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Social Zapping: Examining Predictors of Last-Minute Cancelations Among Community Members

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Social Zapping:

Examining Predictors of Last-Minute Cancelations

Among Community Members

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Biography

Alyssa Tayler Altieri (she/her) was born in Indianapolis, IN, April 20, 1999. Alyssa graduated from Indiana University in Richmond, IN where she received her Bachelor of Science degree in Psychology with minors in Creative Writing and Neuroscience. After completing her Bachelor of Science degree, she started the Research Psychology MS program at DePaul University in Fall of 2021. Alyssa's research interests include childhood adversity, psychology within the media, trauma-related disorders, clutter, and consumer psychology.

Table of Contents

List of Tables

List of Appendices

Abstract

Social zapping refers to the tendency to cancel plans or appointments shortly before they are supposed to take place in order to attend plans deemed "better" than the original (Müller et al., 2020). With the recent global pandemic occurring and forced isolation presenting as a consequence, the population more than ever has turned to technology to keep up with their relationships (Pennington, 2021). Because of this, social zapping has become increasingly prevalent. Although there is clear need to assess social zapping, few empirical studies have been conducted regarding the predictors and implications of social zapping (Müller et al., 2020; 2021). The present study sought to examine potential predictors of social zapping, including behavioral traits such as the four fundamental needs (belongingness, self-esteem, sense of control, and meaningful existence). Furthermore, the present study sought to determine if the four fundamental needs were predictors of social zapping in individuals aged 40-75 years old. Data utilized for the present study was collected in 2021. The present study found that belongingness and self-esteem significantly predicted social zapping tendencies with belongingness being the strongest predictor. The present study also found that older adults have a significant, more positive relationship with self-esteem, sense of control, and meaningful existence than individuals aged 39 and younger. The population of young adults (aged 18-39) were found to have stronger, more positive relationships with belongingness. Social zapping was found to be nonsignificant for both older adults and younger adults. The current study additionally found social desirability to be a significant predictor of self-esteem and meaningful existence. Overall, the present study builds on what is currently a new phenomenon in research and will provide new information on the relationship between age, social zapping, and behavioral traits such as the four fundamental needs.

Introduction

As the newest generation of emerging adults (often called *Generation Z,* spanning the

timeframe 1997 to 2012) transition into becoming full adults, researchers have noticed social

media emerge as the primary method of contacting and establishing relationships with others

(Pennington, 2021). There is no shortage of electronic use to perform everyday tasks that

normally would be carried out in person, and this abundance of technology has amplified during

the time of the COVID-19 pandemic (Pandya & Lodha, 2021). Research suggested that

Generation Z's social media habits may be predicted and connected to personality traits and

behavioral patterns (Müller et al., 2020). However social zapping tendencies have not been

explored with middle-aged to older adults; a notable-sized portion of the population using social

media (Pew Research Center, 2021). The current study included a community sample of adults

(aged 40-75) to determine predictors of behaviors related to social media usage.

Although isolated communication may be a positive preference given the safety and

convenience it provides to individuals, there is a new phenomenon materializing pertaining to the

rate at which people are eliminating plans made through social media (Gabbiadini et al., 2020).

This concept is known as *social zapping*, coined by Müller et al. (2020) to describe frequent

"flipping of channels" between various social appointments. Because repercussions such as

social dismay or frustration among friends and superiors are not physically seen, individuals feel

more inclined to send a text message ultimately abandoning set excursions. Although there is not

a substantial amount of literature expanding on the complexity of social zapper personalities,

further observation into the characteristics of those participating has revealed that it may be

related to social behavior. Moreover, it may be necessary to examine basic social psychological

concepts related to the tendency to social zap peers. The present study provides an exploratory

assessment of the social behaviors and cognitions related to social zapping by older adults

Social Zapping: Defined, But Minimally Assessed

There is limited research on social zapping and the behavioral constructs that may be

predictive. Most information about social zapping comes from two articles published by Müller

and colleagues (Müller et al., 2020; 2021). The term "*social zapping,*" as described by Müller et

al. in their 2020 article, is defined as the process of an individual's cancelling or switching

plans/appointments with another person minutes before they are supposed to take place. These

social plans are almost always created and nixed through instant messaging (IM), a form of

communicating found on social media. The immediate appointment cancellation through instant

messaging occurs because they have been offered plans deemed to be "more appealing" (Müller

et al., 2020).

Müller et al. found evidence toward personality traits, such as narcissism and

Machiavellianism predicting social zapping outcomes (2021). Participants who displayed

symptomatology of the "Dark Triad" were more likely to social zap, providing information on

how behavioral traits were linked with social zapping (Müller et al., 2021). Because Müller and

colleagues laid the groundwork for correlation between psychosocial characteristics and social

zapping, the present study will assess other personality indicators related to and predicting social

zapping.

Although social zapping has an introductory framework to reference, there is a lack of

published studies dedicated to middle-aged and older adult population samples. Findings from

Pew Research Center provide evidence that older adults' (65+) social media usage jumped from

3% in 2005 to 45% in 2021 (Pew Research Center, 2021). This subgroup is not the only set of

older adults to experience a significant rise in social media usage; participants aged 50-64 displayed a nearly 70% increase in social media usage in those same years (Pew Research Center, 2021). With social media usage on the rise among populations of adults, there should be more research dedicated to exploring a larger age range of adults' social zapping habits. Knowledge on underlying personality factors in the context of a different generation pushes for a more representative and inclusive understanding of social zapping.

