (presentation order) was between-subjects with six levels corresponding to the six possible presentation orders of the three versions of the inventories: 1) Offline, social media, unspecified context, 2) offline, unspecified context, social media, 3) social media, offline, unspecified context, 4) social media, unspecified context, offline, 5) unspecified context, offline, social media, 6) unspecified context, social media, offline.

2.1.3. Measures[2]

As a measure of self-perceived personality, the samples completed versions of the Big Five Inventory-2 (BFI-2: Soto & John, 2017a, 2017b). The Big Five Inventory-2 built on and extended a widely used measure of personality (Big Five Inventory; John et al., 1991). The BFI-2 captures the broad bandwidth of each trait dimension while also capturing the secondary facets within each dimension and preserving the predictive power of important life outcomes. Sample 1 completed the 60-item version (BFI-2, Soto and John, 2017a) and Sample 2 completed the 30-item version (BFI-2-S, Soto and John, 2017b).

The Big Five Inventory-2 contains items in which participants report their agreement (1 = disagree strongly to 5 = agree strongly) to statements capturing their level of openness (e.g., "I am someone who is complex, a deep thinker"), conscientiousness (e.g., "I am someone who is reliable, can always be counted on), extraversion (e.g., I am someone who is talkative), agreeableness (e.g., "I am someone who is compassionate, has a soft heart"), and emotional stability (e.g., "I am someone who worries a lot").

Following the frame of reference approach (Robie et al., 2017; Schulze et al., 2021), participants completed the BFI-2 versions specifying offline contexts (e.g., "I am someone who is compassionate, has a soft heart *offline*"), social media contexts (e.g., "I am someone who is compassionate, has a soft heart *on social media*"), and globally (e.g., I am someone who is compassionate, has a soft heart"). Cronbach's alphas showed acceptable reliability for the Big Five scales in all three contexts (αs > 0.72; Table 2), which is comparable to those shown in the scale's validation (i.e., αs > 0.73; Soto & John 2017a; 2017b). There was one exception where reliability where conscientiousness on social media showed α = 0.53 for Sample 2. This is consistent with prior research showing that some items assessing conscientiousness may not apply to social media (see Bunker & Kwan, 2021).

We further calculated three indices of individual differences in self-perceived similarity between offline and social media contexts to assess these perceptions at the individual level: 1) Within-person correlations, 2) difference scores, and 3) rank-order change between the offline and social media Big Five.

1) We calculated the within-person correlation between offline and social media personality self-perceptions as a direct measure of self-perceived similarity. That is, each participant received a score reflecting the correlation between their scores on their offline and social media items for a given trait. For example, participants received a score reflecting the correlation between their scores on the items assessing extraversion of the offline and social media selves—after the items were scored to be in the same direction (i.e., after scores on negatively worded items were reversed).

We also calculated the within-person correlation between all the offline and social media items to reflect self-perceived similarity across traits (i.e., aggregate score). For this calculation, we keyed scores on the relevant neuroticism items to be in the same positive direction as the scores on the other Big Five traits. This approach is consistent with research on self-enhancement suggesting that higher scores on Big Five items indicate more positive self-perceptions (Kwan et al., 2004). In sum, the six within-person correlation scores (i.e., self-perceived similarity between offline and social media selves for each of the Big Five and aggregated across the Big Five) reflect the association between the self-perceived personality of the offline and social media selves. A participant with a score of $r = -1$ suggests they perceive their offline and social media selves as complete opposites while a participant with a score of $r = 1$ suggests they perceive the two selves as identical.

2) For each participant, we calculated the difference between the trait scores of the offline and social media selves for each of the Big Five traits and the aggregate of the five traits. This index addresses the possibility that participants may share similar levels of perceived similarity between offline and social media selves but show differences in the direction of the perceived similarity. To illustrate, one person may perceive themselves as more extraverted on social media than offline while another person perceives themselves as more extraverted offline than on social media—however, these two people may have the same degree of discrepancy between the offline and social media selves as shown by within-person correlations of extraversion between the offline and social media selves.
3) We calculated each participant's change in the rank-order of their scores reported for their offline selves from their social media selves. Given that changes in rank-order between two contexts are distinct from changes in means (Block & Robins, 1993; Specht et al., 2011), it is important to consider how a person may show a difference in their mean levels of personality between how they perceive themselves offline versus social media while maintaining their rank-order within the population across the two contexts. We first calculated the rank

[2] A full list of measures is available at https://osf.io/e8xnc/?view_only=110da7845ba343ee8b3201fedbac0455 We report measures used in this study below.

Table 2
Descriptives for personality perceptions of the offline, social media, and global selves by sample (study 1).

Trait	Offline Self				Social Media Self				Global Self			
	Student		Prolific		Student		Prolific		Student		Prolific	
	M (*SD*)	α	*M* (*SD*)	α	*M* (*SD*)	α	*M* (*SD*)	α	*M* (*SD*)	α	*M* (*SD*)	α
O	3.65 (.63)	.80	3.55 (.76)	.77	3.37 (.59)	.74	3.17 (.76)	.74	3.68 (.63)	.82	3.56 (.76)	.80
C	3.55 (.66)	.84	3.71 (.76)	.78	3.39 (.59)	.77	3.48 (.56)	.53	3.53 (.66)	.85	3.68 (.78)	.80
E	3.33 (.73)	.85	2.84 (.87)	.79	2.87 (.76)	.86	2.21 (.82)	.82	3.33 (.72)	.85	2.78 (.85)	.79
A	3.73 (.55)	.77	3.83 (.61)	.76	3.54 (.58)	.77	3.49 (.62)	.73	3.70 (.57)	.78	3.77 (.63)	.76
ES	3.18 (.80)	.89	3.26 (.97)	.87	3.47 (.72)	.84	3.64 (.82)	.84	3.10 (.81)	.89	3.18 (.97)	.88
Agg	3.49 (.44)	.83	3.44 (.52)	.79	3.33 (.42)	.80	3.20 (.43)	.73	3.47 (.44)	.84	3.40 (.51)	.80

*Note. N*s = 1081 (Student) and 260 (Prolific). O = Openness. C = Conscientiousness, E = Extraversion, A = Agreeableness, ES = Emotional Stability. Agg = Aggregate of all five traits.

Table 3
Descriptives for indices of individual differences in perceived similarity between the offline and social media selves (study 1).

Trait ($n_{Sample\ 1}/n_{Sample\ 2}$)	Sample 1 (Students) *M* (*SD*)	Sample 2 (Prolific) *M* (*SD*)	*d* [95% CI]
Within-person correlation (perceived similarity between the offline and social media selves)			
Openness (n = 1025/233)	.341 (.347)	.412 (.409)	**−.20 [-.34, -.05]**
Conscientiousness (n = 1019/219)	.211 (.357)	.106 (.500)	**.27 [.12, .42]**
Extraversion (n = 1048/237)	.286 (.321)	.275 (.423)	.03 [-.11, .17]
Agreeableness (n = 1050/260)	.438 (.331)	.499 (.407)	**−.17 [-.31, -.04]**
Emotional Stability (n = 1022/212)	.275 (.327)	.169 (.510)	**.29 [.14, .44]**
Aggregate (n = 1060/260)	.311 (.202)	.304 (.249)	−.03 [-.10, .17]
Difference score (social media self-perceptions minus offline self-perceptions)			
Openness	−.272 (.523)	−.381 (.559)	**.21 [.07, .34]**
Conscientiousness	−.150 (.622)	−.235 (.685)	.13 [.00, .27]
Extraversion	−.449 (.826)	−.627 (.944)	**.21 [.07, .34]**
Agreeableness	−.189 (.477)	−.343 (.536)	**.31 [.18, .45]**
Emotional Stability	.282 (.666)	.383 (.844)	−.14 [-.28, .01]
Aggregate	−.157 (.405)	−.241 (.454)	**.20 [.07, .34]**
Rank-order change (rank on social media self-perceptions minus rank on offline self-perceptions)			
Openness	- (274.138)	- (58.606)	–
Conscientiousness	- (310.594)	- (76.277)	–
Extraversion	- (356.164)	- (86.287)	–
Agreeableness	- (265.403)	- (61.103)	–
Emotional Stability	- (284.283)	- (70.417)	–
Aggregate	- (300.723)	- (73.188)	–

Note. N = 1080 (Sample 1)/260 (Sample 2); *ns* vary among within-person correlations due incalculable values in participants with constant scores in either the offline or social media traits. Aggregate = aggregate of all five traits. Bold values indicate $p < .05$.

Table 4
Correlations between personality perceptions of the offline, social media, and global selves by sample (study 1).

Trait and self	Offline self	Social media self	Global self
Openness			
Offline self	–	.728 [.666, .781]	.908 [.883, .927]
Social media self	.629 [.592, .664]	–	.764 [.708, .810]
Global self	.865 [.849, .879]	.648 [.612, .681]	–
Conscientiousness			
Offline self	–	.500 [.403, .586]	.909 [.885, .928]
Social media self	.505 [.460, .549]	–	.510 [.414, .595]
Global self	.887 [.874, .899]	.524 [.480, .566]	–
Extraversion			
Offline self	–	.374 [.264, .474]	.902 [.877, .923]
Social media self	.384 [.332, .434]	–	.393 [.284, .491]
Global self	.884 [.870, .897]	.413 [.362, .461]	–
Agreeableness			
Offline self	–	.623 [.542, .692]	.878 [.847, .903]
Social media self	.643 [.606, .676]	–	.670 [.597, .732]
Global self	.822 [.802, .841]	.625 [.587, .660]	–
Emotional Stability			
Offline self	–	.570 [.482, .647]	.929 [.910, .944]
Social media self	.618 [.580, .654]	–	.598 [.514, .671]
Global self	.899 [.887, .910]	.622 [.584, .657]	–
Aggregate			
Offline self	–	.561 [.471, .639]	.932 [.913, .946]
Social media self	.560 [.518, .600]	–	.591 [.506, .665]
Global self	.910 [.899, .920]	.579 [.537, .617]	–

Note. N = 1080–1081 (Sample 1)/260 (Sample 2). Values below diagonals are for Sample 1 (Student). Values above diagonals for Sample 2 (Prolific). All correlations are significant at $p < .05$. Aggregate = Aggregate of all five traits.

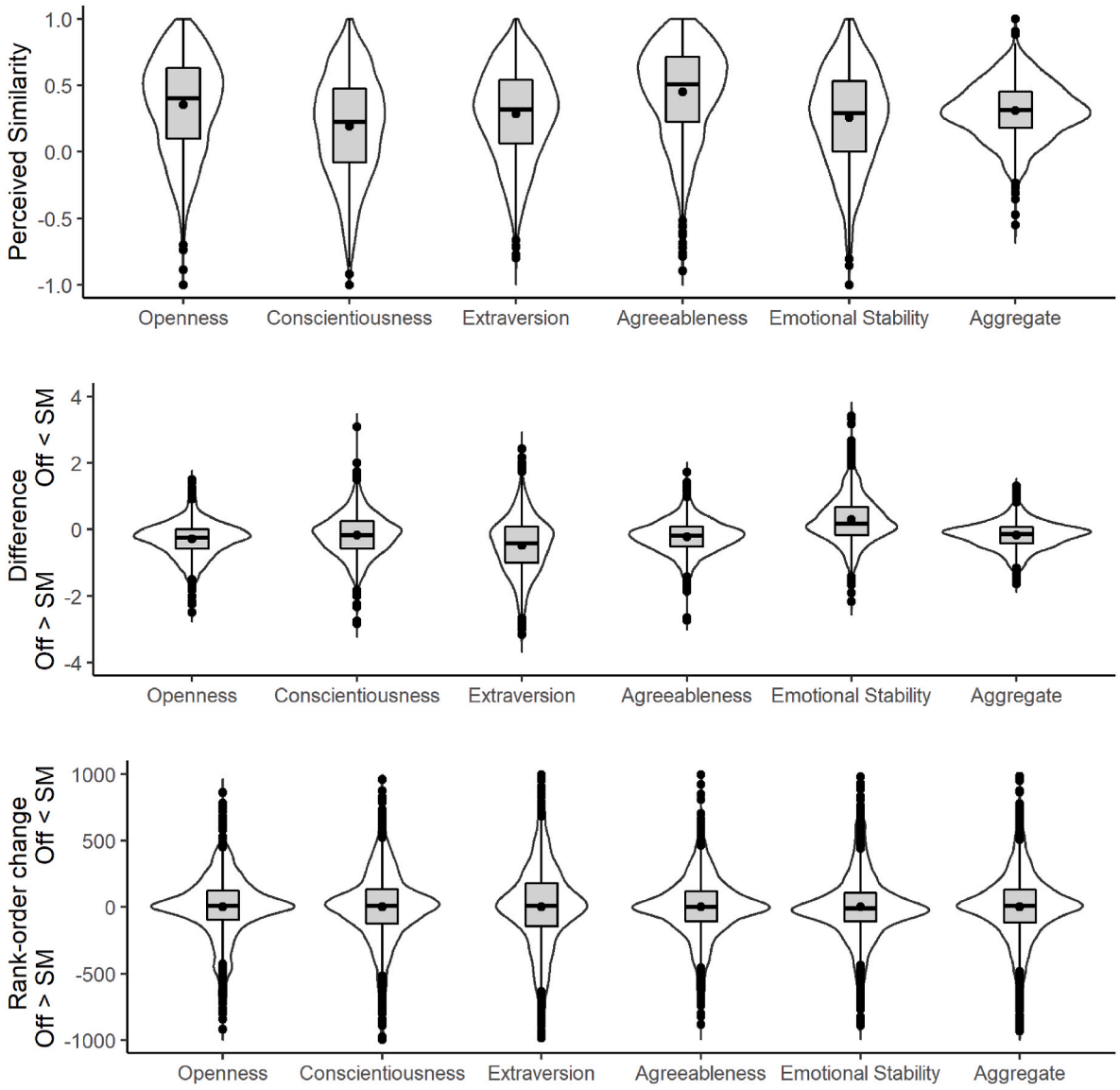

Fig. 2. *Individual Differences in Perceived Similarity (Within-person Correlations), Difference Scores, and Rank-order Change between the Offline and Social Media Selves (Study 1; Samples 1 and 2 combined). Note.* Point within boxplot shows the mean of each index by trait. Aggregate = Aggregate of all five traits.

scores for each participant representing how their trait levels ranked within each sample (for each of the Big Five and the aggregate across traits). We calculated these rank scores separately for the offline and social media self-perceptions. Then, we calculated rank-change scores representing the difference between each participant's social media and offline ranks for each Big Five trait and the aggregate across traits. Descriptives for all three indices by sample are shown in Table 3.

