



Research article

Baby Boomers' use of Facebook and Instagram: uses and gratifications theory and contextual age indicators

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ABSTRACT

Social media research tends to prioritize how young adults – and college students, in particular – use social network sites. While several studies have focused on how Facebook can help alleviate loneliness among older adults, the motives for using other social media platforms, including Instagram, have not been adequately explored. This study therefore focuses on how a uses and gratifications framework applies to older users of Facebook and Instagram, including the relationship to contextual age. A survey of 414 Baby Boomers and Traditionalists was conducted in the Fall of 2019. The results revealed that older adults rely on Facebook and Instagram to compensate for the lack of social activity and face-to-face interactions in their daily lives. These patterns are consistent with social compensation hypothesis and contradict the findings of studies done with college students. In addition, the older adults' life satisfaction was a negative predictor of using these sites for companionship and diversion. Future research should furthermore explore how other personality traits and social situations might influence older individuals use of social media. This knowledge can be particularly useful in times of health pandemic, such as COVID-19, when so many older individuals are confined to their homes and rely on social media for interaction and entertainment. Insight into intergenerational social media usage differences can also benefit advertisers, policy makers, recreational groups, healthcare and social services.

1. Introduction

As individuals around the world adapt to the restrictions imposed on daily interaction by social distancing and COVID-19 preventive measures, social media that provide integration and a sense of connection with others have become increasingly essential in everyday life. Among these, Facebook and Instagram are arguably among the most popular social networking sites (SNS) today – Facebook primarily organized around maintaining relationships with friend and family networks, while Instagram prioritizes sharing visual content, such as photos and videos.

Research that examines the ways in which these sites are used to fulfil individual needs has largely focused on younger users, and college students, in particular. While these observations and conclusions are no doubt important, they further a skewed notion that SNS are primarily for and used by young people, and as such do not provide a comprehensive understanding of how other users derive satisfaction from SNS. While a number of studies have focused on how social media, primarily Facebook, can help alleviate loneliness among older users (e.g., Aarts, 2018; Baecker et al., 2014; Sinclair and Grieve, 2017), the motives for using

other social media platforms, including Instagram, have not been adequately explored.

Older adults represent the fastest growing portion of the human population, and SNS can help satisfy some of their social needs (Nam, 2019). Khoo and Yang (2020) found that social media use for interactions with broader social networks (e.g., friends) is as beneficial as social media use to connect with family for improving middle-aged and older adults' perception of social support. This study, therefore, attempts to address this gap by focusing on Facebook and Instagram use among older generations. In doing so, we subscribe to the paradigm that life-position indicators guide strategic media use.

Contextual age (or life-position) indicators, as defined by Rubin and Rubin (1982), are a useful alternative to chronological age that has previously been related to media use (Bondad-Brown et al., 2012). These indicators include one's social activity, life satisfaction, interpersonal interaction, economic security, mobility, and physical health. Psychosocial researchers generally agree that positive aging can be considered an amalgam of subjective well-being, life satisfaction, and longevity (Freund and Riediger, 2003; Jopp and Smith, 2006).

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A useful framework for examining inter-generational differences in social media use is the uses and gratifications (U&G) theory, which emphasizes how personal characteristics and individual needs subsequently determine media use and satisfaction. Insight into intergenerational social media usage differences can benefit multiple sectors, including advertisers, policy makers, recreational groups, healthcare and social services.

1.1. Social media and uses and gratifications theory

Uses and gratifications theory posits that people actively select and use media to satisfy individual needs (Katz et al., 1973-4; Wu et al., 2010). For example, while some may use social media to broaden or expand their social circle, others may use it primarily to play games or share media content. In 1973, Katz, Gurevitch, and Hass proposed five categories of needs that apply to all media formats: 1) *Cognitive needs*, 2) *Affective needs*, 3) *Personal integrative needs*, 4) *Social integrative needs*; and 5) *Cathartic needs*. Social media U&G research has revealed a broad spectrum of previously unidentified gratifications, including socializing (Apaolaza et al., 2014), documentation (Sheldon and Bryant, 2016), virtual community (Chen and Kim, 2013), interpersonal utility (Luo and Remus, 2014), reciprocity (Pai and Arnott, 2013), expressive information sharing, professional advancement, meeting new people (Smock et al., 2011), career opportunities, global exchange (Roy, 2009), spiritual support, psychological support, and networking (Anderson, 2011), as well as online shopping and purchasing behavior (Hossain et al., 2020; Hossain et al., 2020).