The present study explored the emerging concept of social zapping with a community sample of persons aged 40-75 years old. Moreover, the present study will examine four (4) key social psychological core concepts fundamental to understanding social behavior. Deemed the four fundamental needs by Williams (1997, 2007), when these needs are threatened, there is room for contradictory feelings potentially leading to dissonance (Warburton & Williams, 2005). The impact that the four fundamental needs might have on the general population is critical to understanding effects on personality (Williams, 1997). Through the lens of social zapping, these behavioral constructs will provide a better framework for individual behavior as a whole and vice-versa. Because little research has focused on particular behavioral features of social zapping, these four constructs will be the focus of the current study in order to provide insight to a basic understanding of zapping tendencies. The four social concepts identified and emphasized throughout the proposed study include: *belongingness, self-esteem, desire for control, and meaningful existence.* Assessing these social qualities is imperative to understanding the nature of social zapping and the tendency for such actions among older adults. Each of the four core social concepts are examined in the next section, and their potential link to social zapping behaviors are discussed.

Four Core Social Psychological Constructs: Predictors of Social Zapping?

Previous research on social zapping explored potential mediators, such as "fear of missing out" (FoMO) and "the Dark Triad" (i.e., narcissism, Machiavellianism, and psychopathy) to determine if there were any connections to a person's tendency to cancel last minute appointments or shift to "more enjoyable" activities (Müller et al., 2021). While these specific studies supported what Müller et al. claimed as "negative" behavioral traits (such as those associated with the "Dark Triad"), none of the current research observed the behavioral traits contributing to social zapping that are considered neutral or positive (2021). *Belongingness*, *self-esteem*, *desire for control,* and *meaningful existence* are all components worth examining to determine the behavioral characteristics held by social zappers, and they provide a new perspective at traits more applicable to the general population. Each of these social behavior concepts will be examined and reflected to a person's tendency for social zapping.

Belongingness: Examining A Root Aspect of Social Zapping

Belongingness, coined by Lee and Robbins (1995), combines companionship, affiliation, and connectedness for individuals to promote kinship and deter feelings of seclusion. One may feel a sense of belonging when they build friendships and interpersonal relationships while seeking out connections with their peers. Feeling deterred or rejected from the group promotes an absence of belongingness (Lee & Robbins, 1995). Determined by the *Need to Belong Scale* (Leary et al., 2013) and consisting of factors that surround how one feels about their inclusion to the environment around them, belongingness is linked to level of engagement depending on perceived isolation (Leary et al., 2013; Gilken & Johnson, 2019).

If one feels as though they were snubbed by their peers, they are more likely to experience feelings of sadness and embarrassment (Leary et al., 2013). Negative emotions such

as these depressive symptoms are linked to higher levels of isolation (Matthews et al., 2018). Because an individual experiencing depressive symptoms is more likely to isolate themselves, it may be inferred that their social zapping tendencies would also be higher. Social zapping is characterized by canceling a plan last minute because a better alternative has been presented, but there is no evidence to assume what this "better plan" is (Müller et al., 2020). If an individual has concluded that staying home to avoid socialization is the more desirable option, this may be linked to their depression-induced isolation. In line with this, frequent social zapping may decrease perception of belongingness as one continues to disconnect from their social circle. A lack of social connection creates a never-ending cycle of canceling plans because of a sense of low moods and absence of connectedness, further deepening these same issues.

Specifically in older adults, sense of belonging is linked to suicidal ideation and shares an association with depression (McLaren et al., 2007). Negatively correlated, persons who felt a low sense of belongingness within their community reported feeling higher levels of depression (McLaren et al., 2007). Older adults also experience further feelings of loneliness when not experiencing a strong sense of belongingness (Prieto-Flores et al., 2011). With the presence of these debilitating emotions because of low sense of belongingness, social isolation is prevalent and to be expected (Tiwari & Ruhela, 2012). Revisiting the idea that social zapping is a consequence of isolation, older adults experiencing high levels of depression would be no exception to those exhibiting high social zapping behaviors. A cycle begins to emerge where individuals low in belongingness will experience depressive symptoms, thus isolating themselves and zapping their plans, only to feel as though they belong less. Therefore, the present study predicts a sense of belongingness and social zapping will be inversely correlated, such that a low sense of belonging will be an indicator to high social zapping. If lack of belonging is an indicator

of isolation, and isolation leads to social zapping, then low belongingness might predict more social zapping.

Self-esteem: An Emotional Connection to Social Zapping?

In addition to a sense of belonging, self-esteem may be an affective component that, in turn, may potentially show a negative correlation with social zapping. Self-esteem is defined by the distance between self-image and ideal self directly influenced by the satisfaction one feels toward themselves (Silber & Tippett, 1965). Because the research on social zapping is slim, it may be helpful to view self-esteem in regard to Müller and colleagues' paper connecting "Dark Triad" traits and social zapping (2021).

Prior research by Müller et al. (2021) on social zapping confirmed that the participants willing to social zap were characterized by "Dark Triad" personalities, the psychological theory that includes Machiavellianism, narcissism, and psychopathy. Participants were more likely to report higher levels of social zapping when they, specifically, displayed traits of Machiavellianism and narcissism (Müller et al., 2021). However, psychopathy showed a weak, but significant, correlation to social zapping (Müller et al., 2021). Keeping this in mind, finding the connection between self-esteem and the "Dark Triad" traits may allow for a hypothesis based on the foundation Müller et al. created for social zapping.