2.2. Results and discussion

2.2.1. RQ1: Do people perceive themselves as the same between offline and social media?

2.2.1.1. Sample level. We first examined the correlations in self-perceived personality between the offline and social media selves across each sample (Table 4). In both samples, perceptions of the social media and offline selves were strongly correlated across traits (aggregate score). This supports Hypothesis 1a that people perceive the personality of their offline and social media selves as similar. Yet almost half of the variance was still unaccounted for, suggesting that people do not perceive the personality of their offline and social media selves as the same. In terms of the individual Big Five, perceptions of the social media self moderately to strongly correlated with perceptions of the offline self. Perceptions of extraversion showed correlations below $r = 0.5$ between the offline and social media selves while the other four traits showed correlations above $r = 0.5$ across samples. The correlations in extraversion between the offline and social media selves were significantly weaker than the correlations of the other four traits between offline and social media selves ($Zs > 3.510$, $ps < .001$) except for conscientiousness in Sample 2 ($Z = 1.771$, $p = .077$). These findings suggest that people may view some aspects of their social media and offline selves as more similar than other aspects.

2.2.1.2. Individual level. We next examined perceived personality between the offline and social media selves at the individual level (i.e., within-person correlations: Table 3). Participants reported moderate correlations on average between the aggregate personality of their offline and social media selves (see within-person correlations; Table 3). Differences between the samples in these estimates were small for each trait and the aggregate of all five traits ($ds < 0.30$).

There were also substantial individual differences in these

Table 5
Number of people who perceive their offline and social media selves as similar (study 1; samples 1 and 2 combined).

	Within-person correlation (perceived similarity between the offline and social media selves)	
	$r > .5$	$r < .5$
Openness	499 (39.7%)	759 (60.3%)
Conscientiousness	286 (23.1%)	952 (76.9%)
Extraversion	371 (28.9%)	914 (71.1%)
Agreeableness	678 (51.4%)	640 (48.6%)
Emotional stability	343 (27.8%)	891 (72.2%)
Aggregate	245 (18.7%)	1075 (81.4%)

	Difference score (social media self-perceptions minus offline self-perceptions)		
	Off > SM	Same	Off < SM
Openness	910 (67.9%)	104 (7.8%)	326 (24.3%)
Conscientiousness	754 (56.3%)	105 (7.8%)	481 (35.9%)
Extraversion	921 (68.7%)	73 (5.4%)	346 (25.8%)
Agreeableness	904 (67.5%)	45 (3.4%)	391 (29.2%)
Emotional stability	390 (29.1%)	102 (7.6%)	848 (63.3%)
Aggregate	902 (67.3%)	14 (1.0%)	424 (31.6%)

	Rank-order change (rank on social media self-perceptions minus rank on offline self-perceptions)		
	Off > SM	Same	Off < SM
Openness	607 (45.3%)	4 (0.3%)	730 (54.4%)
Conscientiousness	628 (46.8%)	0 (0.0%)	713 (53.2%)
Extraversion	624 (46.5%)	0 (0.0%)	717 (53.5%)
Agreeableness	653 (48.7%)	4 (0.3%)	684 (51.0%)
Emotional stability	734 (54.7%)	3 (0.2%)	604 (45.0%)
Aggregate	627 (46.8%)	3 (0.2%)	711 (53.0%)

Note. Off = offline. SM = social media. Aggregate = Aggregate of all five traits. Percentages may not add up to exactly 100 given rounding.

perceptions, as depicted by the distributions shown in the violin plots in Fig. 2. We examined the number of persons who reported strong overlap ($r > 0.5$ vs. < 0.5) in the personality of their offline and social media selves (Table 5). Less than 20% of the samples reported a within-person correlation over 0.5 across the traits; agreeableness was the only trait in which most of the sample reported a within-person correlation over 0.5. In contrast to the sample level analyses, this suggests that not all individuals perceive the self as similar between offline and social media contexts. At the individual level, self-perceived similarity between offline and social media contexts supports Hypothesis 1b that people do not perceive the personality of the offline and social media selves as similar.

In terms of difference scores, participants on average perceived their offline selves as higher on the Big Five than their social media selves except for emotional stability (Table 3). We examined the number of persons who perceived their offline self as higher on the Big Five than their social media self, vice versa, or no difference (Table 5). Less than 8% of the samples reported no difference between the personality of their offline and social media selves. A similar finding appeared for rank change: Less than 1% reported no change in rank between social media and offline self-perceptions (Table 5). Together, these findings suggest that very few people perceive their offline and social media selves as the same.

2.2.2. *RQ2: Do perceptions of the global self reflect perceptions of both the offline and social media selves?*

We further note the strong correlations between the perceived personality of the social media and global selves, and that the offline and global selves were perceived as almost identical in both samples (Table 4). Importantly, the correlation between perceived aggregate personality of the offline and global selves was significantly stronger than the correlation between perceived aggregate personality of the social media and global selves in both samples ($Z_{Sample\ 1/Sample\ 2} = 20.109/11.270$, $ps < .001$). People's perceived personality of their offline self may be more like their perceptions of their global self than those of their social media self.

The question then is whether the perceived traits of the social media self predict perceptions of the global self independently from perceptions of the offline self. To this end, we conducted a series of multiple regressions to test whether perceived personality of the social media self could predict perceptions of the global self independently from perceptions of the offline self (see Table 6). VIFs among predictors were less than 2.130, suggesting that multicollinearity was not present in the analyses. For each of the Big Five and the aggregate across traits, perceptions of the social media self predicted perceptions of the global self independently of the offline self. Taken together, these findings suggest that although people perceive more similarity between their offline and global selves relative to between their social media and global selves,

Table 6
Predicting the perceived personality of the global self with the perceptions of the social media self independently from the perceptions of the offline self (study 1).

Model r^2_{adj} (Student/Prolific)	Estimates in predicting perceived personality of the global self							
	Sample 1 (Student)				Sample 2 (Prolific)			
	B (*SE*)	95% CI	*t*	*p*	B (*SE*)	95% CI	*t*	*p*
Openness $r^2_{adj} = .765/.845$								
Offline	.764 (.019)	[.726, .801]	39.876	<.001	.753 (.036)	[.683, .824]	20.957	<.001
Social media	.187 (.021)	[.146, .227]	9.075	<.001	.220 (.036)	[.149, .291]	6.113	<.001
Conscientiousness ($r^2_{adj} = .794/.828$)								
Offline	.835 (.016)	[.804, .867]	52.263	<.001	.887 (.030)	[.827, .946]	29.318	<.001
Social media	.111 (.018)	[.076, .147]	6.205	<.001	.103 (.041)	[.022, .184]	2.503	.013
Extraversion ($r^2_{adj} = .787/.816$)								
Offline	.837 (.015)	[.808, .866]	56.014	<.001	.864 (.028)	[.809, .920]	30.571	<.001
Social media	.080 (.014)	[.052, .108]	5.35	<.001	.067 (.030)	[.008, .126]	2.232	.027
Agreeableness ($r^2_{adj} = .690/.795$)								
Offline	.744 (.023)	[.699, .789]	32.646	<.001	.775 (.037)	[.702, .848]	20.914	<.001
Social media	.151 (.021)	[.109, .194]	7.023	<.001	.204 (.036)	[.132, .275]	5.601	<.001
Emotional stability ($r^2_{adj} = .815/.868$)								
Offline	.841 (.017)	[.808, .874]	49.990	<.001	.869 (.027)	[.815, .923]	31.704	<.001
Social media	.119 (.019)	[.082, .156]	6.310	<.001	.120 (.032)	[.056, .183]	3.697	<.001
Aggregate ($r^2_{adj} = .834/.874$)								
Offline	.850 (.049)	[.821, .879]	57.144	<.001	.851 (.026)	[.800, .902]	32.837	<.001
Social media	.099 (.015)	[.068, .130]	6.316	<.001	.117 (.031)	[.056, .179]	3.765	<.001

Note. $N = 1080–1081$ (Sample 1)/260 (Sample 2). Offline = perceptions of the offline self. Social media = perceptions of the social media self. Aggregate = Aggregate of all five traits.

how people perceive themselves on social media contributes to how they see themselves globally.

3. Study 2

Findings in Study 1 suggest that people perceive themselves as similar but not the same between social media and offline. People perceived strong similarity at the sample level (supporting Hypothesis 1a) but not at the individual level (supporting Hypothesis 1b): Although people see their offline and social media selves as similar *on average*, most people do not see their offline and social media selves as similar. Study 2 built on and extended the findings of Study 1 with three additional aims. First, Study 2 examined whether members of Generation Z in early adulthood perceive greater similarity between their offline and social media selves than members of the Baby Boomers in late adulthood (Hypothesis 2). Second, Study 2 examined whether perceived similarity between the offline and social media selves is linked (positively vs. negatively) to psychological well-being (i.e., Hypotheses 3a vs. 3b). Third, Study 2 included a more comprehensive test of perceived similarity between the offline and social media selves by examining continuity with the social media self. Prior research on self-continuity focused on the perceived connection between temporal selves (Ersner-Hershfield et al., 2009; Parfit, 1971, 1984; Sedikides et al., 2023; Sokol & Serper, 2017). Some people perceive strong connections between the past, present, and future; others view the future or past selves as if they were different persons (Pronin & Ross, 2006). Like future or past selves, thinking about the social media self requires people to consider themselves outside of the present, physical world they inhabit. There is a sense in which one may feel "continuous" with their social media self. Based on self-continuity research (e.g., Bartels & Rips, 2010; Bixter et al., 2020; Hershfield, 2011; Molouki & Bartels, 2017; Urminsky, 2017), we considered three measurable components of self-continuity that capture how connected a person feels to their social media self, how positively they view it, and whether it is easy for them to imagine. Self-continuity offers a global assessment of overlap in perceptions between the offline and social media selves that complements the specific traits in the Big Five taxonomy.

3.1. Method

3.1.1. Participants

The two samples consisted of 401 participants and were collected simultaneously during the fall of 2022. All but 1 participant passed the attention check, yielding a final sample of 400 participants. In the Generation Z sample, participants ($n = 199$) identified as 48.2% women; 49.7% men; 2.0% non-binary; $M_{age} = 22.13$, $SD_{age} = 2.09$; 70.7% White/Caucasian, 1.5% Latino/Latina, 7.1% Asian/Asian American, 6.1% Black/African America, 1.5% Middle Eastern/Middle Eastern American, 10.6% South Asian/Indian, 2.5% multiple ethnic or racial backgrounds or specified a background not listed. Socioeconomic

Table 7
Descriptives for personality perceptions of the offline, social media, and global selves by sample (study 2).

Trait	Offline				*d* [95% CI]	Social Media				*d* [95% CI]	Global				*d* [95% CI]
	Gen Z (early adults)		Boomers (late adults)			Gen Z (early adults)		Boomers (older adults)			Gen Z (early adults)		Boomers (late adults)		
	M (*SD*)	α	*M* (*SD*)	α		*M* (*SD*)	α	*M* (*SD*)	α		*M* (*SD*)	α	*M* (*SD*)	α	
O	3.59 (.70)	.69	3.70 (.88)	.85	−.14 [-.33, .06]	3.38 (.71)	.67	3.24 (.89)	.82	.17 [-.02, .37]	3.59 (.72)	.76	3.71 (.87)	.85	−.14 [-.34,.05]
C	3.30 (.78)	.75	3.89 (.82)	.85	**−.73 [-.94, -.53]**	3.30 (.65)	.60	3.65 (.67)	.74	**−.54 [-.74, -.34]**	3.32 (.76)	.77	3.88 (.83)	.86	**−.71 [-.91, -.50]**
E	2.82 (.86)	.78	2.97 (84)	.76	−.18 [-.37, .02]	2.44 (.81)	.77	2.37 (.83)	.81	.09 [-.11, .28]	2.82 (.86)	.79	2.93 (.87)	.79	−.13 [-.32, .07]
A	3.70 (.68)	.69	4.08 (.71)	.81	**−.55 [-.75, -.35]**	3.40 (.76)	.76	3.80 (.69)	.74	**−.55 [-.75, -.35]**	3.65 (.72)	.76	4.05 (.74)	.81	**−.56 [-.76, -.36**
ES	2.92 (.96)	.86	3.77 (.86)	.87	**−.92 [-1.13, -.72]**	3.33 (.85)	.73	3.87 (.76)	.82	**−.68 [-.88, -.47]**	2.88 (.97)	.87	3.73 (.88)	.89	**−.91 [-1.12, -.71]**
Agg	3.27 (.49)	.76	3.68 (.53)	.83	**−.81 [-1.02, -.61]**	3.17 (.43)	.72	3.39 (.53)	.78	**−.45 [-.65,-.26]**	3.25 (.49)	.79	3.66 (.52)	.84	**−.81 [-1.01, -.60]**

Note. $N = 199$ (Gen Z), 201 (Boomers). O = Openness. C = Conscientiousness, E = Extraversion, A = Agreeableness, ES = Emotional Stability. Agg = Aggregate of all five traits. Bold values indicate $p < .05$.