Most of this research, however, has focused primarily on Millennials or on older adults' use of Facebook. For example, Jung et al. (2017) conducted interviews with older adults (average age: 80.4 years) to understand how they used Facebook. Results revealed six primary reasons for using Facebook (keeping in touch, sharing photos, social surveillance, responding to family members, convenient communication, curiosity) and six primary reasons for not using Facebook (privacy, need for media richness, preference for familiarity, triviality of communication, time commitment, frustration with site tools). The homogeneity of participants was a limitation of Jung et al. study as the sample comprised of only Caucasians who were relatively affluent, well educated, and all lived in the same retirement community.

As the first study to apply a U&G framework to understand how older generations (i.e., Baby Boomers and Traditionalists) use Instagram, we pose the following question:

RQ1: What specific needs dictate Facebook and Instagram use among the Baby Boomer (50 + years old) and Traditionalist (75 + years old) generations?

1.2. Social media use and life-position indicators

Social media usage among older individuals may also be governed by life-position indicators or what is known as contextual age. Rubin and Rubin's (1982; 1992) 18-item index to measure one's life position includes six dimensions: interpersonal interaction, social activity, life satisfaction, physical health, economic security, and mobility. These indicators frequently explain and predict social media use better than mere demographics (Bondad-Brown et al., 2012).

One study that probed cross-generational differences in social activity (Chang et al., 2015) found that whereas older SNS users tend to value the quality of their online friendships over quantity, younger users are generally predisposed to value the size of their social network over the quality of these relationships. Older users (60–87 years) who relied on traditional media (e.g., radio, newspaper, and film) reported lower life satisfaction scores than those who used the Internet, including SNS (Nimrod, 2018). An individual's socio-economic status has also been found to influence their social media usage (Hsu et al., 2015). Contextual age indicators are thus valuable to gain greater insight into media use and gratifications. We therefore attempt to address the sparse scholarship on

how life position indicators influence media use among older generations by posing the research question:

RQ2: How do life position indicators - namely, social activity, life satisfaction, interpersonal interaction, physical health, and economic security - influence Facebook and Instagram use among the Baby Boomer and Traditionalist generations?

2. Method

2.1. Participants and procedure

Participants included 293 women, 120 men, and 1 “other” sex, ranging from 50 to 91 years (mean age = 61.89; $SD = 6.52$). Approximately 85% self-identified as Caucasian, 8.7% as African American, 1.2% as Asian American, 1.7% as Hispanic, and the remainder did not select any of these provided categories. They were recruited through snowball sampling by requesting students at a mid-sized research university to locate participants who fit the research criteria (i.e., above 50 years). Eligible participants completed an online survey posted in Qualtrics. Before beginning the questionnaire, participants signed the electronic consent form informing them that the study would take approximately 15 min to complete and that some of the survey items regarding loneliness, life satisfaction, and economic status might elicit feelings of sadness, depression, or despair among some participants. Due to any potential discomfort, participants were allowed to skip any questions that might prompt these negative feelings. In addition, they were not requested to provide easily identifiable information such as their name or username, thus ensuring strict confidentiality. Participants did not receive any compensation for participation in this study. The University of Alabama in Huntsville Institutional Review Board of Human Subjects Committee approved the study.

The questionnaire contained the following measures, all of which were measured using five-point Likert scales. Compared to a seven-point Likert scales, five-point Likert scales are most recommended by researchers because they increase response rate and response quality while also reducing respondents' “frustration level” (Babakus and Mangold, 1992; Sachdev and Verma, 2004).

2.2. Measures

2.2.1. Facebook uses and gratifications

Participants were asked if they used Facebook and, if yes, then prompted to complete a 33-item scale that measured motives for Facebook use. A total of 343 participants (82.9%) stated that they used Facebook (251 women, 91 men, and 1 “other” sex). Items were pooled from previous social media uses and gratifications studies (e.g., Sheldon, 2008). Participants rated the personal importance of (from 1 = *very unimportant* to 5 = *very important*) Facebook activities to them. An exploratory factor analysis (a principal component solution and varimax rotation) was used to verify motivations for Facebook use, and yielded the following five factors that accounted for 66.20% of the variance (Table 1): *diversion* ($M = 3.18$; $SD = .99$), *entertainment* ($M = 3.01$; $SD = .85$), *relationship maintenance* ($M = 3.00$; $SD = .82$), *companionship* ($M = 1.65$; $SD = .89$), and finally *meeting new people* ($M = 1.41$; $SD = .60$).