Narcissism, specifically pathological narcissism, might occur when there is an obstruction in the development of one's personality (Cain, Pincus, & Ansell, 2008). This defect leads to an inability to regulate self-esteem and self-cohesion (Cain, Pincus, & Ansell, 2008). Findings from Falkenbach, Howe, and Falki (2013) suggest that low self-esteem and aggression are both linked to pathological narcissism. A diagnosis of *Narcissistic Personality Disorder* (NPD) is also associated with low self-esteem (Falkenbach, Howe, Falki, 2013; Pincus et al.,

2009; Vater et al., 2013). The negative correlation between narcissism and self-esteem is prevalent in the literature, and because Müller et al. (2021) already found a correlation between narcissism and social zapping, it is inferred that low self-esteem will lead to high social zapping through the lens of high narcissism.

Psychopathy, as defined by Anderson and Kiehl (2014), is a disorder indicated by low empathy and a lack of emotional control. There are two identifying types of psychopathy, Factor 1 and Factor 2, that have their own unique characteristics (Lyons, 2019). Factor 2, known as secondary psychopathy, includes more impulsive behaviors and taking risks (Lyons, 2019). Falkenbach, Howe, and Falki (2013) found that low self-esteem was a mediator for Factor 2 psychopathy and aggression, leading researchers to believe that those scoring low on self-esteem are also scoring high on Factor 2. Because Factor 2 is associated with impulsive behaviors, and Müller et al. (2021) found that social zapping is done more frequently by impulsive individuals, there may be evidence to suggest that low self-esteem (found to be an indicator of Factor 2 psychopathy) leads to higher levels of social zapping.

Machiavellianism, the third and final trait associated with the "Dark Triad," has been defined by Towler as the use of manipulation and cunningness to gain power (2020). There has already been a relationship built between Machiavellianism and low self-esteem with results indicating that they are negatively correlated (Stenason, 2014). Noting that Müller et al. found a significant correlation between Machiavellianism and social zapping in their 2021 study, and taking into consideration that low self-esteem is an indicator of Machiavellianism, there is evidence to suggest that low self-esteem is negatively correlated with Machiavellianism. This follows the same trend observed with psychopathy and narcissism, the other two "Dark Triad" traits, and is further emphasized by Müller et al. (2021). As was stated before, because there is

little research within the field of social zapping, utilizing what evidence there is now may lead to better hypotheses regarding new behavioral traits that are being tested.

"Dark Triad" traits are found to be the most prevalent in adolescent-aged individuals as opposed to older adults (Makim & Shetty, 2018; Klimstra et al., 2020). In line with the current research, self-esteem continues to rise throughout adulthood and peaks at age 60 (Robins & Trzesniewski, 2005). As mentioned above, low self-esteem is thought to lead to high "Dark Triad" traits, and these "Dark Triad" traits are directly related to high social zapping (Müller et al., 2021). Given older adults might have higher levels of self-esteem and, concurrently, lower levels of "Dark Triad" traits, the current study anticipated that older elevated self-esteem would predict lower levels of social zapping (and vice-versa).

Sense of Control: Social Zapping as a Conscious Choice

Sense of control may be defined as pertaining to one's choices, capability of determining what one may do to avoid or alleviate displeasing situations, level of responsibility, and consistency (see Baronas & Louis, 1988). Greenberger and Strasser (1986) viewed personal control as how one acts on their own beliefs during a specific period in time and such decision making may facilitate actions taken to achieve desired life events. In general, sense of control encouraged behaviors that drive an individual to continue building upon the foundation they have created regarding aspirations and life trajectories (Baronas & Louis, 1988). A sense of self-control directly linked to emotional welfare, as well as perceived social support, both of which are negatively correlated with levels of depression (Mirowsky & Ross, 1990). Continuing with the theme already presented in the prior constructs, it is assumed that self-control's relationship with depression predicts the relationship between self-control and social zapping.

When depressive symptoms are prevalent, isolation is more likely to occur, and it has already been inferred that social zapping is a consequence of this self-isolation (Matthews et al., 2019). This is, again, especially the case with older adults, and may lead to less belongingness that only furthers this isolation (Prieto-Flores et al., 2011). The negative correlation between depression and self-control dictates the relationship between self-control and social zapping in that they would also be negatively correlated (granted that depression and social zapping would be considered positively correlated). Because the trajectory of emotions related to sense of control seemingly follow the same pattern as belongingness and self-esteem, it is reasonable to conclude that sense of control leading to lower/higher levels of depression will then inherently lead to lower/higher levels of social zapping, respectively. Given this information, it was expected in the present study that a lower sense of control would predict more social zapping tendencies among older adults.

Meaningful Existence: An Overall Worldview Related to Social Zapping?

Proposed and defined by Gerber and Wheeler (2009), *meaningful existence* is a need surrounding one's value and life purpose, to feel as though one has a meaningful interaction within their environment. Self-esteem is viewed as a quasi-buffer for reaching meaningful existence (Gerber & Wheeler, 2009); that is, as one limits the space between their perceived self and ideal self, their confidence grows, and they begin to feel as though they might make notable and worthwhile contributions to their environment (Gerber & Wheeler, 2009). A meaningful existence, then, begins to take on the role of distinguishing humans between animals by providing a sense of efficacy (Landau et al., 2007). Humans may build a legacy through their actions, or potentially take the steps to achieve religious/spiritual goals (i.e.- reaching Heaven),

and this leads to a substantial feeling of purpose (Landau et al., 2007). Meaningful existence then blossoms from this purpose.