Table 8
Descriptives for indices of individual differences in perceived similarity between the offline and social media selves (study 2).

Trait ($n_{Gen\ Z}/n_{Boomers}$)	Gen Z (Early adults) *M* (*SD*)	Boomers (Late adults) *M* (*SD*)	*d* [95% CI]
Within-person correlation (perceived similarity between the offline and social media selves)			
Openness ($n = 178/173$)	.362 (.453)	.511 (.357)	**−.37 [-.58, -.15]**
Conscientiousness ($n = 184/159$)	.184 (.482)	.156 (.478)	.06 [-.15, .27]
Extraversion ($n = 184/192$)	.270 (.443)	.312 (.419)	−.10 [-.30, .11]
Agreeableness ($n = 196/200$)	.430 (.444)	.508 (.408)	−.18 [-.38, .01]
Emotional Stability ($n = 173/158$)	.182 (.457)	.223 (.474)	−.09 [-.30, .13]
Aggregate ($n = 197/200$)	.291 (.253)	.353 (.233)	**−.25 [-.45, -.05]**
Difference score (social media self-perceptions minus offline self-perceptions)			
Openness	−.210 (.486)	−.459 (.581)	**.47 [.27, .66]**
Conscientiousness	−.004 (.714)	−.235 (.611)	**.35 [.15, .54]**
Extraversion	−.384 (.968)	−.603 (.940)	**.23 [.03, .43]**
Agreeableness	−.297 (.732)	−.282 (.615)	−.02 [-.22, .17]
Emotional Stability	.403 (.791)	.105 (.681)	**.40 [.20, .60]**
Aggregate	−.099 (.451)	−.295 (.445)	**.44 [.24, .64]**
Rank-order change (rank on social media self-perceptions minus rank on offline self-perceptions)			
Openness	- (42.347)	- (39.662)	–
Conscientiousness	- (58.395)	- (45.182)	–
Extraversion	- (66.908)	- (65.495)	–
Agreeableness	- (55.402)	- (49.692)	–
Emotional Stability	- (54.255)	- (49.997)	–
Aggregate	- (58.143)	- (50.788)	–

Note. $N = 199$ (Gen Z)/201 (Boomers); *ns* vary among within-person correlations due to incalculable values in participants with constant scores in either the offline or social media traits. Bold values indicate $p < .05$.

breakdown showed the samples to be 31.8% working class, 30.3% lower-middle class, 30.8% middle class, 6.6% upper middle class, and 0.5% upper class.

In the Baby Boomer sample, participants (n = 201) identified as 49.8% women; 50.2% men; M_{age} = 63.78, SD_{age} = 4.98; 95.5% White/Caucasian, 0.5% Asian/Asian American, 1.0% South Asian/Indian, 1.0% Black/African America, and 2% multiple ethnic or racial backgrounds or specified a background not listed. Socioeconomic breakdown showed the samples to be 31.8% working class, 22.9% lower-middle class, 41.3% middle class, 4.0% upper middle class, and 0.0% upper class.

All participants were recruited via Prolific Academic, received 2.00 USD for their participation, and completed the study online via Qualtrics survey software. Power analysis showed that both samples could detect small correlations with 0.80 power (Gen Z Sample: r = 0.197; Boomer Sample: r = 0.196) and thus test the hypotheses regarding correlation size.

3.1.2. Design

The study design was the same as Study 1: Participants complete measurements of their personality traits specified for offline and social media contexts and without a context specified (global self-perceptions). The presentation order of the contextualized measures was randomized.

3.1.3. Measures

3.1.3.1. Self-perceived similarity in terms of personality. Participants completed the 30-item version of the BFI-2 (Soto and John, 2017b) as used in Study 1, Sample 2. Reliabilities across traits were $\alpha > 0.70$ with few exceptions (e.g., perceptions of openness and conscientiousness of the offline and social media selves in the Gen Z sample; Table 7).

As in Study 1, we calculated three indices of perceived similarity between offline and social media selves to assess individual differences in these perceptions, which may also relate to psychological well-being: 1) Within-person correlations, 2) difference scores, and 3) rank-order change between the offline and social media Big Five. Descriptives are shown in Table 8.

3.1.3.2. Social media self-continuity. Participants completed a measure of continuity with the social media self. We adopted a modified version of items from the Future Self-Identification Scale (Bixter et al., 2020) and the Inclusion of the Self into the Other Scale (Aron et al., 1992). Participants were shown a series of overlapping circles representing the level of perceived overlap between any two selves (Fig. 3 shows seven pairs of circles representing varying degrees of overlap between the offline and social media selves used in the present study). Participants indicated which pair of circles represents how similar and connected they feel between the two versions of themselves.

Participants also indicated how much positivity they felt toward their social media self (i.e., "how much do you like your social media self"; 1 = not at all to 7 = like as much as possible) and vividness of their social media self ("how easy is it for you to visualize a mental image of your social media self"; 1 = very difficult to 7 = very easy). An aggregate score of the four items was created (i.e., continuity with the social media self, α = 0.67/0.75).[3] Descriptives are shown in Table 9.

3.1.3.3. Psychological well-being. Participants completed three measures of psychological well-being: 1) Depression was assessed with the Center for Epidemiologic Studies Depression Scale (CES-D-R; Radloff, 1977; Eaton et al., 2004). Participants indicated what proportion of the time 20 different statements (e.g., "I felt depressed") applied to them in the past week (0 = Rarely or none of the time (less than 1 day) to 4 = All of the time (5–7 days)). Life satisfaction was assessed with the Riverside Life Satisfaction Scale (Margolis et al., 2019), which is a revision of the Satisfaction with Life Scale (Diener et al., 1985). Six items (e.g., "I am content with my life") are rated on a 1 (strongly disagree) to 7 (strongly agree) scale. 3) Self-esteem was assessed with the single-item self-esteem scale ("I have high self-esteem"; 1 = strongly disagree to 7 = strongly agree; Robins et al., 2001). Participants in Generation Z were more depressed, less satisfied with life, and had lower self-esteem than Boomers (Table 10).

3.1.3.4. Mobile phone use. As a control variable, we included how much time participants typically spent daily on their mobile device obtained from their logged smartphone records (i.e., "Screen Time" in iOS and "Digital Well-Being and Parental Controls" in Android). Logged mobile phone use is a more accurate predictor of social media use than self-reported use (Parry et al., 2021). Further, most social media use takes place on smartphones, and most social media platforms are integrated with other digital applications on mobile devices (Chaffey, 2022). How much time a person spends on their mobile device is likely to reflect their engagement with social media. As one might expect, Gen Z participants spent more time on their phones than Boomers (d = 0.67; 95% CI [0.45, 0.89]; Table 10). Of note, Boomers averaged several hours a day on their phones, suggesting that they do not lack digital engagement. Also, consistent with prior literature (Valkenburg et al., 2022), mobile phone use did not show strong links to psychological well-being in Generation Z ($rs < 0.07$; Table 11). Appendix A shows the bivariate correlations between the personality perceptions and psychological well-being or mobile phone use. In this research, we aimed to examine whether comparisons in the perceived similarity between the offline and social media selves and their links to psychological well-being across generations held with and without mobile phone use.

3.1.3.5. Primary social media platform. Participants also indicated the social media platform they primarily used/is their favorite (i.e., "*Which of the following social media do you primarily use/is your favorite? Please select only one.*"). Gen Z and Boomers preferred different platforms (Table 12). We thus used platform preference as an additional control for tests of generation differences in terms of the perceived similarity between offline and social media selves and its links to psychological well-being held across platform preferences (i.e., for each platform, we created predictor variables in which a person received a score of "1" if they preferred the platform and a "0" if they did not).

3.2. Results and discussion

3.2.1. RQ1: Do people perceive themselves as the same between offline and social media?

3.2.1.1. Sample level. We first examined the correlations in perceived personality between the offline and social media selves in each sample (Table 13). Overall, the perceived personality of the social media self was strongly and positively correlated with the perceived personality of the offline self for each trait and the aggregate of all five traits in both samples (with the exception of agreeableness in Gen Z and extraversion in both generations). Consistent with Study 1, these findings support Hypothesis 1a that people perceive strong similarity between their offline and social media selves ($r > 0.5$). Also consistent with Study 1 extraversion showed the weakest relationships between perceptions of the offline and social media selves relative to the other four of the Big Five traits ($Zs > 2.147$, $ps < .033$).

There were notable generation differences: Boomers perceived the aggregate personality of their social media and offline selves as marginally more similar than Gen Z (Z = 1.828, p = .068), which was significant when controlling for mobile phone use (aggregate

[3] For exploratory purposes, participants also completed the items regarding the self-continuity between their offline and global selves (see https://osf.io/e8xnc/?view_only=110da7845ba343ee8b3201fedbac0455).

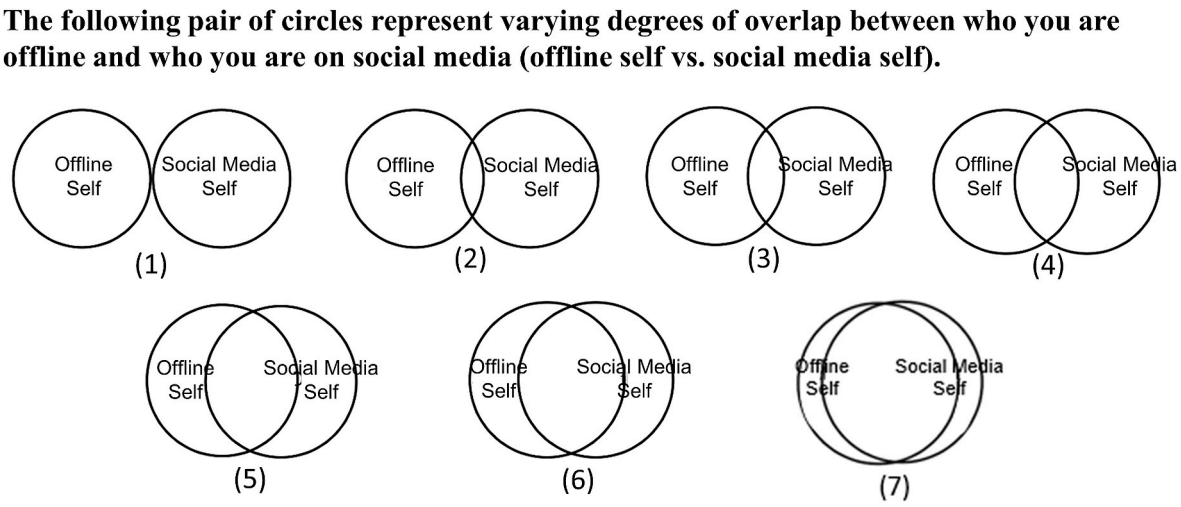

Fig. 3. Measure of perceived overlap between the offline and social media selves.

Table 9
Differences in continuity with the social media self across generations (study 2).

Index	Generation and score		*d* [95% CI]
	Gen Z (early adults) *M* (*SD*)	Boomers (older adults) *M* (*SD*)	
Similarity between offline and social media	4.72 (1.50)	5.15 (1.64)	**−.27 [-.47, -.08]**
Connectedness between offline and social media	4.56 (1.50)	5.02 (1.67)	**−.29 [-.49, -.09]**
Positivity felt towards the social media self	4.57 (1.41)	5.34 (1.30)	**−.57 [-.77, -.37]**
Vividness of the social media self	4.08 (1.71)	4.08 (1.99)	.00 [-.20, .19]
Continuity with the social media self	4.48 (1.09)	4.90 (1.26)	**−.35 [-.55, -.16]**

Note. $N = 199$ (Gen Z), 201 (Boomers). Bold values indicate $p < .05$.

Table 10
Descriptives for psychological well-being and mobile phone use (study 2).

Variable ($n_{\text{Gen Z}}/n_{\text{Boomer}}$)	α		*M* (*SD*)		*d* [95% CI]
	Gen Z (early adults)	Boomers (late adults)	Gen Z (early adults)	Boomers (older adults)	
Depression ($n = 196/192$)	.94	.91	21.78 (13.15)	11.00 (8.98)	**.95 [.74, 1.17]**
Life satisfaction ($n = 199/201$)	.89	.90	3.95 (1.36)	4.63 (1.40)	**−.50 [-.70, -.30]**
Self-esteem ($n = 199/201$)	–	–	3.92 (1.68)	4.72 (1.66)	**−.48 [-.67, -.28]**
Mobile phone use ($n = 187/161$)	–	–	314.03 (174.69)	168.36 (257.68)	**.67 [.45, .89]**

Bold values indicate $p < .001$.

Table 11
Correlations between psychological well-being and mobile phone use (study 2).

	Depression	Life satisfaction	Self-esteem	Mobile phone use
Depression	–	**−.733**	**−.585**	.069
Life satisfaction	**−.715**	–	**.595**	−.064
Self-esteem	**−.615**	**.617**	–	−.009
Mobile phone use	−.024	.044	−.082	–

Note. ns = 184–199 (Gen Z), 153–201 (Boomers). Values below diagonals are for Gen Z. Values above diagonals for Boomers. Bold values indicate $p < .001$.

Table 12
Primary social media platform by generation (study 2).