2.2.2. Instagram uses and gratifications

A total of 152 participants (37%) stated that they used Instagram (122 women and 30 men). Motivations to use Instagram were measured using 24 items that were pooled from previous Instagram uses and gratifications research (Sheldon et al., 2017). Participants reported how often (from 1 = *never* to 5 = *very often*) they used Instagram for various purposes, and a follow-up exploratory factor analysis revealed motivations for Instagram use that accounted for 64.20% of the variance (Table 2). These were *relationship surveillance* ($M = 2.59$; $SD = .94$), followed by *documentation* ($M = 2.14$; $SD = .98$), *inspiration* ($M = 2.07$; $SD = 1.02$),

Table 1. Motives for Facebook use: Measures of central tendencies and reliability.

	M*	SD	Alpha
Factor 1: RELATIONSHIP MAINTENANCE	3.00	.82	.88
To communicate with my friends.	3.21	1.06	
To get in touch with people I know.	3.07	1.04	
To stay in touch with friends.	3.53	1.04	
To send a message to a friend.	2.91	1.04	
Get through to someone who is hard to reach.	2.59	1.05	
To post a message on my friend's wall.	2.67	.96	
Factor 2: ENTERTAINMENT	3.01	.85	.87
It is entertaining.	3.42	1.08	
To see other people's pictures.	3.57	1.14	
To enjoy it.	3.34	1.06	
To have fun.	2.93	1.17	
To read other people's profiles.	2.48	1.04	
To see which of the people I know who joined Facebook.	2.34	1.11	
Factor 3: MEETING NEW PEOPLE	1.41	.60	.82
Find companionship.	1.37	.77	
Find more interesting people than in real life.	1.46	.85	
It makes me cool among my peers.	1.38	.78	
Develop a romantic relationships.	1.16	.51	
Meet new friends	1.68	.97	
Factor 4: DIVERSION	3.18	.99	.84
To occupy my time.	2.92	1.11	
It is one of the routine things I do when online.	3.33	1.15	
To pass time when bored.	3.30	1.16	
Factor 5: COMPANIONSHIP	1.66	.89	.88
To feel less lonely.	1.67	.98	
No one to talk or be with.	1.65	.95	

*means for a 5-point scale (very unimportant = 1; very important = 5) (Sheldon, 2008).

Bold denotes the overall mean score for each factor.

diversion/companionship ($M = 1.54$; $SD = .82$), and finally self-promotion ($M = 1.45$; $SD = .64$).

2.2.3. Life-position indicators

The life-position scale (Rubin and Rubin, 1982) was used to measure interpersonal interaction, social activity, life satisfaction, economic security, and physical health. Respondents indicated the extent to which they agreed with 15 life-position statements (1 = *strongly disagree*; 5 = *strongly agree*). Each of the five dimensions was measured using three items, and participant responses for each dimension were averaged across the three respective items to create a subscale for that dimension.

Interpersonal interaction was measured using the items: "I get to see my friends as often as I would like," "I spend enough time communicating with my family or friends by telephone or e-mail," and "I have ample opportunity for conversation with other people." Responses to all three items were averaged and summed into a subscale. The mean for this dimension was 3.57 ($SD = .98$; Cronbach's alpha = .74). *Social activity* was measured using three items: "I often travel, vacation, or take trips with others," "I often visit with friends, relatives, or neighbors in their homes," and "I often participate in games, sports, or activities with others." ($M = 3.09$; $SD = 1.08$; Cronbach's alpha = .75). *Life satisfaction* was measured using these items: "I find a great deal of happiness in my life," "I have been very successful in achieving my aims or goals in life," and "I am very content and satisfied with my life" ($M = 3.94$; $SD = .91$; Cronbach's alpha = .82). *Economic security* was measured using the items: "I have enough money to buy things I want, even if I don't really need them," "I live quite comfortably now and have enough money to buy what I need or want," and "I have no major financial worries" ($M = 3.51$; $SD = 1.19$; Cronbach's alpha = .91). Finally, *physical health* was measured

Table 2. Motives for Instagram use: Measures of central tendencies.