When considering the relationship between meaningful existence and social zapping, it may be useful to consider how self-esteem was projected to affect social zapping and the relationship self-esteem has with meaningful existence. When looking at meaningful existence, Compton found that there was a significant positive correlation with well-being (2000). Paradise and Kernis (2002) then found that well-being and self-esteem were positively correlated as well, providing evidence that meaningful existence and self-esteem may be positively correlated. This was further demonstrated when Paradise and Kernis found a positively correlated relationship between life purpose and self-esteem; life purpose being nearly identical in features to that of meaningful existence with scales that measure perceived purpose and meaning in life (2002). When looking at the relationship between self-esteem and social zapping, it was hypothesized that self-esteem would be negatively correlated with social zapping. Because meaningful existence and self-esteem were found to be positively correlated, there is evidence to believe that meaningful existence would be negatively correlated with social zapping.

Continuing to look at well-being, and with the discussion of depression and isolation in mind, Wood and Joseph (2010) found that low levels of well-being put individuals at a higher risk of depression. As discussed previously, individuals experiencing depressive symptoms were more likely to isolate themselves, potentially leading to an increase in social zapping. With a connection already established between well-being and meaningful existence, this provides further evidence for the relationship between meaningful existence and social zapping. A higher likelihood of depressive symptoms due to low well-being may be linked to low levels of meaningful existence and, in turn, may contribute to increased social zapping.

Because low self-esteem held a similar audience as those with "Dark Triad" traits, and Dark Triad traits were more likely to social zap, it is to be expected that low meaningful existence would lead to higher levels of social zapping (Müller et al., 2021). The correlation between meaningful existence and social zapping is grounded in the idea that self-esteem and meaningful existence are positively correlated, and because self-esteem is negatively correlated with social zapping, it would seem as though meaningful existence and social zapping would also be negatively correlated. Viewing meaningful existence through a lens that takes self-esteem into account allows for a more straightforward look into the link between meaningful existence and social zapping.

Older adults tend to see the peak of meaningful existence as it occurs around 60-years-old (Aftab et al., 2019). The difference in older adults vs younger generations lie in what individuals are searching for, their priorities, and their gratitude (Aftab et al., 2019). Considering the aforementioned information regarding the relationship between social zapping and meaningful existence, and because older adults tend to experience a higher level of meaningful existence, meaningful existence might be a predictor of low social zapping in older adults.

Summary and Rationale

The literature regarding social zapping is scarce, with only two known published articles (Müller et al., 2020; 2021.) Both these published studies included university students, young emerging adults. Although there is research to support a link with each of the core social psychological variables discussed, no known study assessed their link connecting to social zapping, especially with older adults from community samples. It is proposed that understanding the fundamental social factors linked to social zapping will provide important information about the concept of social zapping.

Therefore, the present study will be the first assessments on how these four social constructs (*belongingness, control, self-esteem*, and *meaningful existence*) interact with social zapping with a community sample. Utilizing existing data on older adults is proposed to assess predictors of social zapping through reliable and valid self-report measures. This study will be quantitative, using existing (archival) data collected online from a community sample of older adults (through Prolific Academic) including all four behavioral social psychological core variables (i.e., belongingness, control, self-esteem, and meaningful existence), as well as measures on social zapping and social desirability (to control for social appearance tendencies), with each construct measured through reliable and valid Likert-type psychometric scales.

Statement of Hypothesis

> **Hypothesis I** – *Individuals displaying a low sense of any four of the fundamental needs (belongingness, sense of control, self-esteem, and meaningful existence) predicts higher social zapping tendencies.*

> **Hypothesis II** – *Older adults take part in social zapping tendencies less than the participants in the student sample because of their more positive relationship with belongingness, sense of control, self-esteem, and meaningful existence.*

 Research Questions

1. How does social desirability effect social zapping tendencies in middle- to older-aged adults and what is its relationship with the four fundamental needs?

2. Is there a perceived difference in social zapping levels between age groups (middle- to older-aged adults and younger adults)?

<center>**Method**</center>

Participants

Data for both proposed studies were collected from a U.S. adult sample of 315 participants (D. Patel, June 2021). In order to have a complete data set, responses from 18 individuals were removed who did not complete all measures, leaving a final total sample size of 297 participants. This population consisted approximately 46% females ($n = 138$) and 49% males ($n = 147$). The mean age of participants was 30.9 years old ($SD = 10.88$). Concerning race, 13.7% of participants identified as Asian or Pacific Islander ($n = 43$), 9.8% as Black or African American ($n = 31$), 8.6% as Hispanic/Latinx ($n = 27$), 0.9% as American Indian or Alaskan Native, and less than 1% ($n = 1$) identified as Middle Eastern or Northern African; but the majority self-identified as White/Caucasian, (68.6%, $n = 216$), Most participants held a Bachelor's Degree ($n = 112$, 35.6%), while 17.8% held a Master's Degree ($n = 56$), and 17.8% attended some college ($n = 56$). Participants primarily claimed to be single ($n = 143$, 45.4%) or married ($n = 98$, 31.1%).

Psychometric Scales

All participants completed a set of reliable and valid measures. The following scales were used to ascertain the relationship between self-reported social zapping tendencies and core social psychological concepts discussed above.