Platform	Gen Z (early adults)	Boomers (late adults)
Facebook	15 (7.5%)	110 (54.7%)
Instagram	64 (23.2%)	19 (9.5%)
Twitter	28 (14.1%)	32 (15.9%)
Snapchat	15 (7.5%)	1 (0.5%)
WeChat	3 (1.5%)	1 (0.5%)
TikTok	52 (26.1%)	6 (3.0%)
Other	22 (11.1%)	32 (15.9%)

Note. $N = 199$ (Gen Z), 201 (Boomers).

personality $r_{\text{Gen Z/Boomer}}$ between social media and offline selves = 0.526/0.671, $Z = 2.102$, $p = .036$). These findings suggest that while people may perceive strong overlap between their offline and social media selves, Gen Z perceive less overlap than Boomers—contrary to our Hypothesis 2, which was based on generational differences in time spent online.

3.2.1.2. Individual level. We next examined perceived similarity between the personality of the offline and social media selves at the individual level (see within-person correlations; Table 8; see Fig. 4 for a visual of individual differences). Both generations showed lower within-person correlations than $r = 0.5$, and only roughly a quarter of both Gen Z and Boomers reported a within-person correlation over 0.5 across the traits (Table 14). Agreeableness was the only trait in which the majority of both samples reported a within-person correlation over 0.5 (Boomers also reported a majority of within-person correlations over 0.5 for openness). Taken together these findings replicate those in Study 1 suggesting support for Hypothesis 1b at the individual difference level. These findings suggest that individuals in both Gen Z and Boomer tend to not see their offline and social media selves as strongly overlapping in personality traits.

There were notable generation differences: Gen Z participants showed lower within-person correlations between the perceptions of

Table 13
Correlations between personality perceptions of the offline, social media, and global selves by sample (study 2).

Trait and self	Offline Self	Social media self	Global self
Openness			
Offline self	–	.786 [.727, .834]	.963 [.952, .972]
Social media self	.761 [.695, .814]	–	.786 [.727, .834]
Global self	.864 [.824, .896]	.790 [.731, .837]	–
Conscientiousness			
Offline self	–	.684 [.603, .751]	.942 [.942, .956]
Social media self	.507 [.396, .604]	–	.722 [.648, .782]
Global self	.875 [.838, .904]	.512 [.402, .608]	–
Extraversion			
Offline self	–	.361 [.234, .476]	.901 [.872, .924]
Social media self	.329 [.199, .447]	–	.435 [.316, .541]
Global self	.890 [.857, .916]	.427 [.306, .535]	–
Agreeableness			
Offline self	–	.615 [.521, .694]	.922 [.898, .940]
Social media self	.489 [.376, .588]	–	.646 [.557, .720]
Global self	.846 [.801, .881]	.557 [.453, .646]	–
Emotional Stability			
Offline self	–	.654 [.567, .726]	.924 [.901, .942]
Social media self	.623 [.530, .701]	–	.647 [.559, .721]
Global self	.922 [.898, .940]	.632 [.540, .709]	–
Aggregate			
Offline self	–	.643 [.554, .717]	.955 [.941, .966]
Social media self	.522 [.412, .616]	–	.693 [.613, .758]
Global self	.918 [.893, .937]	.563 [.459, .651]	–

Note. $N = 199$ (Gen Z)/201(Boomers). Aggregate = Aggregate of all five traits. Values below diagonals are for Gen Z. Values above diagonals for Boomers. All correlations are significant at $p < .05$.

their offline and social media selves than Boomers in terms of openness and aggregate personality (Table 8; Fig. 4). Generation (0 = Gen Z; 1 = Boomer) predicted these estimates for both openness (B(*SE*) = 0.019 (0.061), 95% CI [0.071, 0.312], $p = .002$) and the aggregate of the five traits (B(*SE*) = 0.095 (0.035), 95% CI [0.027, 0.162], $p = .007$) after controlling for mobile phone use and preferred platform. Consistent with the sample level analyses, these findings do not support Hypothesis 2 that Generation Z perceives greater similarity of themselves across contexts due to higher mobile phone use.

Moreover, consistent with Study 1, the majority of the Gen Z and Boomer samples reported higher levels of the Big Five for their offline self rather than social media self except for emotional stability (Table 14). Also consistent with Study 1, few participants reported no difference in the Big Five between their offline and social media self-perceptions in terms of mean levels and rank-order: Less than 18% of Boomers and 15% of Gen Z reported no difference in personality between their offline and social media selves, and less than 1% of Boomers and 3% of Gen Z reported no change in rank (Table 14). These findings replicate findings in Study 1 and suggest that few perceive their offline and social media selves as the same.

However, generation differences in difference scores suggest that Generation Z are more likely to perceive their social media self as higher on most of the Big Five than their offline self compared to Boomers. The effect size of the generation difference across traits was twice as large as the effect size for the college student and Prolific samples in Study 1 (see difference scores in Table 3 vs. Table 8). Gen Z may be more likely to perceive their social media selves as high on the Big Five because they are less likely to report their offline self as higher on the Big Five than Boomers ($d = 0.81$ in the present study). Indeed, perceptions of the offline self in terms of the Big Five were negatively correlated with the difference score index across generations and for each of the Big Five (*r*s ranged from −0.628 to −0.311, *p*s < .001). Generation differences could also be due to differences in mobile phone use or platform preferences. After controlling for offline trait level, mobile phone time, and platform preferences, Generation (0 = Gen Z; 1 = Boomer) was a significant predictor such that Boomers were less likely to report their social media self as more open (B(*SE*) = −0.208 (0.070), 95% CI [-0.345, −0.071], $p = .003$) and less agreeable (B(*SE*) = 0.200 (0.085), 95% CI [0.034, 0.367], $p = .019$) than their offline self compared to Gen Z. Some generation differences in offline versus social media self-perception appear to be meaningful independent of generation differences in offline personality, mobile phone use, or platform preferences.

3.2.1.3. Self-continuity. We examined whether generation differences appeared in continuity with the social media self. Overall, Generation Z perceived lower continuity between their offline and social media selves than Boomers (Table 9). Generation (0 = Gen Z; 1 = Boomer) predicted continuity between the offline and social media selves even after controlling for mobile phone use and platform preference (B(*SE*) = 0.465 (0.159), 95% CI [0.154, 0.777], $p = .004$). These findings replicate generation differences in the perceived similarity between the offline and social media selves in terms of personality traits (failing to support Hypothesis 2) and further suggest these perceptions hold when participants explicitly consider their level of global overlap between the contexts.

3.2.2. *RQ2: Do perceptions of the global self reflect perceptions of both the offline and social media selves?*

Perceptions of the personality of the offline and global selves were almost identical and the correlations between these perceptions were considerably stronger than those between the social media and global selves in terms of aggregate personality in both Gen Z and Boomers ($Z_{\text{Gen Z/Boomer}} = 9.295/10.269$, *p*s < .001). Like Study 1, these findings suggest that people's perceptions of their offline self may be more similar to their global self than their perceptions of their social media self. However, the relationship between the perceived aggregate personality of the global and offline selves was stronger in Boomers than in Gen Z ($Z = 3.072$, $p = .002$). Boomers may be more likely to identify with the offline self. Multiple regression analyses to predict the perceived personality of the global self with the perceptions of the social media self independently of the offline self showed similar findings as in Study 1. VIFs among predictors were less than 2.619, suggesting that multicollinearity was not an issue. Across traits and generations, the perceptions of the social media self predicted the perceptions of the global self independently of perceptions of the offline self (Table 15). Taken together, these findings suggest that despite some generation differences in self-perceived similarity, perceptions of the social media self contribute to perceptions of the global self in both early and late adults.

3.2.3. *RQ3: Is perceived similarity between the offline and social media selves related to psychological well-being?*

Across traits and generations, within-person correlations between perceptions of the offline and social media selves showed weak and mostly insignificant relationships to psychological well-being (Table 16). Using multiple regression, we tested and found that the interaction between the perceived similarity estimate (i.e., the within-person correlation for the aggregate of all five traits) and generation on psychological well-being was significant only on life satisfaction after controlling for mobile phone use (Model 1 in Table 17; Model 2 shows estimates without the interaction term). Regarding the direction of the relationships, the generation differences showed that within-person correlations between perceptions of the offline and social media selves in terms of most of the Big Five were positive predictors of depression and negative predictors of life satisfaction in Generation Z while the opposite patterns occurred for Baby Boomers. These findings suggest that support for Hypothesis 3a versus 3b depends on the generation—support for Hypothesis 3a in Boomers but not Gen Z and support for Hypothesis 3b in Gen Z but not Boomers. The expectation that perceiving oneself as more similar between contexts is linked positively to psychological well-being in individualistic contexts may apply to social media in late but not early adults.

The other individual differences in perceived similarity between the

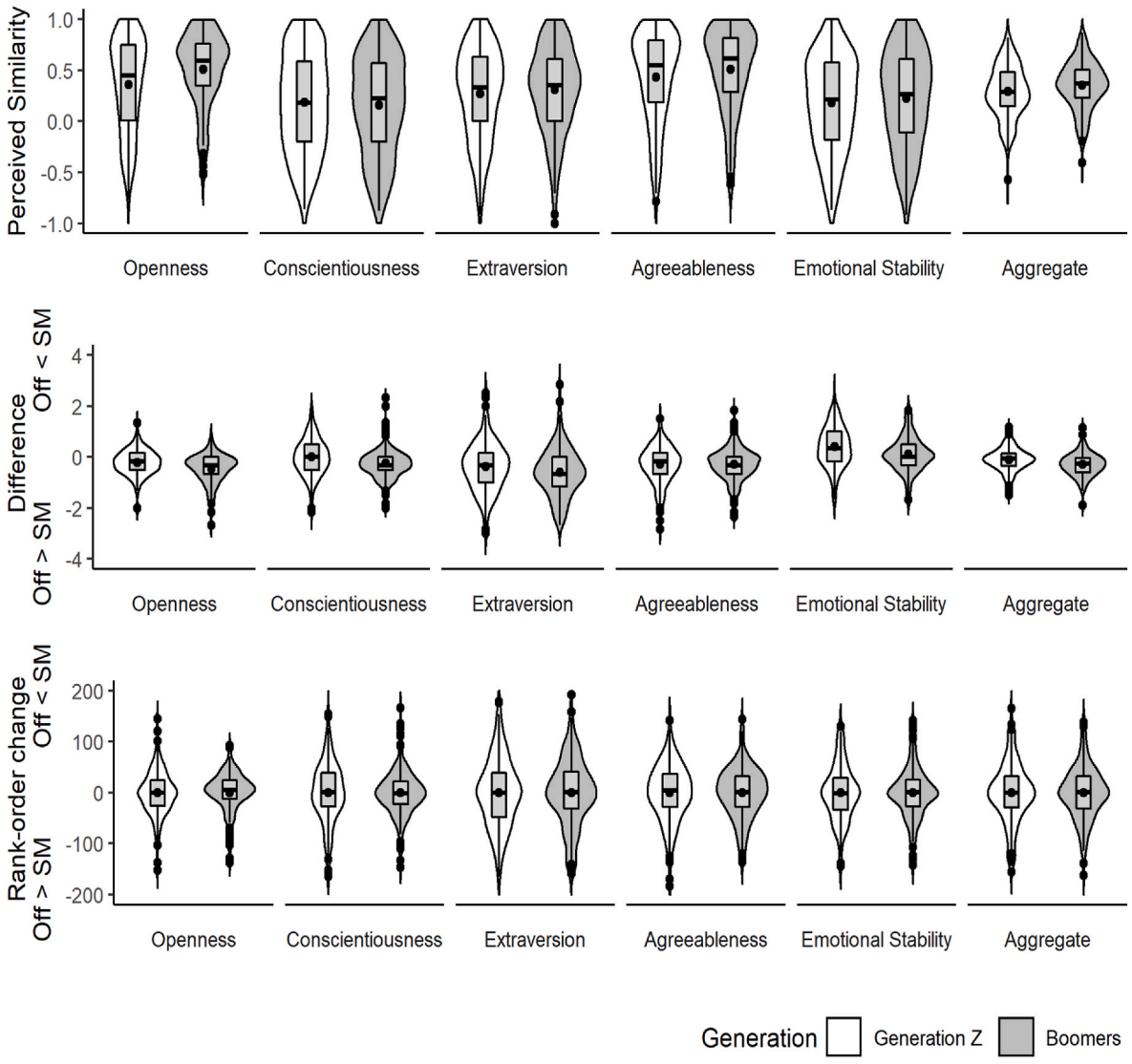

Fig. 4. *Individual Differences in Perceived Similarity (Within-person Correlations), Difference Scores, and Rank-order Change between the Offline and Social Media Selves (Study 2). Note.* Point within boxplot shows the generation mean of each index by trait. Aggregate = Aggregate of all five traits.

offline and social media selves (difference scores in means and rank-order between offline and social media self-perceptions, and self-continuity) showed significant relationships to psychological well-being across generations (Table 16). These indices predicted all three indicators of psychological well-being across generations, even with mobile phone use in the models (Models 3–5; Table 17). These findings suggest that perceiving the social media self as higher on the Big Five than the offline self in terms of mean levels or rank-order is linked to greater depression and lower life satisfaction and self-esteem in both early and late adulthood.