	M	SD	Alpha
Factor 1: RELATIONSHIP SURVEILLANCE	2.59	.94	.86
To see "visual status updates" of my friends.	2.60	1.25	
To follow my friends.	2.99	1.20	
To "like" my followers' photos.	2.57	1.17	
To creep through other people's posts.	1.78	1.01	
To see what other people share.	2.98	1.19	
Factor 2: DOCUMENTATION	2.14	.98	.86
To depict my life through photos.	2.10	1.10	
To commemorate an event.	2.35	1.26	
To share my life with other people.	2.17	1.15	
To provide "visual status updates for my friends".	1.89	1.13	
Factor 3: INSPIRATION	2.07	1.02	.76
For inspiration.	2.17	1.18	
To find people with whom I have common interests.	1.93	1.06	
Factor 4: SELF-PROMOTION	1.45	.64	.80
To show off.	1.26	.62	
To become popular.	1.26	.59	
To self-promote myself.	1.46	.87	
To show off my photography skills.	1.59	1.00	
To create art.	1.56	.98	
Factor 5: DIVERSION/COMPANIONSHIP	1.54	.82	.85
To avoid loneliness.	1.54	.91	
To escape from reality.	1.66	.99	
To browse daily lives of celebrities.	1.52	.85	

*means for a 5-point scale (never = 1; very often = 5).

Bold denotes the overall mean score for each factor.

using the items: "Healthwise, I am no worse off than anyone else my age," and "I usually feel in top-notch physical condition" ($M = 3.39$; $SD = 1.04$; Cronbach's alpha = .73).

The reliability of these subscales is consistent with prior similar research that has ranged from .70 (social activity) (Sheldon and Bryant, 2016) to .84 (life satisfaction) (Sheldon, 2014).

3. Results

We utilized an exploratory factor analysis, Pearson product-moment correlations, and hierarchical linear regression to investigate the two research questions.

3.1. Motives for using SNS

RQ1 focused on the specific needs that dictate Facebook and Instagram use among the Baby Boomer (50 + years old) and Traditionalist (75 + years old) users. Analysis indicated that the main reason for Facebook use was diversion (see Table 1), followed by entertainment, relationship maintenance, companionship, and meeting new people, respectively.

Although 82.9% of participants used Facebook, only 37% reported using Instagram. The mean values for motivations for Instagram use (Table 2) were also much lower than the corresponding means for Facebook use (Table 1). Participants primarily used Instagram for relationship surveillance, followed by documentation, inspiration, diversion/companionship, and self-promotion, respectively.

3.2. Life-position indicators and SNS use

RQ2 explored the relationship between life-position indicators and older users' motivations to use Facebook and Instagram. Pearson product-moment correlations (Table 3) revealed several significant relationships regarding Facebook use (see Table 3) and Instagram use (see Table 4). Of

Table 3. Correlations among life-position indicators and motives for Facebook use.

	1	2	3	4	5	6	7	8	9	10
1. Interpersonal Interaction	-									
2. Social Activity	.53**	-								
3. Life Satisfaction	.52**	.48**	-							
4. Economic Security	.33**	.36**	.50**	-						
5. Physical Health	.27**	.34**	.36**	.42**	-					
6. Relationship Maintenance Motive	-.11*	-.02	-.03	-.08	-.12*	-				
7. Entertainment Motive	-.10*	-.04	-.12*	-.11*	-.15**	.66**	-			
8. Meeting New People Motive	-.14**	-.09*	-.14**	-.02	-.01	.38**	.44**	-		
9. Diversion Motive	-.15**	-.14**	-.17**	-.13*	-.12*	.53**	.65**	.27**	-	
10. Companionship Motive	-.35**	-.30**	-.34**	-.19**	-.13**	.36**	.44**	.43**	.43**	-

Note. * $p < .05$; ** $p < .01$; one-tailed.

Table 4. Correlations among life-position indicators and motives for Instagram use.

	1	2	3	4	5	6	7	8	9	10
1. Interpersonal Interaction	-									
2. Social Activity	.53**	-								
3. Life Satisfaction	.52**	.48**	-							
4. Economic Security	.33**	.36**	.50**	-						
5. Physical Health	.27**	.34**	.36**	.35**	-					
6. Relationship Surveillance Motive	-.19**	.05	-.05	.02	-.03	-				
7. Documentation Motive	-.24**	.11	.02	-.01	-.05	.63**	-			
8. Inspiration Motive	-.16*	-.02	-.13*	-.07	-.06	.61**	.51**	-		
9. Self-Promotion Motive	-.15*	.08	-.03	-.09	.07	.39**	.55**	.55**	-	
10. Diversion Motive	-.26**	-.14*	-.29**	-.16*	-.12	.49**	.42**	.55**	.52**	-

Note. * $p < .05$; ** $p < .01$; one-tailed.