Need to belong. Participants responded to the 10-item *Need to Belong Scale* designed by Leary, Kelly, Cottrell and Schreindorfer (2006) **t**o determine how integrated one feels within their own environment. This scale includes levels of acceptance and negative emotions associated with isolation. The authors reported strong internal consistency, Cronbach's alpha of

0.81 (*M* = 33.3, *SD* = 6.61). Sample items include "*I want other people to accept me*" and "*I don't like being alone*." A 5-point Likert scale was used (*1 = not at all to 5 = extremely*).

Self-esteem. Rosenberg's (1965) *Self-Esteem Scale,* a 10-item measure, looked at both positive and negative feelings regarding one's own self-worth. This scale provides a uni-dimensional model to assess a global sense of how confident one is in their own abilities. Overall reliability reported by the original author suggested strong internal consistency, Cronbach's alpha of 0.81 (*M* = 22.62, *SD* = 5.80; see Sinclair et. al, 2010). Sample items include "*On the whole, I am satisfied with myself*" and "*All in all, I am inclined to feel that I am a failure*." A 4-point Likert scale was used (*0 = strongly disagree to 3 = strongly agree*).

Desire for control. Burger's (1979) *Desire for Control Scale,* a 10-item scale, gathered how strong one's urge is to control the events happening in their environment. This self-report measure includes both a willingness and reluctance to take charge of various situations. The author reported strong internal consistency, with a Cronbach's alpha of 0.80 (*M* = 100.5, *SD* = 12.73).Sample items include "*I would prefer to be a leader than a follower*" and "*Others usually know what is best for me.*" A 7-point Likert scale was used (*1 = the statement does not apply to me at all to 7 = the statement always applies to me*).

Meaningful existence. Participants also responded to Steger, Frazier, Oishi, and Kale (2006)'s 10-item *Meaning in Life Questionnaire* utilized to measure how closely one identified to their life's purpose. Emphasis was placed on the importance of seeking out significance or meaning in one's life. For this scale, the authors claimed strong internal consistency, with a Cronbach's alpha of 0.86 (*M* = 23.8, *SD* = 5.9). Sample items include "*I am always looking to find my life's purpose*" and "*I am seeking a purpose or mission for my life*." A 7-point Likert scale was used (*1 = absolutely untrue to 7 =absolutely true*).

Social desirability. In addition, participants responded to Reynold's (1982) brief the *Social Desirability Scale* to establish personal attributes and traits regarding social approval. Participants reported on how strong their values were toward obtaining social acceptance. The original Marlowe-Crowne Social Desirability Scale is comprised of 33 items; however, the present study used a reliable and valid shortened version of 13 items from that scale. The revised MCSD Scale maintained a Cronbach's alpha of 0.76 ($M = 5.67$, $SD = 3.20$), reported by Reynolds (1982). Sample items include "*No matter who I'm talking to, I'm always a good listener*" and "*There have been occasions when I took advantage of someone.*" A dichotomous scale was used (*1 = true and 2 = false*).

Social zapping. Müller, Wegmann, Stolze, and Brand's (2020) *Social Zapping Scale*, a 6-item scale, measured one's likelihood of canceling plans shortly before they are supposed to take place. Both social settings and appointment-based settings were considered. The scale showed moderately high reliability, with a Cronbach's alpha of 0.77 ($M = 2.04$, $SD = 0.80$). Sample items include "*Right before an appointment, I consider meeting somebody else with whom I could have more fun*" and "*I often cancel my appointments.*" A 6-point Likert scale was used (*1 = completely disagree to 6 = completely agree*).

Demographic items. Aside from completing the psychometric scales, all participants were asked to report their *gender, age, relationship status, education level, ethnicity*, and *residing state*. These items provided a profile of participants.

Procedure

An adult data sample was collected for 4 days during the summer of 2021, using an online survey through Prolific Academic, an online crowd source program where participants are paid for their time. Previous research indicated that the use of this source program is reliable and

valid (Peer et al., 2017). Participants were asked to complete a consent form prior to moving on in the survey. Participants were paid US $3.50 for approximately 30-40 minutes of time. Those individuals who did not meet the eligibility criteria were prompted out. The body of the survey contained four blocks: one block was qualitative, asking for thoughts and actions on clutter behavior; three other blocks contained the psychometric scales discussed above for a set of quantitative measures. All measures were presented in counterbalanced order, to control fatigue effects, and took most participants 30 minutes of less to complete. Payment was provided online after all survey items were completed. A fifth and last block included demographic questions such as age, gender, relationship status, highest education completed, ethnicity, and residing state.

Results

Preliminary Analyses

Table 1 provides descriptive statistics for the measures used in the present study. The zero-order correlation matrix and the mean sum scores and their standard deviations for all study variables are presented in Table 1.

Table 1. Intercorrelates and Mean Sum Scores for All Study Variables

Variable	M (SD)	1.	2.	3.	4.	5.	6.
1. Belonging	27.67 (7.07)	[.813]					
2. Self-esteem	30.36 (6.30)	-.434**	[.920]				
3. Control	46.46 (5.40)	-.175	.302*	[.195]			
4. Meaning	47.40 (8.50)	-.193	.639**	.472**	[.685]		
5. Social Desirability	18.90 (1.70)	-.236	.465**	.194	.394**	[-.038]	
6. Social Zapping	12.74 (5.41)	.329*	-.282	-.135	.028	-.234	[.810]

Note: N = 48, *p < .05, **p < .01. Values in brackets are coefficient alpha.