4. General discussion

4.1. Summary of findings

4.1.1. *RQ1: Do people perceive themselves as the same between offline and social media?*

The present research is first to examine the perceived similarity between offline and social media selves in terms of personality traits and self-continuity, and the relationship between these perceptions and psychological well-being across generations. Table 18 shows a summary of the research questions, hypotheses, and findings. Findings showed that across generations and student and non-student samples, people tend to view their offline and social media selves as similar. These findings support Hypothesis 1a based on personality reports between different social roles in daily life like "with friends vs. strangers" that show strong correlations between reports (Church et al., 2012). However, an examination of individual differences revealed that some did not perceive their offline and social media selves as similar and few viewed the two selves as the same. These findings at the individual level support Hypothesis 1b, which was based on early research in computer-mediated communication suggesting striking differences between offline and online contexts (McKenna & Bargh, 2014; Postmes et al., 1998; 2001). For some individuals, differences in perceived personality of the offline and social media selves may mirror early research in personality that showed weak to moderate correlations between expressions of personality across situational contexts (e.g., *r*s in the 0.20s or 0.30s; Bem & Allen, 1974; Bem & Funder, 1978; Hartshorne & May 1928; Mischel, 1983; Mischel & Peake, 1982; Mischel et al., 2002; Newcomb, 1929). These findings suggest that some people may use social media to present a different self than physical contexts.

Findings in Study 2 showed that Generation Z perceived *less* similarity and continuity between their offline and social media selves than Baby Boomers, even when controlling for mobile phone use. These

Table 14
Number of people who perceive their offline and social media selves as similar (study 2).

Trait	Within-person correlation (perceived similarity between the offline and social media selves)			
	Gen Z (early adults)		Boomer (late adults)	
	$r > .5$	$r < .5$	$r > .5$	$r < .5$
Openness	82 (46.1%)	96 (53.9%)	101 (58.4%)	72 (41.6%)
Conscientiousness	54 (29.3%)	130 (70.7%)	50 (31.4%)	109 (68.6%)
Extraversion	62 (33.7%)	122 (66.3%)	64 (33.3%)	128 (66.7%)
Agreeableness	106 (54.1%)	90 (45.9%)	119 (59.5%)	81 (40.5%)
Emotional Stability	50 (28.9%)	123 (71.1%)	48 (30.4%)	110 (69.6%)
Aggregate	44 (22.3%)	153 (77.7%)	51 (25.5%)	149 (74.5%)

	Difference (social media self-perceptions minus offline self-perceptions)					
	Gen Z (early adults)			Boomer (late adults)		
	Off > SM	Same	Off < SM	Off > SM	Same	Off < SM
Openness	119 (59.8%)	29 (14.6%)	51 (25.6%)	149 (74.1%)	30 (14.9%)	22 (10.9%)
Conscientiousness	96 (48.2%)	13 (6.5%)	90 (45.2%)	128 (63.7%)	26 (12.9%)	47 (22.4%)
Extraversion	122 (61.3%)	18 (9.0%)	59 (29.6%)	146 (72.6%)	13 (6.5%)	42 (20.9%)
Agreeableness	115 (57.8%)	24 (12.1%)	60 (30.2%)	119 (59.2%)	36 (17.9%)	46 (22.9%)
Emotional Stability	53 (26.6%)	20 (10.1%)	136 (63.3%)	69 (34.3%)	36 (17.9%)	96 (47.8%)
Aggregate	117 (58.8%)	7 (3.5%)	75 (37.7%)	153 (76.1%)	3 (1.5%)	45 (22.4%)

	Rank-order change (rank on social media self-perceptions minus rank on offline self-perceptions)					
	Gen Z (early adults)			Boomer (late adults)		
	Off > SM	Same	Off < SM	Off > SM	Same	Off < SM
Openness	97 (48.7%)	5 (2.5%)	97 (48.7%)	79 (39.3%)	1 (0.5%)	121 (60.2%)
Conscientiousness	97 (48.7%)	1 (0.5%)	101 (50.8%)	104 (51.7%)	0 (0.0%)	97 (48.3%)
Extraversion	99 (49.7%)	1 (0.5%)	99 (49.7%)	98 (48.8%)	1 (0.5%)	102 (50.7%)
Agreeableness	94 (47.2%)	0 (0.0%)	105 (52.8%)	89 (44.3%)	6 (0.3%)	106 (52.7%)
Emotional Stability	102 (51.3%)	2 (1.0%)	95 (47.7%)	100 (49.8%)	0 (0.0%)	101 (50.2%)
Aggregate	99 (49.7%)	1 (0.5%)	99 (49.7%)	98 (48.8%)	2 (1.0%)	101 (50.2%)

Note. Off = offline. SM = social media. Aggregate = Aggregate of all five traits. Percentages may not add up to exactly 100 given rounding.

findings were the opposite of Hypothesis 2, which was based on generational differences in social media use and that spending more time in a context predicts a stronger psychological connection to that context (Ryder et al., 2000; Sheldon et al., 1997). Consistent with prior research (e.g., Bolton et al., 2013), Gen Z spent more time online than Boomers in the present research. However, the present findings cast a question of whether spending more time on social media translates to perceiving more connection between one's offline and social media selves.

Compared to Boomers, Generation Z participants were more likely to perceive their social media self as more open, conscientious, extraverted, and emotionally stable than their offline self. These traits are typically viewed as positive or socially desirable and linked to positive psychological well-being (Kwan et al., 2004; Musek, 2007; van der Linden, te Nijenhuis, & Bakker, 2010). Gen Z may be more likely to present a socially desirable self on social media relative to Boomers. However, after controlling for offline trait perceptions, generation differences in comparing offline and social media self-perceptions

Table 15
Predicting the perceived personality of the global self with the perceptions of the social media self independently from the perceptions of the offline self (study 2).

	Estimates in predicting perceived personality of the global self							
	Gen Z (early adults)				Boomers (late adults)			
Model r^2_{adj} (Gen Z/Boomers)	B (*SE*)	95% CI	*t*	*p*	B (*SE*)	95% CI	*t*	*p*
Openness r^2_{adj} = .786/.929								
Offline	.650 (.053)	[.547, .754]	12.357	<.001	.892 (.030)	[.832, .951]	29.695	<.001
Social media	.320 (.052)	[.219, .422]	6.202	<.001	.074 (.030)	[.016, .133]	2.498	.013
Conscientiousness (r^2_{adj} = .770/.898)								
Offline	.815 (.039)	[.738, .892]	20.922	<.001	.851 (.031)	[.790, .913]	27.199	<.001
Social media	.109 (.047)	[.017, .202]	2.331	.021	.179 (.038)	[.103, .254]	4.679	<.001
Extraversion (r^2_{adj} = .811/.823)								
Offline	.837 (.033)	[.773, .901]	25.674	<.001	.890 (.033)	[.825, .955]	26.945	<.001
Social media	.160 (.035)	[.091, .228]	4.617	<.001	.133 (.033)	[.067, .199]	3.973	<.001
Agreeableness (r^2_{adj} = .739/.859)								
Offline	.796 (.044)	[.710, .883]	18.106	<.001	.879 (.035)	[.810, .948]	25.019	<.001
Social media	.177 (.039)	[.100, .254]	4.519	<.001	.135 (.036)	[.064, .206]	3.741	<.001
Emotional stability (r^2_{adj} = .854/.855)								
Offline	.871 (.035)	[.802, .941]	24.815	<.001	.892 (.036)	[.821, .964]	24.599	<.001
Social media	.108 (.040)	[.030, .187]	2.724	.007	.087 (.041)	[.006, 168]	2.120	.035
Aggregate (r^2_{adj} = .851/.922)								
Offline	.853 (.032)	[.790, .916]	26.683	<.001	.863 (.026)	[.813, .914]	33.742	<.001
Social media	.130 (.036)	[.058, .202]	3.574	<.001	.133 (.026)	[.083, .184]	5.197	<.001

Note. N = 199 (Gen Z)/201(Boomers). Aggregate = Aggregate of all five traits.

Table 16
Correlations between psychological well-being and perceived similarity between the offline and social media selves.

Self-perception	Depression		Life Satisfaction		Self-esteem		Mobile phone use		*n*	
	Gen Z (young adults)	Boomer (late adults)	Gen Z (young adults)	Boomer (late adults)	Gen Z (young adults)	Boomer (late adults)	Gen Z (young adults)	Boomer (late adults)	Gen Z (young adults)	Boomer (late adults)
	Within-person correlation (perceived similarity between the offline and social media selves)									
O	**.171**	−.004	**−.149**	−.088	−.096	−.074	.059	.001	178	173
C	.076	.096	−.092	−.075	−.021	−.050	**.173**	.092	184	160
E	.002	−.140	.013	**.157**	−.067	**.143**	.121	.017	184	192
A	.070	**.147**	−.121	−.044	**−.251**	**−.145**	.055	.012	186	182
ES	−.129	**−.168**	.094	**.188**	.066	.038	.080	.030	173	158
Agg	.080	−.023	−.107	.061	−.130	−.029	**.168**	.039	162	123
	Difference score (social media self-perceptions minus offline self-perceptions)									
O	**.220**	.020	**−.238**	.005	**−.145**	−.042	.129	.044	199	201
C	**.180**	**.203**	**−.152**	**−.240**	**−.151**	−.039	.057	−.034	199	201
E	**.318**	**.299**	**−.253**	**−.233**	**−.264**	**−.225**	.089	.082	199	201
A	.064	.130	.044	**−.175**	−.037	−.036	.008	−.021	199	201
ES	**.306**	**.330**	**−.176**	**−.263**	**−.282**	**−.183**	−.013	−.026	199	201
Agg	**.368**	**.325**	**−.255**	**−.292**	**−.303**	**−.183**	.082	.023	199	201
	Rank-order change (rank on social media self-perceptions minus rank on offline self-perceptions)									
O	**.230**	.010	**−.239**	.030	**−.153**	−.036	**.146**	.062	199	201
C	.131	.132	−.117	**−.169**	−.120	−.021	.083	−.025	199	201
E	**.313**	**.293**	**−.246**	**−.233**	**−.244**	**−.208**	.071	.095	199	201
A	.082	.115	.015	**−.144**	−.053	−.002	.008	.013	199	201
ES	**.175**	**.218**	−.077	**−.195**	**−.178**	−.089	−.025	−.021	199	201
Agg	**.307**	**.305**	**−.211**	**−.289**	**−.246**	**−.176**	.100	.043	199	201
	Social media self-continuity									
Similarity	−.037	**−.139**	**.141**	.116	.060	.080	.020	.001	199	201
Connected	−.006	**−.163**	.099	.114	.015	.097	.129	−.017	199	201
Vividness	−.003	−.128	.027	**.216**	**.171**	**.244**	**.171**	.046	199	201
Positive	**−.397**	**−.356**	**.443**	**.256**	**.442**	**.398**	.128	−.105	198	201
Continuity	**−.145**	**−.240**	**.238**	**.228**	**.236**	**.258**	**.160**	−.013	198	201

Note. O = Openness. C = Conscientiousness, E = Extraversion, A = Agreeableness, ES = Emotional Stability. Agg = Aggregate of the five traits. Bold = significant at $p < .05$.

remained significant only for openness and agreeableness. Some behaviors indicative of the "dark side" of social media (Baccarella et al., 2018) such as intolerance (indicative of low openness) may not apply to most of our Gen Z participants.

4.1.2. *RQ2: do perceptions of the global self reflect perceptions of both the offline and social media selves?*

Across studies, we found that both offline and social media self-perceptions independently predicted perception of the global self in college and internet samples and for both Gen Z and Boomers. Perceptions of the personality of the offline and global selves correlated stronger than those between the social media and global selves, especially for Boomers. People, especially Boomers, may be more likely to identify with the offline self. However, the findings suggest that people still think of their social media self when thinking about who they are. Self-perception on social media may contribute to an important part of people's global self-conception.

4.1.3. *RQ3: Is perceived similarity between the offline and social media selves related to psychological well-being?*

Relationships between psychological well-being and perceived similarity between the offline and social media selves were small. However, the directions of these relationships by sample showed that perceiving the social media and offline selves as similar in terms of the aggregate of the personality traits was negatively linked to psychological well-being (lower depression, higher life satisfaction) in Generation Z (Hypothesis 3b) while positively linked to psychological well-being in Baby Boomers (Hypothesis 3a). Positive links between self-consistency and psychological well-being may apply to Boomers in late adulthood given that these individuals are digital immigrants whose values of self-consistency were derived from their early socialization (i.e., mainly in physical environments). However, for some members of Gen Z, social media may be an escape to explore new identities and overcome constraints in their physical environment, or venues to express aspects of themselves (true self) that are not always able to express around others in physical life—These findings suggest that using social media as an escape or an alternative venue for self-expression could be an adaptive strategy for some early adults.

The present findings also showed that perceiving the social media self as higher on the Big Five than the offline self in terms of mean levels or rank-order was linked to greater depression and lower life satisfaction and self-esteem for both generations. Individuals who perceive their social media self in this way may view their social media self as an ideal self they've failed to live up to offline—an example of self-discrepancy between the current and ideal self that is linked to poor psychological well-being (see Higgins, 1987, 1989; Mason et al., 2019). Implications of these findings may particularly apply to Gen Z who reported more depression and less life satisfaction and self-esteem than Boomers. The duality of social media whether people use it adaptively versus maladaptively (Kwan & Bodford, 2015; Manago, 2015; Teske, 2002) may depend on how a person uses social media in reference to their offline identity.

4.2. *Implications*

The present research has implications for research on self-perception. The observed strong overlap in offline and social media self-perceptions suggests that today's online world may be increasingly intertwined with the offline world. These findings support the idea of "context collapse" (see Marwick & Boyd, 2011) between offline and

Table 17
Predicting psychological well-being with individual differences in perceived similarity between the offline and social media selves.