Table 5. Results of the hierarchical linear regression analysis for significant predictors of motives for Facebook use.

Motive	Life-Position Predictor	B	SE	β	p	R ²
Relationship Maintenance	ns					
Entertainment	ns					
Diversion	Interpersonal Interaction	-.16	.06	-.16	.01	.024
	Life Satisfaction	-.14	.07	-.13	.05	.036
Companionship	Interpersonal Interaction	-.33	.05	-.35	.00	.125
	Life Satisfaction	-.23	.06	-.23	.00	.167
Meeting New People	Interpersonal Interaction	-.09	.04	-.14	.01	.020

ns = none significant ($p > .05$).

particular interest, companionship displayed the strongest relationship with the life-position indicators among Facebook users.

Five hierarchical linear regressions (Table 5) were conducted to determine which life-position indicators best predicted the motives for Facebook use among older users. For the dependent variables *relationship maintenance* and *entertainment*, no life position indicators were significant predictors. For the dependent variable *diversion*, interpersonal interaction and life satisfaction indicators were significant predictors, explaining 2% and 1.2% of variance. For the dependent variable *companionship*, interpersonal interaction explained 12.5% of variance and life satisfaction explained 4.2% of the variance. Finally, for the dependent variable *meeting new people*, the interpersonal interaction indicator captured 2% of the variance. As evident from the hierarchical linear regression, life position indicators had the most influence on companionship motive.

3.3. Predictors of motives for Instagram use

Five hierarchical linear regressions (Table 6) investigated which life-position indicators best explained the motives for Instagram use among older users. For the dependent variable *relationship surveillance*, interpersonal interaction explained 3.7% of the variance, and social activity accounted for 2.6% of the variance. For the *documentation motive*, interpersonal interaction explained 5.6% of the variance, and social activity accounted for 5.7% of the variance. For the *inspiration motive*, interpersonal interaction was the only significant predictor explaining 2.9% of variance. For the *self-promotion motive*, interpersonal interaction explained 2.3% of the variance, and social activity accounted for 3.1% of the variance. For the *diversion/companionship* motive, interpersonal interaction and life satisfaction were significant predictors that determined 6.5%, and 5.2% of the variance, respectively.

Table 6. Results of the hierarchical linear regression analysis for significant predictors of motives for Instagram use.

Motive	Life-Position Predictor	B	SE	β	p	R ²
Relationship Surveillance	Interpersonal Interaction	-.19	.08	-.19	.02	.037
	Social Activity	.17	.08	.20	.04	.063
Documentation	Interpersonal Interaction	-.24	.08	-.24	.00	.056
	Social Activity	.26	.08	.29	.00	.067
Inspiration	Interpersonal Interaction	-.18	.08	-.17	.03	.029
Self-promotion	Interpersonal Interaction	-.10	.05	-.15	.05	.023
	Social Activity	.13	.05	.22	.02	.054
Diversion/Companionship	Interpersonal Interaction	-.22	.07	-.25	.00	.065
	Life Satisfaction	-.24	.08	-.24	.00	.116

Overall, interpersonal interaction (measured as having meaningful face-to-face social interactions with others) emerged as a significant predictor of motives for Facebook and Instagram use among older users, with life satisfaction and social activity also accounting for some of the Facebook and Instagram use, respectively. We now examine the implications of these results.

4. Discussion

Although Baby Boomers and older users spend approximately the same amount of time on Facebook as Millennials and younger users (Provision Living, 2019), there is a palpable dearth of research exploring older users' motivations and SNS usage patterns. Most scholarship in this arena tends to disproportionately prioritize and privilege SNS use among college students and young adults (Sheldon, 2008; Smock et al., 2011). Prior research on older users has primarily focused on Facebook and how social media are used to alleviate loneliness (Aarts, 2018; Baecker et al., 2014; Sinclair and Grieve, 2017). No previous studies have explored the motives for Instagram use among older users, nor how social media use among older adults is related to contextual age. The result of this trend is a skewed perception of SNS use and generational variations in user motivations that, in turn, has socioeconomic and sociocultural implications. Disregarding or minimizing older users' preferences and needs can have wide-ranging and potentially detrimental repercussions across varied contexts, including (but not limited to) health and mental well-being, recreation and rejuvenation, and social integration. This study is among the first to apply a uses and gratifications framework to examine Facebook and Instagram use among older users. Specifically, this research makes several valuable contributions to understand the complex relationships between life-position indicators and SNS use. Our two research questions were therefore adequately addressed through this study.