Primary Analyses

<u>*Hypothesis I*</u> *– Individuals displaying a low sense of any four of the fundamental needs*

(belongingness, sense of control, self-esteem, and meaningful existence) would predict

higher social zapping tendencies.

To evaluate the first hypothesis, four *linear regression analyses* were conducted using

belongingness, sense of control, self-esteem, and meaningful existence as four separate predictor variables and social zapping as the outcome variable. Simple linear regression was used to test if any one of the four predictor variables significantly predicted social zapping. The results indicated that the regression was significant for belonging, β = .329, p = .029, while self-esteem approached significance, β = -.241, p = .057. The fitted regression model for sense of belonging was social zapping score = 6.389 + 0.227*(belonging). Self-esteem scores accounted for 8.0% of the variance in social zapping (R^2 = .080, F(1, 42) = 3.809, p = .029), and belonging accounted for 10.8% of the variance in social zapping (R^2 = 0.108, F(1, 44) = 5.106, p = .057). Meaningful existence was not significant, β = .028, p = .852, nor was control, β = -.135, p = .365.

Results indicated that belongingness and self-esteem were significant predictors for social zapping. Belongingness was found to be the strongest predictor of social zapping. Control and meaningful existence were not found to be significant predictors of social zapping.

Hypothesis II – *Older adults take part in social zapping tendencies less than younger*

   participants (aged 39 and younger) because of their more positive relationship with

   belongingness, sense of control, self-esteem, and meaningful existence.

To evaluate the second hypothesis, an *independent samples t-test* was conducted to determine whether older adults had a better relationship with belongingness, sense of control, self-esteem, and meaningful existence than that of younger adults in the sample. The difference in belonging between older adults (*M* = 27.67, *SD* = 7.07) and younger adults (*M* = 30.76, *SD* = 7.50) was significant, *t* (275) = -2.554; *p* = .011. The difference in self-esteem between older adults (*M* = 30.36, *SD* = 6.30) and younger adults (*M* = 27.48, *SD* = 6.51) was significant as well, *t* (282) = 2.785; *p* = .003. Also, a sense of control between older adults (*M* = 46.46, *SD* = 5.39) and younger adults (*M* = 42.84, *SD* = 6.21) was significantly different, *t* (288) = 3.761; *p* <

.001. Meaningful existence between older adults ($M = 23.66$, $SD = 8.25$) and younger adults ($M = 20.94$, $SD = 8.03$) was significantly different, $t(292) = 2.122$; $p = .017$.

Results indicated that the older adult sample did have higher levels of self-esteem, sense of control, and meaningful existence than the younger adult sample. However, older adults did display a lower sense of belongingness than participants in the younger adult sample. The same independent samples t-test found that social zapping was nonsignificant ($p = .159$) for both older adults and younger adults.

Table 2. *Independent Samples T-Tests* Results

Measure	Older Adults ($n = 48$)		Younger Adults ($n = 267$)		
	M	SD	M	SD	
Belonging	27.67	7.07	30.76	7.50	.011[*]
Self-esteem	30.36	6.30	27.48	6.51	.003[**]
Control	46.46	5.39	42.84	6.21	.001[**]
Meaning	23.66	8.25	20.94	8.03	.017[**]

Note: N = 315, [**]p < .01, [*]p < .05.

1. How does social desirability effect social zapping tendencies in middle- to older-aged adults and what is its relationship with the four fundamental needs?

To evaluate the first research question, five additional *simple linear regression* analyses were conducted using social desirability as the predictor variable and social zapping, belongingness, self-esteem, sense of control, and meaningful existence as the outcome variables. Simple linear regression was used to determine if social desirability significantly predicted any of the four fundamental needs and/or social zapping tendencies. The results indicated that the

regression was significant for self-esteem, β = .465, *p* = .001, and for meaningful existence, β =

.394, *p* = .006. The fitted regression model for social desirability and self-esteem was self-esteem

= -2.512 + 1.736*(social desirability). The fitted regression model for social desirability and

meaningful existence was meaningful existence = -13.547 + 1.976*(meaningful existence).

Social desirability scores accounted for 21.6% of the variance in self-esteem (R^2 = .216, F(1, 45)

= 12.383, *p* = .001), and accounted for 15.5% of the variance in meaningful existence (R^2 =

0.155, F(1, 45) = , *p* = .006). Belonging was not significant, β = -.236, *p* = .118, nor was control,

β = .194, *p* = .186. Social desirability was not found to be a predictor of social zapping, β = -

.741, *p* = .114.

Results indicated that social desirability was a significant predictor of self-esteem and

meaningful existence. Participants scoring high in social desirability scored lower for both self-

esteem and meaningful existence. Social desirability was not found to be a significant predictor

of belonging, control, or social zapping.

2. Is there a perceived difference in social zapping levels between age groups (middle- to older-

aged adults and younger adults)?

To evaluate the second research question, a *Mann-Whitney U* test was performed to

evaluate whether perceived difference in social zapping levels differed by age (younger adults

and older adults). The results indicated that there was no significant difference between the

perceived difference in social zapping levels of younger adults vs older adults, *z* = -1.479, *p* =

.139.

Discussion

The current study examined the relationship between social zapping and 4 behavioral characteristics: belongingness, self-esteem, sense of control, and meaningful existence. Specifically, the present study explored the relationship older adult community members have with these four behavioral traits and how this relationship predicts social zapping tendencies compared to younger adult participants.