Model	Estimates in predicting psychological well-being							
	Depression				Life satisfaction Self-esteem			
	B (*SE*)	95% CI	*t*	*p*	B (*SE*)	95% CI	*t*	*p*
Model 1								
Within-person correlation	9.475 (7.636)	[-5.547, 24.497]	1.241	.216	−1.788 (.907) −1.362 (1.110)	[-3.572, −.004] [-3.544, .821]	−1.971 −1.227	.050 .221
Generation	−9.663 (2.109)	[-13.813, −5.514]	−4.581	<.001	.375 (.249) .695 (.304)	[-.115, .864] [.096, 1.294]	1.506 2.283	.133 .023
Mobile Phone Use	.001 (.003)	[-.001, .006]	.222	.824	.000 (.000) .000 (.000)	[-.001, .001] [-.001, .001]	−.159 .422	.874 .673
Within-person correlation* Generation	−5.237 (5.042)	[-15.155, 4.682]	−1.039	.300	1.212 (.599) .536 (.733)	[.034, 2.391] [-.905, 1.978]	2.024 .732	.044 .465
Model 2								
Within-person correlation	1.983 (2.505)	[-2.945, 6.910]	.791	.429	−.053 (.299) −.594 (.364)	[-.641, .535] [-1.310, .121]	−.178 −1.634	.858 .103
Generation	−11.351 (1.346)	[-13.998, −8.704]	−8.434	<.001	.763 (.159) .867 (.194)	[.450, 1.076] [.486, 1.248]	4.792 4.472	<.001 <.001
Mobile phone use	.001 (.002)	[-.005, .006]	.257	.797	.000 (.000) .000 (.000)	[-.001, .001] [-.001, .001]	−.240 .393	.810 .694
Model 3								
Difference score	8.752 (1.324)	[6.147, 11.357]	6.608	<.001	−.851 (.162) −1.093 (.198)	[-1.169, -.532] [-1.483,-.704]	−5.250 −5.520	<.001 <.001
Generation	−9.382 (1.278)	[-11.896, −6.869]	−7.343	<.001	.571 (.154) .599 (.188)	[.268, .874] [.228, .969]	3.707 3.180	<.001 .002
Mobile phone use	.000 (.003)	[-.005, .005]	.059	.953	.000 (.000) .000 (.000)	[-.001, .001] [-.001, .001]	−.080 .0554	.936 .580
Model 4								
Rank-order change	.062 (.011)	[.040, .084]	5.621	<.001	−.006 (.001) −.008 (.002)	[-.008, −.003] [-.011, −.005]	−4.553 −4.827	<.001 <.001
Generation	−11.218 (.1.266)	[-13.708, −8.728]	−8.863	<.001	.751 (.151) .830 (.185)	[.454, 1.049] [.466, 1.195]	4.962 4.484	<.001 <.001
Mobile Phone use	.000 (.003)	[-.005, .005]	−.017	.987	.000 (.000) .000 (.000)	[-.001, .001] [-.001, .001]	−.023 .610	.982 .542
Model 5								
Continuity	−1.813 (.527)	[-2.849, −.777]	−3.443	<.001	.305 (.061) .372 (.075)	[.185, .426] [.223, .520]	4.978 4.931	<.001 <.001
Generation	−10.484 (1.321)	[-13.083, −7.884]	−7.934	<.001	.632 (.153) .686 (.187)	[.332, .933] [.317, 1.055]	4.144 3.660	<.001 <.001
Mobile phone use	.002 (.003)	[-.004, .007]	.0547	.584	.000 (.000) .000 (.000)	[-.001, .000] [-.001, .001]	−.610 .010	.542 .992

Note. Within-person correlation = perceived similarity in aggregate personality between the offline and social media selves. Difference score = Social media self-perceptions minus offline self-perceptions in aggregate personality. Rank-order change = Rank on social media self-perceptions minus rank on offline self-perceptions in aggregate personality. Continuity = Continuity with the social media self. Generation coded as 0 = Generation Z; 1 = Baby Boomer.

online contexts (Bodford, 2017; Bodford et al., 2021) and contrast with early characterizations of the online and offline worlds as strikingly different (McKenna & Bargh, 2014; Postmes et al., 1998; 2001). Social media may be akin to other social situations where people show strong overlap in how they perceive themselves (see Church et al., 2012). However, our findings suggest that some people do not appear to perceive themselves as similar between offline and social media contexts and that how people perceive themselves on social media contributes to how they perceive themselves globally independently from how they perceive themselves offline. As the psychological boundaries between offline and social media life collide, it becomes critical to understand how perceptions between these contexts separately and jointly organize people's experiences. A core finding in prior work is the positive relationship between consistency in self-perception across contexts and psychological well-being (Donahue et al., 1993; Leary, 2003; Morse & Gergen, 1970; Sedikides et al., 2023; Slabu et al., 2014; Sokol & Serper, 2019; Swann et al., 2007). We found that this relationship may not apply to perceptions of the self between offline and social media contexts for members of Generation Z. Social media allow individuals to control their self-presentation and obtain social resources by presenting themselves differently (Bayer et al., 2020; McFarland & Ployhart, 2015). Social media may provide an environment for people to think and feel different from their usual self. Taken together with present findings, this digital environment may play an increasingly prominent role in how people perceive themselves offline and more globally.

Further, much of prior research on self-perception and social media use focused on young adults. This focus is understandable. Young adults are undergoing critical identity development, heavily use social media, and they comprise the accessible college samples commonly used in behavioral research (Diehl & Hay, 2011; Lodi-Smith & Roberts, 2010; Orben, 2020a,b; Twenge, 2017). The present research builds prior work by examining self-perception in the understudied context of late adulthood. Older adults undergo challenges such as loneliness, cognitive decline, and decreases in mobility (Demnitz et al., 2018; Ong et al., 2016; Spreng & Turner, 2019). The present research invites further work to investigate perceptions of the offline and social media self in late adulthood. One question is whether the selves that late adults express on social media can help them mitigate these challenges (e.g., by connecting with others online) and experience positive outcomes.

The present research also has implications for research on social media and psychological well-being. There is widespread concern about social media use and psychological well-being, but much of the research on this topic shows inconclusive findings (Orben, 2020a,b; Valkenburg, 2022). Indicators like screen time and frequency of social media use may show inconclusive or weak relationships with psychological well-being because they are inaccurate and are often confounded by the various ways people may use social media (Parry et al., 2022). The present research sought to address such concerns by applying psychological

Table 18
Summary of the present research.

Research Question	Hypotheses	Findings
RQ1: Do people perceive themselves as the same between offline and social media?	H1a: Correlations between perceived personality of the offline and social media selves would be strong (i.e., *r* of .5 or higher) vs. (H1b) less than strong (i.e., *r* of less than .5)	H1a supported at sample but not individual level
	H1b: Correlations between perceived personality of the offline and social media selves would be less than strong (i.e., *r* of less than .5)	H1b supported at individual but not sample level
	H2: Generation Z would perceive more similarity between their offline and social media selves than Baby Boomers	H2 not supported
RQ2: Do perceptions of the global self reflect perceptions of both the offline and social media selves?	Exploratory	Both offline and social media self-perceptions independently predicted global self-perception
RQ3: Is perceived similarity between the offline and social media selves related to psychological well-being?	H3a: perceived similarity between the offline and social media selves would positively relate to psychological well-being	H3a supported for Boomers but not Gen Z
	H3b: perceived similarity between the offline and social media selves would negatively relate to psychological well-being	H3b supported for Gen Z but not Boomers

theory on the self to explain psychological well-being in the context of media use. Whether a person views themselves as consistent across different contexts plays a role in their psychological well-being (Donahue et al., 1993; Leary, 2003; Morse & Gergen, 1970; Sedikides et al., 2023; Slabu et al., 2014; Sokol & Serper, 2019; Swann et al., 2007). Beyond how much time a person spends on social media, it is important to consider how they view themselves on social media overlaps with how they view themselves offline—particularly as social media features dealing with self-presentation become more sophisticated. Future research on social media and mental health may benefit from theoretical groundings in research on self-perception.

4.3. Limitations and future directions

The present studies were correlational in design and thus cannot address whether there is a causal relationship between perceptions of the offline versus social media selves and psychological well-being. A question for future research is why perceived similarity between the offline and social media selves was not positively linked to psychological well-being in Generation Z. On the one hand, early adults may use social media to escape or as a refuge from their offline circumstances. On the other hand, early adults who are less depressed and more satisfied with life may be better equipped to take advantage of the opportunities on social media that contrast with offline life (McFarland & Ployhart, 2015) and overcome the psychological constraints of today's complex digital environment (Talaifar & Lowery, 2023). In either case, future research may investigate the relationships between psychological well-being and offline versus social media selves (via self-perceptions or other characteristics) over time or via experimental design to address causal directions.

Although the present research incorporated a diverse range of samples (i.e., college and internet samples, samples of Generation Z and Baby Boomers), findings regarding the generation comparisons in perceived similarity are limited in generalizability due to sample source. Gen Z and Boomer participants in Study 2 were recruited via Prolific Academic. Prolific Academic is noted for higher data quality, more honest participants, and better representation of population demographics than alternative platforms (Douglas et al., 2023; Peer et al., 2017). However, older adult participants on Prolific tend to be more technologically active than their peers (Turner & Onorato, 1999). Our observed generation differences in the present study might have been smaller due to a technologically active Boomer sample. Future research may seek alternative sources to invite late adults to participate in studies testing generation differences in digital media use.

This research focused on *generation* similarities and differences in perceived similarity between offline and social media selves and its links to psychological well-being. It remains unknown whether differences are due to cultural differences between generations (e.g., different norms, social values, etc.) or are due to being in different aspects of the developmental life span. Late adults have more stable self-concepts and are less likely to explore different identities than early adults (Lodi-Smith & Roberts, 2010), which has implications for psychological well-being (Diehl & Hay, 2011). Future research may examine whether generation differences in psychological well-being and perceived similarity between offline and social media contexts are due to young people being more likely to test new identities rather than the unique values in the digital communities they partake in.

In a similar vein, the generations we selected raise further questions about a nuanced interplay between generational influences, technological literacy, and individual traits. We selected Generation Z and Baby Boomers participants to test generation differences in perceived similarity between the offline and social media selves given their respective associations as digital "natives" and "immigrants." However, one may ask whether Generation X or Millennials, for example, may show self-perceptions (offline or on social media) that align more closely with Generation Z or Baby Boomers. Such alignment may result from technological literacy, generational influence, or unique personality characteristics. Further, individuals within a particular generational cohort are not homogenous in their social perception and behavior (e.g., Noble & Schewe, 2003; Salthouse, 2013; Wang et al., 2019). Future research investigating age differences in social perception and behavior in the context of digital technology may wish to determine the specific roles of generation, technological use, development, and individual traits.

The present research also examined *self-perceived* similarity. A further question is whether people are as likely to perceive themselves as similar between offline and social media contexts as observers would. Future research may accordingly wish to examine similarity in personality beyond self-perceptions via peer reports or behavioral measures (e.g., social media data; Bailey et al., 2020). A challenge with the latter is what behaviors are comparable between offline and social media contexts on the same dimension. Future research may wish to select particular offline and social media contexts to compare peer or behavioral reports to address this issue and complement the broad comparison of offline and social media contexts in the present research.

The present research was conducted with participants in traditionally individualistic cultural environments where self-consistency and psychological well-being positively correlate in physical contexts (Donahue et al., 1993; Leary, 2003; Morse & Gergen, 1970; Sedikides et al., 2023; Slabu et al., 2014; Sokol & Serper, 2019; Swann et al., 2007). People, particularly early adults, constantly switching between offline and social media contexts are not unlike bicultural individuals whose thoughts, feelings, and behavior vary as they switch cultural frames (Alter & Kwan, 2009; Chen & Bond, 2010; Hong et al., 2000). The present research suggests that self-perceptions in offline and social media contexts are similar but not the same and that such perceptions are linked to psychological well-being in ways that contrast with traditional expectations of self-consistency. Future research may test

whether links between psychological well-being and perceived similarity across offline and social media selves hold in collectivistic cultural environments—which show different relationships between self-perception and social media use than individualistic cultures (e.g., Bunker & Kwan, 2023). Studying psychology in offline and social media contexts separately and jointly will be important to understand the social well-being of the emerging digital world and the relationship between technology and cultural changes.

Credit Author statement

Conceptualization: CJB, VSYK. Data curation: CJB. Formal analysis: CJB. Funding acquisition: CJB. Methodology: CJB, VSYK. Writing—original draft: CJB. Writing—review and editing: CJB, VSYK.

Declaration of competing interest

None.