4.1. Summary of findings

4.1.1. Motives for Facebook and Instagram use

First, results show that older users tend to prefer Facebook to Instagram. This finding is consistent with previous conclusions regarding social media use and generational differences (Provision Living, 2019). Although the reasons for both Facebook and Instagram use among older users were strikingly similar to those expressed by younger users (Sheldon, 2008), there are some important differences. Whereas Millennials primarily use Facebook for relationship maintenance (Sheldon, 2008), Baby Boomers and Traditionalists in our study tend to use it for diversion and entertainment. It is likely that these older users still prefer face-to-face interaction with friends and family above all other formats. As indicated through their predominant usage of Instagram for relationship surveillance, which entails a relatively passive form of relationship maintenance that involves 'following' a friend's posts rather than directly communicating with the friend, as on Facebook. Instagram was also often used for documentation and inspiration needs, to catalog

events and create positive memories that promote life satisfaction. These motives bear strong similarity to corresponding findings among younger users, although the mean values among older users were generally lower than those recorded among college students (Sheldon and Bryant, 2016; Sheldon et al., 2017). This is likely explained by the fact that older users tend to use Instagram less frequently than younger users.

Our results also complement uses and gratifications conclusions about SNS use among college students, indicating that older users also primarily use Facebook to fulfill social integrative and cathartic needs. Finally, our study builds theory by being the only research that intentionally explore motivations for Instagram use among older users. Much more work needs to be done in this area to explore why some SNS platforms are more popular than others among these users.

4.1.2. Life-position indicators and Facebook use

Intriguing differences from younger users emerged when exploring the relationships between life-position indicators and Facebook and Instagram use among older users. In particular, two indicators were negative predictors of specific motivations to use Facebook.

Life satisfaction was a negative predictor of using Facebook for companionship and diversion. In other words, older users who reported higher life satisfaction scores did not feel that they needed Facebook to alleviate loneliness or fulfill the need for companionship. Those who were less satisfied with their lives used Facebook to compensate for the loss. Finally, interpersonal interaction was a negative predictor of using Facebook to meet new people, for diversion, and companionship. Again, older users who felt that their offline social lives were already rich and meaningful enough were less likely to use Facebook to make new acquaintances or to pass time when bored or lonely.

By extension, these relationships between life-position indicators and Facebook use provide unique insight into how and why older users are likely to utilize Facebook. This demographic is more likely to rely on social media when they experience a lack of social activity in their daily lives, and also as a result of general prevailing dissatisfaction or unhappiness with their life circumstances. These patterns are consistent with *social compensation hypothesis*, which posits that individuals compensate for the lack of face-to-face friendships by extending their online social sphere (e.g. Valkenburg et al., 2005; Zywicki and Danowski 2008). More work needs to be done to uncover if some particular forms of dissatisfaction (e.g., physical/mobility restriction vs. loneliness and general malaise vs. clinical depression, etc.) are stronger predictors of social compensation among older individuals than others.

4.1.3. Life-position indicators and Instagram use

Three life-position indicators predicted specific ways in which Instagram is used among older individuals. First, social activity was a positive predictor of using Instagram for relationship surveillance, documentation, and self-promotion. Those who tend to travel more and frequently participate in real-world leisure activities were more likely to use Instagram to monitor their friends' activities. They would also document their stories, and use Instagram to show off. When studying

college students, Sheldon and Bryant (2016) also found that social activity was a significant predictor of the documentation motive for Instagram use. We suspect that this relationship is a by-product of Instagram's primarily visual structure. However, Sheldon and Bryant (2016) did not find social activity to be related to any other motive for Instagram use. Given this, the relationship between social activity and self-promotion in our study is interesting, particularly the implication that older users might be interested in promoting themselves to gain social approval. Future studies should examine this relationship further.