The first hypothesis predicted that scoring low on any of the four behavioral traits (sense of belonging, self-esteem, sense of control, and meaningful existence) would predict higher social zapping scores. This hypothesis was significant only for belongingness. While self-esteem was approaching significance as a predictor of social zapping, it was negatively correlated, meaning individuals who felt a high sense of self-esteem engaged in less social zapping. Belongingness was found to be the strongest predictor of social zapping among the four characteristics. Participants who scored high in belongingness also displayed higher in social zapping scores. These results are in line with the current literature, Müller et al. found low self-esteem to be linked with "maximizing in selecting friends," a similar process to social zapping (2020). A high sense of belonging promotes the need to seek out relationships and inclusion which provides individuals multiple sources of activities and plans (Hagerty et al., 1992). It may not be uncommon to agree to a couple of different plans in order to ensure that one has something to do, thus raising the rate of social zapping when they end up cancelling the plans they do not attend. It is important to note that the relationship between self-esteem and belonging was found to be negatively correlated in this study, going against the current literature on the relationship of these two traits (Gailliot & Baumeister, 2007; Stets & Burke, 2014; Jetten et al., 2015). Although belonging and self-esteem are almost always seen as having a positive

relationship with one another, the distinct difference of using an older adult community sample may have changed the norm. Older adults are commonly known to have self-esteem that peaks around the age 60, the age of the majority of our sample (Robins, 2010), but older adults also report lower levels of belongingness (McLaren et al., 2007). This may account for the difference in correlation found in the beginning of the study.

The second hypothesis aimed to determine the difference in social zapping tendencies between younger and older adults through their relationship with the four behavioral characteristics (belongingness, self-esteem, sense of control, and meaningful existence). Social zapping tendencies were not found to be statistically significant among older and younger adults, however, the study still found that older adults had a higher level of self-esteem, meaningful existence, and sense of control than younger adults. Younger adults experienced higher belongingness than older adults, contributing further evidence to the current literature (Allen et al., 2021).

The first research question examined the relationship between social desirability and the four fundamental needs alongside social zapping. Social desirability was not found to be a predictor of social zapping; however, it was found to be a significant predictor of both meaningful existence and self-esteem. It should be noted that self-esteem had a significant relationship in nearly all of the hypotheses and research questions it was included in. Results indicated that self-esteem is deemed as a primary indicator of social zapping, a significant outcome of social desirability, and was determined to play a significant role in both older and younger adults (older adults had higher self-esteem). These findings support the current literature surrounding self-esteem and the critical role it serves among nearly every demographic group

(cf., Zeigler-Hill, 2013; Mecca, Smelser, & Vasconcellos, 1989; Leary, 1999; Kernis et al., 1993).

The second research question examined perceived differences in social zapping levels between young adult participants (aged 39 and younger) and older adult participants (aged 40 to 75). Although the results did not show a significant difference, future research should take a more thorough look at the relationship between age and social zapping. Given the presence of social media and technology in all age groups, it would be beneficial to compare and contrast predictors of social zapping across age.

Social Implications

Because there is little published research focused on social zapping (e.g., Müller et al., 2020; 2021) any new research determining the social implications seems warranted. The results in the current study suggested that there are behavioral traits which might predict social zapping tendencies; however, chronological age does not seem to be such a factor. Müller and colleagues' research (2020; 2021) suggested that there are "negative" behavioral traits, such as the "Dark Triad," associated with social zapping. The current study explored both "positive" or "neutral" self-reported traits, such as self-esteem and sense of belonging. These variables add to a wider array of behavioral traits to the literature. Consequently, there is now evidence that certain personality traits are linked with social zapping and that these are not necessarily fixed traits.

One may experience more social zapping throughout various points in their lifetime, because of the variation in self-esteem and belongingness. Given that there is minimal research exploring social zapping tendencies, it is difficult to determine implications surrounding relationships, sense of self, perceived isolation, emotion disorders, etc. when an individual is

partaking in social zapping. It is challenging to say that programs and treatment plans aimed at raising self-esteem and belongingness should be created to lower social zapping tendencies given the inverse relationship between belonging and social zapping. Further research should target more potential predictors of social zapping in order to gain a clearer understanding of how to limit social zapping.

Limitations of the Current Study

Of course, the current study is not without limitations, especially considering the novelty of research on social zapping. Both the control scale and the social desirability scale used for the study had low coefficient alphas, or reliability, and the sample size used was too low. With only 48 participants, it is difficult to determine if this study is applicable to the general population (of both older adults and younger adults). Social zapping may have been significant for either population, had a larger participant pool was included. In addition, it is difficult to provide context for social zapping given there was little research done prior to this study.

Also, all data were collected during the COVID-19 pandemic and may not be representative of social zapping happening outside of the pandemic. Given how fearful the population was to interact with one another in person, social zapping may have occurred because individuals did not want to contract the virus. High levels of isolation may have also played a role in social zapping as individuals sought community and attempted to maintain relationships but were hesitant to meet up.

Future Directions for Research

Despite the limitations from the present exploratory study, there is no limit to the amount of future research that possible on social zapping. Until the current study, research was only on potential behavioral traits influencing social zapping tendencies (e.g., Müller et al., 2020; 2021).

Future research might explore other predictors of social zapping, including personality factors associated with social zapping behavior not listed in the current literature. Future research also might examine the effects social zapping has on relationships and individuals partaking in it. Additionally, circumstances and environments prompting the use of social zapping tendencies should be studied. For example, it might be interesting to determine the relationship between COVID-19 and social zapping, as well as the relationship between social zapping and online spaces.