Data availability

Data, code, and materials are available: https://osf.io/e8xnc/?view_only=110da7845ba343ee8b3201fedbac0455

Appendix A

Table A1
Correlations between Self-perceived Traits and Psychological Well-being and Mobile Phone Use (Study 2)

Trait and self	Depression		Life-satisfaction		Self-esteem		Mobile phone use	
	Gen Z (young adults)	Boomer (late adults)	Gen Z (young adults)	Boomer (late adults)	Gen Z (young adults)	Boomer (late adults)	Gen Z (young adults)	Boomer (late adults)
Openness								
Offline self	−.064	−.050	.131	.045	.110	**.195**	−.022	−.052
Social media self	.087	−.037	−.035	.047	.008	**.165**	.065	−.023
Global self	−.004	−.016	−.021	.036	.052	**.191**	.009	−.025
Conscientiousness								
Offline self	**−.336**	**−.346**	**.327**	**.359**	**.220**	**.190**	.042	−.004
Social media self	**−.205**	**−.235**	**.225**	**.221**	.096	**.196**	.111	−.035
Global self	**−.345**	**−.351**	**.373**	**.366**	**.219**	**.216**	.100	−.011
Extraversion								
Offline self	**−.396**	**−.330**	**.376**	**.325**	**.552**	**.430**	.013	−.054
Social media self	−.040	.011	.097	.065	**.270**	**.179**	.120	.033
Global self	**−.416**	**−.300**	**.371**	**.340**	**.551**	**.457**	−.001	−.029
Agreeableness								
Offline self	**−.142**	**−.292**	.116	**.234**	−.007	.130	**.172**	−.008
Social media self	−.065	**−.184**	**.146**	.085	−.041	.101	**.163**	−.028
Global self	**−.156**	**−.237**	.120	**.177**	.016	.119	**.158**	−.027
Emotional Stability								
Offline self	**−.687**	**−.653**	**.550**	**.521**	**.680**	**.536**	.011	−.054
Social media self	**−.494**	**−.451**	**.459**	**.355**	**.506**	**.443**	.001	−.082
Global self	**−.701**	**−.669**	**.549**	**.553**	**.720**	**.610**	−.002	−.030
Aggregate								
Offline self	**−.574**	**−.521**	**.522**	**.464**	**.560**	**.471**	.063	−.055
Social media self	**−.268**	**−.244**	**.326**	**.218**	**.319**	**.318**	**.162**	−.038
Global self	**−.581**	**−.506**	**.497**	**.477**	**.571**	**.523**	.079	−.039

Note. ns = 187–199 (Gen Z), 161–201 (Boomers). Aggregate = Average of all five traits. Top diagonal indicates values for Boomers. Lower diagonal indicates values Gen Z. Bold values indicate $p < .05$.

References

Allport, G. W., & Odbert, H. S. (1936). Trait names: A psycholexical study. *Psychological Monographs, 47*(1), i–171. https://doi.org/10.1037/h0093360

Alter, A. L., & Kwan, V. S. Y. (2009). Cultural sharing in a global village: Evidence for extracultural cognition in European Americans. *Journal of Personality and Social Psychology, 96*(4), 742–760. https://doi.org/10.1037/a0014036

Appelbaum, M., Cooper, H., Kline, R. B., Mayo-Wilson, E., Nezu, A. M., & Rao, S. M. (2018). Journal article reporting standards for quantitative research in psychology: The APA Publications and Communications Board task force report. *American Psychologist, 73*(1), 3–25. https://doi.org/10.1037/amp0000191

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*(4), 596. https://doi.org/10.1037/0022-3514.63.4.596

Baccarella, C. V., Wagner, T. F., Kietzmann, J. H., & McCarthy, I. P. (2018). Social media? It's serious! Understanding the dark side of social media. *European Management Journal, 36*(4), 431–438. https://doi.org/10.1016/j.emj.2018.07.002

Bailey, E. R., Matz, S. C., Youyou, W., & Iyengar, S. S. (2020). Authentic self-expression on social media is associated with greater subjective well-being. *Nature Communications, 11*(1), 4889. https://doi.org/10.1038/s41467-020-18539-w

Bainbridge, T. F., Ludeke, S. G., & Smillie, L. D. (2022). Evaluating the Big Five as an organizing framework for commonly used psychological trait scales. *Journal of Personality and Social Psychology, 122*(4), 749. https://doi.org/10.1037/pspp0000395

Bartels, D. M., & Rips, L. J. (2010). Psychological connectedness and intertemporal choice. *Journal of Experimental Psychology: General, 139*(1), 49–69. https://doi.org/10.1037/a0018062

Bayer, J. B., Triệu, P., & Ellison, N. B. (2020). Social media elements, ecologies, and effects. *Annual Review of Psychology, 71*(1), 471–497. https://doi.org/10.1146/annurev-psych-010419-050944

Behm-Morawitz, E. (2013). Mirrored selves: The influence of self-presence in a virtual world on health, appearance, and well-being. *Computers in Human Behavior, 29*(1), 119–128. https://doi.org/10.1016/j.chb.2012.07.023

Bem, D. J., & Allen, A. (1974). On predicting some of the people some of the time: The search for cross-situational consistencies in behavior. *Psychological Review, 81*(6), 506. https://doi.org/10.1037/h0037130

Bem, D. J., & Funder, D. C. (1978). Predicting more of the people more of the time: Assessing the personality of situations. *Psychological Review, 85*(6), 485. https://doi.org/10.1037/0033-295X.85.6.485

Bixter, M. T., McMichael, S. L., Bunker, C. J., Adelman, R. M., Okun, M. A., Grimm, K. J., … Kwan, V. S. (2020). A test of a triadic conceptualization of future self-identification. *PLoS One, 15*(11), Article e0242504. https://doi.org/10.1371/journal.pone.0242504

Block, J., & Robins, R. W. (1993). A longitudinal study of consistency and change in self-esteem from early adolescence to early adulthood. *Child Development, 64*(3), 909–923. https://doi.org/10.2307/1131226

Bodford, J. E. (2017). Blurring safety between online and offline worlds: Archival, correlational, and experimental evidence of generalized. In *Threat in the digital age.* Arizona State University. Ph.D. Dissertation.

Bodford, J. E., Bunker, C. J., & Kwan, V. S. (2021). Does perceived social networking site security arise from actual and perceived physical safety? *Computers in Human Behavior, 121*, Article 106779. https://doi.org/10.1016/j.chb.2021.106779

Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., … Solnet. (2013). Understanding Generation Y and their use of social media: a review and research agenda. *Journal of Service Management, 24*(3), 245–267. https://doi.org/10.1108/09564231311326987.

Bunker, C. J., & Kwan, V. S. Y. (2021). Do the offline and social media Big Five have the same dimensional structure, mean levels, and predictive validity of social media outcomes? *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 15*(4). https://doi.org/10.5817/CP2021-4-8

Bunker, C. J., & Kwan, V. S. Y. (2023). Deviation from design: Social media use is linked to less connection between the self and others. *Cyberpsychology, Behavior, and Social Networking*. https://doi.org/10.1089/cyber.2022.0372

Bunker, C. J., Saysavanh, S. E., & Kwan, V. S. (2021). Are gender differences in the big five the same on social media as offline? *Computers in Human Behavior Reports, 3*, Article 100085. https://doi.org/10.1016/j.chbr.2021.100085

Caldwell-Harris, C. L., & Aycicegi, A. (2006). When personality and culture clash: The psychological distress of allocentrics in an individualist culture and idiocentrics in a collectivist culture. *Transcultural Psychiatry, 43*(3), 331–361. https://doi.org/10.1177/1363461506066982

Carr, C. T., & Hayes, R. A. (2015). Social media: Defining, developing, and divining. *Atlantic Journal of Communication, 23*(1), 46–65. https://doi.org/10.1080/15456870.2015.972282

Cervone, D., & Shoda, Y. (1999). Beyond traits in the study of personality coherence. *Current Directions in Psychological Science, 8*(1), 27–32. https://doi.org/10.1111/1467-8721.00007

Chaffey, D. (2022). Global social media research summary, 2022 *Smart Insights*. Retrieved from https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-mediaresearch/.

Chen, S. X., & Bond, M. H. (2010). Two languages, two personalities? Examining language effects on the expression of personality in a bilingual context. *Personality and Social Psychology Bulletin, 36*(11), 1514–1528. https://doi.org/10.1177/0146167210385360

Cheng, C., Wang, H. Y., Sigerson, L., & Chau, C. L. (2019). Do the socially rich get richer? A nuanced perspective on social network site use and online social capital accrual. *Psychological Bulletin, 145*(7), 734. https://doi.org/10.1037/bul0000198

Church, A. T., Alvarez, J. M., Katigbak, M. S., Mastor, K. A., Cabrera, H. F., Tanaka-Matsumi, J., … Buchanan, A. L. (2012). Self-concept consistency and short-term stability in eight cultures. *Journal of Research in Personality, 46*(5), 556–570. https://doi.org/10.1016/j.jrp.2012.06.003

Costa, P. T., Jr., & McCrae, R. R. (1992a). Four ways five factors are basic. *Personality and Individual Differences, 13*(6), 653–665. https://doi.org/10.1016/0191-8869(92)90236-I

Demnitz, N., Hogan, D. B., Dawes, H., Johansen-Berg, H., Ebmeier, K. P., Poulin, M. J., & Sexton, C. E. (2018). Cognition and mobility show a global association in middle-and late-adulthood: Analyses from the Canadian Longitudinal Study on Aging. *Gait & Posture, 64*, 238–243. https://doi.org/10.1016/j.gaitpost.2018.06.116

Diehl, M., & Hay, E. L. (2011). Self-concept differentiation and self-concept clarity across adulthood: Associations with age and psychological well-being. *The International Journal of Aging and Human Development, 73*(2), 125–152. https://doi.org/10.2190/AG.73.2.b

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Diener, E., Lucas, R. E., & Oishi, S. (2018). Advances and open questions in the science of subjective well-being. *Collabra: Psychology, 4*(1). https://doi.org/10.1525/collabra.115

Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology, 41*(1), 417–440. https://doi.org/10.1146/annurev.ps.41.020190.0022

Donahue, E. M., Robins, R. W., Roberts, B. W., & John, O. P. (1993). The divided self: Concurrent and longitudinal effects of psychological adjustment and social roles on self-concept differentiation. *Journal of Personality and Social Psychology, 64*(5), 834. https://doi.org/10.1037/0022-3514.64.5.834

Douglas, B. D., Ewell, P. J., & Brauer, M. (2023). Data quality in online human-subjects research: Comparisons between MTurk, prolific, CloudResearch, Qualtrics, and SONA. *PLoS One, 18*(3), Article e0279720. https://doi.org/10.1371/journal.pone.0279720

Eaton, W. W., Smith, C., Ybarra, M., Muntaner, C., & Tien, A. (2004). Center for epidemiologic studies depression scale: Review and revision (CESD and CESD-R). In M. E. Maruish (Ed.), *The use of psychological testing for treatment planning and outcomes assessment* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum. https://doi.org/10.1037/t29280-000.

Ersner-Hershfield, H., Garton, M. T., Ballard, K., Samanez-Larkin, G. R., & Knutson, B. (2009). Don't stop thinking about tomorrow: Individual differences in future self-continuity account for saving. *Judgment and Decision making, 4*(4), 280–286. https://doi.org/10.1017/S1930297500003855

Evans, C., & Robertson, W. (2020). The four phases of the digital natives debate. *Human Behavior and Emerging Technologies, 2*(3), 269–277. https://doi.org/10.1002/hbe2.196

Fleeson, W. (2004). Moving personality beyond the person-situation debate: The challenge and the opportunity of within-person variability. *Current Directions in Psychological Science, 13*(2), 83–87. https://doi.org/10.1111/j.0963-7214.2004.00280.x

Fulmer, C. A., Gelfand, M. J., Kruglanski, A. W., Kim-Prieto, C., Diener, E., Pierro, A., & Higgins, E. T. (2010). On "feeling right" in cultural contexts: How person-culture match affects self-esteem and subjective well-being. *Psychological Science, 21*(11), 1563–1569. https://doi.org/10.1177/0956797610384742

Gebauer, J. E., Eck, J., Entringer, T. M., Bleidorn, W., Rentfrow, P. J., Potter, J., & Gosling, S. D. (2020). The well-being benefits of person-culture match are contingent on basic personality traits. *Psychological Science, 31*(10), 1283–1293. https://doi.org/10.1177/0956797620951115

Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology, 59*(6), 1216–1229. https://doi.org/10.1037/0022-3514.59.6.1216

Grice, J. W., Medellin, E., Jones, I., Horvath, S., McDaniel, H., O'lansen, C., & Baker, M. (2020). Persons as effect sizes. *Advances in Methods and Practices in Psychological Science, 3*(4), 443–455. https://doi.org/10.1177/2515245920922982

Hartshorne, H., & May, M. A. (1928). Studies in the nature of character. In , *Vol. 1. Studies in deceit.* New York: Macmillan.

Hershfield, H. E. (2011). Future self-continuity: How conceptions of the future self transform intertemporal choice. *Annals of the New York Academy of Sciences, 1235*(1), 30–43. https://doi.org/10.1111/j.1749-6632.2011.06201.x

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*(3), 319. https://doi.org/10.1037/0033-295X.94.3.319

Higgins, E. T. (1989). Self-discrepancy theory: What patterns of self-beliefs cause people to suffer?. In *Advances in experimental social psychology* (Vol. 22, pp. 93–136) Academic Press. https://doi.org/10.1016/S0065-2601(08)60306-8.

Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations.* Sage.

Hong, Y. Y., Morris, M. W., Chiu, C. Y., & Benet-Martinez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist, 55*(7), 709. https://doi.org/10.1037/0003-066X.55.7.709

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big five inventory–versions 4a and 54*. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research. https://doi.org/10.1037/t07550-000

John, O. P., & Robins, R. W. (1993). Determinants of interjudge agreement on personality traits: The Big Five domains, observability, evaluativeness, and the unique perspective of the self. *Journal of Personality, 61*(4), 521–551. https://doi.org/10.1111/j.1467-6494.1993.tb00781.x

Keyes, C. L. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist, 62*(2), 95. https://doi.org/10.1037/0003-066X.62.2.95

Kim, K. T. (2019). The structural relationship among digital literacy, learning strategies, and core competencies among south Korean college students. *Educational Sciences: Theory and Practice, 19*(2), 3–21.

Kwan, V. S. Y., & Bodford, J. E. (2015). The psychology of cyberlife engagement. In R. A. Scott, & S. M. Kosslyn (Eds.), *Emerging trends in the social and behavioral sciences*. Wiley Publications. https://doi.org/10.1002/9781118900772.etrds0346.