Simultaneously, however, interpersonal interaction was a negative predictor of using Instagram for all the reasons included in this study: relationship surveillance, documentation, inspiration, self-promotion, and diversion or companionship. Older Instagram users who had regular face-to-face contact with family and friends reported using this platform less to follow others, document their own lives, or engage in self-promotion. These findings contradict Sheldon and Bryant's (2016) research that uncovered a strong positive relationship between interpersonal interaction and surveillance among college students who used Instagram. These generational differences warrant further investigation, and potentially indicate the diminishing influence of moderating variables (e.g., peer pressure, social desirability, and fear of missing out) with increasing age. Perhaps older individuals experience greater self-contentment from other spheres of their lives that do not necessitate surveilling friends' activities on social networks. Fewer yet richer relationships with age may provide more meaningful interpersonal interaction for this demographic, which may account for the decreased need to keep up with friends on Instagram.

Finally, Instagram use was also negatively predicted by life-satisfaction, which suggests that – as with Facebook – older users tend to use Instagram as a means of escaping and avoiding loneliness and similar negative affect. This pattern corroborates similar patterns among Millennials and adults (Sheldon, 2014), wherein those who report lower life-satisfaction scores tend to spend more time on Facebook for escapism and diversion.

Overall, our results suggest that social media can facilitate positive aging among older users, especially with regards to compensating for the lack of face-to-face interactions. This conclusion is particularly significant given that older individuals are more likely to experience periods of imposed isolation and/or quarantine, such as with the prolonged COVID-19 pandemic. Although this study was conducted before the COVID-19 pandemic, our findings are pertinent to contemporary discussions surrounding how social media usage can benefit older users during periods of prolonged or imposed isolation. According to Baltes and Baltes (1990) theory of successful aging, we are likely to use Compensation when adapting to age-related losses (e.g., the loss of mental, physical and social resources) and thereby adapt to or overcome declining opportunities and abilities. Our study confirms this conclusion, and we found that Facebook and Instagram enabled older users to compensate for the lack of face-to-face contact and decreased life satisfaction. Interestingly, three other life-position variables included in this study - physical health, economic security, and mobility - were not related to these individuals' motives for Facebook or Instagram use. These findings are intriguing, given the particular relevance that they might have for age-related concerns and perceived losses. We therefore recommend that future research examine the implications and replicability of these patterns among other older social media users.

4.1.4. Limitations

This study suffered from its fair share of setbacks that must be considered when interpreting its findings. First, we utilized snowball sampling to recruit participants, which in turn hinders generalizing the results to the broader population. Second, the cross-sectional nature of this study precludes establishing any kind of cause-effect relationships between life-position indicators and how older adults use Facebook and Instagram. Finally, we had a smaller number of participants who use

Instagram, compared to Facebook, and most of them were women, which prevented us from controlling for sex differences.

5. Conclusion

This is the first study to apply the U&G theory to gain an exploratory yet nuanced understanding of how older generations (i.e., Baby Boomers and Traditionalists) use Instagram. Our findings reveal that SNS users are not a homogenous group with similar motivations across varied platforms. Rather, each social medium platform prompts distinct behaviors and forms of interaction that, in turn, reflect specific user motivations. In addition, there are differences in social media use between Baby Boomers and Millennials.

Second, this study demonstrates the relevance and utility of life-position indicators to understanding and predicting Facebook and Instagram use. Our findings corroborate Rubin and Rubin's (1992) thesis that an individual's life situation influences their motives and how they interact with others. Unlike younger users, we found that older adults rely on Facebook and Instagram to compensate for the lack of social interactions in daily lives. This particular motivation gains a different layer of relevance during the ongoing COVID-19 pandemic, when so many older and at-risk individuals are confined to their homes to avoid exposure and infection. As they grapple with increased isolation and loneliness, the role that SNS can play in alleviating negative affect and loneliness, and promoting emotional and mental wellbeing, clearly deserves greater attention. A keener understanding of how older adults use SNS to fulfill specific motivations can enable developers to tailor these platforms to better benefit these users, and particularly during challenging personal or societal events. By extension, this knowledge can also allow other sectors – healthcare, social services, advertisers, policy makers, recreational groups, community organizations, etc. – to leverage these platforms to better serve older SNS users.

Finally, although Baltes' theory has not been directly integrated to examine how social media can influence aging and age-related satisfaction, we argue that it is both relevant and useful to understand social media use among older individuals. We therefore urge more research to understand how selection, optimization, and compensation guide social media usage for older users.

Declarations

Author contribution statement

Pavica Sheldon: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Mary Grace Antony: Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Lynn Johnson Ware: Conceived and designed the experiments; Performed the experiments; Wrote the paper.

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Data availability statement

Data will be made available on request.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

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