Conclusion

Social zapping is an underrepresented and underdeveloped concept that is now impacting people of all ages. The present study details the importance of determining predictors leading to social zapping, including the four fundamental needs (belongingness, self-esteem, sense of control, and meaningful existence). Additionally, the present study offers a look into how age plays a role in social zapping, and how technology is utilized across all age groups. Continuing with this research could potentially lead to a better understanding of behavior and provide insight as to how individuals can better their lives through communication and time spent with loved ones.

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Appendix A

Social Zapping Scale

Scale items:

1. Right before an appointment, I consider meeting somebody else with whom I could have more fun.

2. I usually stick to my commitments to appointments. (R)

3. Sometimes, I realize shortly before an appointment that I'd rather meet up with someone else.

4. I often cancel my appointments

5. While texting with somebody I arranged to meet, I keep on looking for better options.

6. I often rearrange my appointments spontaneously.

Scale Anchors:

1 = Completely disagree

2 = Mostly disagree

3 = Slightly disagree

4 = Slightly agree

5 = Mostly agree

6 = Completely agree

Reference: Müller, S. M., Wegmann, E., Stolze, D., & Brand, M. (2020). Social zapping scale.

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Appendix B

Need to Belong Scale

Scale Items:

1. If other people don't seem to accept me, I don't let it bother me. (R)

2. I try hard not to do things that will make other people avoid or reject me.

3. I seldom worry about whether other people care about me. (R)

4. I need to feel that there are people I can turn to in times of need.

5. I want other people to accept me.

6. I do not like being alone.

7. Being apart from my friends for long periods of time does not bother me. (R)

8. I have a strong "need to belong."

9. It bothers me a great deal when I am not included in other people's plans.

10. My feelings are easily hurt when I feel that others do not accept me.

Scale Anchors:

1 = Not at all

2 = Slightly

3 = Moderately

4 = Very

5 = Extremely

Reference: Need to Belong Scale (NTBS; Leary, Kelly, Cottrell & Schreindorfer, 2006)

Appendix C

Self-Esteem Scale

Scale items:

1. On the whole, I am satisfied with myself.

2. At times, I think I am no good at all. (R)

3. I feel that I have a number of good qualities.

4. I am able to do things as well as most other people.

5. I feel I do not have much to be proud of. (R)

6. I certainly feel useless at times. (R)

7. I feel that I'm a person of worth, at least on an equal plane with others.

8. I wish I could have more respect for myself. (R)

9. All in all, I am inclined to feel that I am a failure. (R)

10. I take a positive attitude toward myself.

Scale anchors:

3 = Strongly Agree

2 = Agree

1 = Disagree

0 = Strongly Disagree

Reference: Rosenberg Self-Esteem Scale (Rosenberg, 1965)

Appendix D

Desire for Control Scale

Scale items:

1. I prefer a job where I have a lot of control over what I do and when I do it.

2. I try to avoid situations where someone else tells me what to do.

3. I would prefer to be a leader than a follower.

4. I enjoy being able to influence the actions of others.

5. Others usually know what is best for me. (R)

6. I would rather someone else take over the leadership role when I'm involved in a group project. (R)

7. When it comes to orders, I would rather give them than receive them.

8. I wish I could push many of life's daily decisions off on someone else. (R)

9. I prefer to avoid situations where someone else has to tell me what it is I should be doing.

10. I like to wait and see if someone else is going to solve a problem so that I don't have to be bothered with it. (R)

Scale anchors:

1 = The statement does not apply to me at all

2 = The statement usually does not apply to me

3 = Most often, the statement does not apply

4 = I am unsure about whether or not the statement applies to me, or it applies to me about half the time

5 = The statement applies more often than not

6 = The statement usually applies to me

7 = The statement always applies to me

Reference: Desire for Control Scale (DCS; Burger, 1979)

Appendix E

Meaningful Existence Scale

Scale items:

1. I understand my life's meaning.

2. I am looking for something that makes my life feel meaningful.

3. I am always looking to find my life's purpose.

4. My life has a clear sense of purpose.

5. I have a good sense of what makes my life meaningful.

6. I have discovered a satisfying life purpose.

7. I am always searching for something that makes my life feel significant.

8. I am seeking a purpose or mission for my life.

9. My life has no clear purpose. (R)

10. I am searching for meaning in my life.

Scale anchors:

1 = Absolutely untrue

2 = Mostly Untrue

3 = Somewhat Untrue

4 = Can't say True or False

5 = Somewhat True

6 = Mostly True

7 = Absolutely True

Reference: Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life. Journal of Counseling Psychology, 53, 80-93.

Appendix F

Social Desirability Scale

Scale Items:

1. It is sometimes hard for me to go on with my work if I am not encouraged.

2. I sometimes feel resentful when I don't get my own way.

3. On a few occasions, I have given up doing something because I thought too little of my ability.

4. There have been times when I felt like rebelling against people in authority even though I knew they were right.

5. No matter who I'm talking to, I'm always a good listener.

6. There have been occasions when I took advantage of someone.

7. I'm always willing to admit it when I make a mistake.

8. I sometimes try to get even, rather than forgive and forget.

9. I am always courteous, even to people who are disagreeable.

10. I have never been irked when people expressed ideas very different from my own.

11. There have been times when I was quite jealous of the good fortune of others.

12. I am sometimes irritated by people who ask favors of me.

13. I have never deliberately said something that hurt someone's feelings.

Scale anchors:

1 = True

2 = False

Reference: Reynolds (1982)