Kwan, V. S. Y., John, O. P., Kenny, D. A., Bond, M. H., & Robins, R. W. (2004). Reconceptualizing individual differences in self-enhancement bias: An interpersonal approach. *Psychological Review, 111*(1), 94. https://doi.org/10.1037/0033-295X.111.1.94

Leary, M. R. (2003). Interpersonal aspects of optimal self-esteem and the authentic self. *Psychological Inquiry, 14*(1), 52–54. https://doi.org/10.1207/S15327965PLI1403&4_15

van der Linden, D., te Nijenhuis, J., & Bakker, A. B. (2010). The general factor of personality: A meta-analysis of big five intercorrelations and a criterion-related validity study. *Journal of Research in Personality, 44*(3), 315–327. https://doi.org/10.1016/j.jrp.2010.03.003

Locke, K. D., Church, A. T., Mastor, K. A., Curtis, G. J., Sadler, P., McDonald, K., Vargas-Flores, J., de, J., Ibáñez-Reyes, J., Reyes, J. A. S., Cabrera, H. F., Mazuera Arias, R., Rincon, B. C., Albornoz Arias, N. C., Muñoz, A., & Ortiz, F. A. (2017). Cross-Situational Self-Consistency in Nine Cultures: The Importance of Separating Influences of Social Norms and Distinctive Dispositions. *Personality and Social Psychology Bulletin, 43*(7), 1033–1049. https://doi.org/10.1177/0146167217704192

Lodi-Smith, J., & Roberts, B. W. (2010). Getting to know me: Social role experiences and age differences in self-concept clarity during adulthood. *Journal of Personality, 78*(5), 1383–1410. https://doi.org/10.1111/j.1467-6494.2010.00655.x

Manago, A. M. (2015). Identity development in the digital age: The case of social networking sites. In K. C. McLean, & M. Syed (Eds.), *The Oxford handbook of identity development* (pp. 508–524). Oxford University Press.

Margolis, S., Schwitzgebel, E., Ozer, D. J., & Lyubomirsky, S. (2019). A new measure of life satisfaction: The Riverside life satisfaction scale. *Journal of Personality Assessment, 101*(6), 621–630. https://doi.org/10.1080/00223891.2018.1464457

Marwick, A. E., & Boyd, D. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society, 13*(1), 114–133. https://doi.org/10.1177/1461444810365313

Mason, T. B., Smith, K. E., Engwall, A., Lass, A., Mead, M., Sorby, M., & Wonderlich, S. (2019). Self-discrepancy theory as a transdiagnostic framework: A meta-analysis of self-discrepancy and psychopathology. *Psychological Bulletin, 145*(4), 372. https://doi.org/10.1037/bul0000186

McAdams, D. P. (1995). What do we know when we know a person? *Journal of Personality, 63*(3), 365–396. https://doi.org/10.1111/j.1467-6494.1995.tb00500.x

McAdams, D. P., & Pals, J. L. (2006). A new big five: Fundamental principles for an integrative science of personality. *American Psychologist, 61*(3), 204. https://doi.org/10.1037/0003-066X.61.3.204

McFarland, L. A., & Ployhart, R. E. (2015). Social media: A contextual framework to guide research and practice. *Journal of Applied Psychology, 100*(6), 1653–1677. https://doi.org/10.1037/a0039244

McKenna, K. Y., & Bargh, J. A. (2014). Plan 9 from cyberspace: The implications of the Internet for personality and social psychology. *Personality and Social Psychology Review*, 57–75. https://doi.org/10.4324/9780203764923-5

Mischel, W. (1983). Alternatives in the pursuit of the predictability and consistency of persons: Stable data that yield unstable interpretations. *Journal of Personality, 51*(3), 578–604. https://doi.org/10.1111/j.1467-6494.1983.tb00346.x

Mischel, W., & Peake, P. K. (1982). Beyond déjà vu in the search for cross-situational consistency. *Psychological Review, 89*(6), 730. https://doi.org/10.1037/0033-295X.89.6.730

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review, 102*(2), 246. https://doi.org/10.1037/0033-295X.102.2.246

Mischel, W., Shoda, Y., & Mendoza-Denton, R. (2002). Situation-behavior profiles as a locus of consistency in personality. *Current Directions in Psychological Science, 11*(2), 50–54. https://doi.org/10.1111/1467-8721.00166

Molouki, S., & Bartels, D. M. (2017). Personal change and the continuity of the self. *Cognitive Psychology, 93*, 1–17. https://doi.org/10.1016/j.cogpsych.2016.11.006

Morse, S., & Gergen, K. J. (1970). Social comparison, self-consistency, and the concept of self. *Journal of Personality and Social Psychology, 16*(1), 148–156. https://doi.org/10.1037/h0029862

Musek, J. (2007). A general factor of personality: Evidence for the Big One in the five-factor model. *Journal of Research in Personality, 41*(6), 1213–1233. https://doi.org/10.1016/j.jrp.2007.02.003

Newcomb, T. M. (1929). *The consistency of certain extrovert-introvert behavior patterns in 51 problem boys*. Teachers College Contributions to Education.

Noble, S. M., & Schewe, C. D. (2003). Cohort segmentation: An exploration of its validity. *Journal of Business Research, 56*(12), 979–987. https://doi.org/10.1016/S0148-2963(02)00268-0

Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., et al. (2015). Promoting an open research culture. *Science, 348*(6242), 1422–1425. https://doi.org/10.1126/science.aab2374

Ong, A. D., Uchino, B. N., & Wethington, E. (2016). Loneliness and health in older adults: A mini-review and synthesis. *Gerontology, 62*(4), 443–449. https://doi.org/10.1159/000441651

Orben, A. (2020a). Teenagers, screens and social media: A narrative review of reviews and key studies. *Social Psychiatry and Psychiatric Epidemiology, 55*(4), 407–414. https://doi.org/10.1007/s00127-019-01825-4

Orben, A. (2020b). The Sisyphean cycle of technology panics. *Perspectives on Psychological Science, 15*(5), 1143–1157. https://doi.org/10.1177/1745691620919372

Parfit, D. (1971). Personal identity. *Philosophical Review, 80*(1), 3–27. https://doi.org/10.2307/2184309

Parfit, D. (1984). *Reasons and persons*. Oxford: OUP.

Parry, D. A., Davidson, B. I., Sewall, C. J., Fisher, J. T., Mieczkowski, H., & Quintana, D. S. (2021). A systematic review and meta-analysis of discrepancies between logged and self-reported digital media use. *Nature Human Behaviour, 5*(11), 1535–1547. https://doi.org/10.1038/s41562-021-01117-5

Parry, D. A., Fisher, J. T., Mieczkowski, H., Sewall, C. J., & Davidson, B. I. (2022). Social media and well-being: A methodological perspective. *Current Opinion in Psychology, 45*, Article 101285. https://doi.org/10.1016/j.copsyc.2021.11.005

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology, 70*, 153–163. https://doi.org/10.1016/j.jesp.2017.01.006

Peterson, R. A. (2001). On the use of college students in social science research: Insights from a second-order meta-analysis. *Journal of Consumer Research, 28*(3), 450–461. https://doi.org/10.1086/323732

Postmes, T., Spears, R., & Lea, M. (1998). Breaching or building social boundaries? SIDE-effects of computer-mediated communication. *Communication Research, 25*(6), 689–715. https://doi.org/10.1177/009365098025006006

Postmes, T., Spears, R., Sakhel, K., & De Groot, D. (2001). Social influence in computer-mediated communication: The effects of anonymity on group behavior. *Personality and Social Psychology Bulletin, 27*(10), 1243–1254. https://doi.org/10.1177/01461672012710001

Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the Horizon, 9*(5), 1–6. https://doi.org/10.1108/10748120110424816

Pronin, E., & Ross, L. (2006). Temporal differences in trait self-ascription: When the self is seen as an other. *Journal of Personality and Social Psychology, 90*(2), 197. https://doi.org/10.1037/0022-3514.90.2.197

R Core Team. (2023). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385–401. https://doi.org/10.1177/014662167700100306

Robie, C., Risavy, S. D., Holtrop, D., & Born, M. P. (2017). Fully contextualized, frequency-based personality measurement: A replication and extension. *Journal of Research in Personality, 70*, 56–65. https://doi.org/10.1016/j.jrp.2017.05.005

Robins, R. W. (2021). Naturalizing the self. In O. P. John, & R. W. Robins (Eds.), *Handbook of personality: Theory and research* (pp. 561–586). The Guilford Press.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*(2), 151–161. https://doi.org/10.1177/0146167201272002

Ryder, A., Alden, L., & Paulhus, D. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology, 79*, 49–65. https://doi.org/10.1037/0022-3514.79.1.49

Salthouse, T. A. (2013). Within-cohort age-related differences in cognitive functioning. *Psychological Science, 24*(2), 123–130. https://doi.org/10.1177/0956797612450893

Schlosser, A. E. (2020). Self-disclosure versus self-presentation on social media. *Current Opinion in Psychology, 31*, 1–6. https://doi.org/10.1016/j.copsyc.2019.06.025

Schulze, J., West, S. G., Freudenstein, J. P., Schäpers, P., Mussel, P., Eid, M., & Krumm, S. (2021). Hidden framings and hidden asymmetries in the measurement of personality–A combined lens-model and frame-of-reference perspective. *Journal of Personality, 89*(2), 357–375.

Sedikides, C., Hong, E. K., & Wildschut, T. (2023). Self-continuity. *Annual Review of Psychology, 74*, 333–361. https://doi.org/10.1146/annurev-psych-032420-032236

Sheldon, K. M., Ryan, R. M., Rawsthorne, L. J., & Ilardi, B. (1997). Trait self and true self: Cross-role variation in the Big-Five personality traits and its relations with psychological authenticity and subjective well-being. *Journal of Personality and Social Psychology, 73*(6), 1380–1393. https://doi.org/10.1037/0022-3514.73.6.138

Slabu, L., Lenton, A. P., Sedikides, C., & Bruder, M. (2014). Trait and state authenticity across cultures. *Journal of Cross-Cultural Psychology, 45*(9), 1347–1373. https://doi.org/10.1177/0022022114543520

Sokol, Y., & Serper, M. (2017). Temporal self appraisal and continuous identity: Associations with depression and hopelessness. *Journal of Affective Disorders, 208*, 503–511.

Sokol, Y., & Serper, M. (2019). Experimentally increasing self-continuity improves subjective well-being and protects against self-esteem deterioration from an ego-deflating task. *Identity, 19*(2), 157–172. https://doi.org/10.1080/15283488.2019.1604350

Soto, C. J., & John, O. P. (2017a). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology, 113*(1), 117. https://doi.org/10.1037/pspp0000096

Soto, C. J., & John, O. P. (2017b). Short and extra-short forms of the big five inventory-2: The BFI-2-S and BFI-2-XS. *Journal of Research in Personality, 68*, 69–81. https://doi.org/10.1016/j.jrp.2017.02.004

Specht, J., Egloff, B., & Schmukle, S. C. (2011). Stability and change of personality across the life course: The impact of age and major life events on mean-level and rank-order stability of the big five. *Journal of Personality and Social Psychology, 101*(4), 862. https://doi.org/10.1037/a0024950

Spreng, R. N., & Turner, G. R. (2019). The shifting architecture of cognition and brain function in older adulthood. *Perspectives on Psychological Science, 14*(4), 523–542. https://doi.org/10.1177/1745691619827511

Strohminger, N., & Nichols, S. (2014). The essential moral self. *Cognition, 131*(1), 159–171. https://doi.org/10.1016/j.cognition.2013.12.005

Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review, 37*(1), 52–68. https://doi.org/10.1080/02796015.2008.12087908

Swann, W. B., Jr., Chang-Schneider, C., & Larsen McClarty, K. (2007). Do people's self-views matter? Self-Concept and self-esteem in everyday life. *American Psychologist, 62*(2), 84. https://doi.org/10.1037/0003-066X.62.2.84

Talaifar, S., & Lowery, B. S. (2023). Freedom and constraint in digital environments: Implications for the self. *Perspectives on Psychological Science, 18*(3), 544–575. https://doi.org/10.1177/17456916221098036.

Teske, J. A. (2002). Cyberpsychology, human relationships, and our virtual interiors. *Zygon, 37*(3), 677–700. https://doi.org/10.1111/1467-9744.00445

Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality, 69*(6), 907–924. https://doi.org/10.1111/1467-6494.696169

Triandis, H. C. (2018). *Individualism and collectivism*. Routledge. https://doi.org/10.4324/9780429499845

Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology, 74*(1), 118. https://doi.org/10.1037/0022-3514.74.1.118

Turner, J. C., & Onorato, R. S. (1999). Social identity, personality, and the self-concept: A self-categorization perspective. In T. R. Tyler, R. M. Kramer, & O. P. John (Eds.), *The psychology of the social self* (pp. 11–46). Mahwah, NJ: Erlbaum.

Twenge, J. M. (2017). Have smartphones destroyed a generation? *The Atlantic, 20*. September 2017 https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/.

Urminsky, O. (2017). The role of psychological connectedness to the future self in decisions over time. *Current Directions in Psychological Science, 26*(1), 34–39. https://doi.org/10.1177/0963721416668810

Valkenburg, P. M. (2022). Social media use and well-being: What we know and what we need to know. *Current Opinion in Psychology, 45*, Article 101294. https://doi.org/10.1016/j.copsyc.2021.12.006

Valkenburg, P. M., Meier, A., & Beyens, I. (2022). Social media use and its impact on adolescent mental health: An umbrella review of the evidence. *Current Opinion in Psychology, 44*, 58–68. https://doi.org/10.1016/j.copsyc.2021.08.017

Wang, H. Y., Sigerson, L., & Cheng, C. (2019). Digital nativity and information technology addiction: Age cohort versus individual difference approaches. *Computers in Human Behavior, 90*, 1–9. https://doi.org/10.1016/j.chb.2018.08.031