
Miscellaneous

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Submitted

July 29th, 2023

Approved

May 15th, 2024

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Communication & Society
ISSN 0214-0039
E ISSN 2386-7876
www.communication-society.com

2024 – Vol. 37(4)
pp. 107-124

How to cite this article:

Weimann-Saks, D., Malka, V. E. & Ariel, Y. (2024). The role of engagement and self-disclosure in mitigating loneliness: a study on women's closed Facebook groups, *Communication & Society*, 37(4), 107-124. <https://doi.org/10.15581/003.37.4.107-124>

The role of engagement and self-disclosure in mitigating loneliness: a study on women's closed Facebook groups

Abstract

Inspired by the uses and gratifications theory, this study examines the role of closed women's Facebook groups in mediating the relationship between various forms of loneliness and perceived gratification among Israeli women. We surveyed 521 female participants to explore the mediating effect of engagement on loneliness and perceived gratification. Our findings suggest that these closed Facebook groups serve as significant platforms for interaction and personal disclosure, thereby contributing to the perceived importance of these groups in members' lives. However, the results also show that these groups may not effectively alleviate social-emotional loneliness, and increased engagement within these groups does not significantly influence the relationship between loneliness and perceived gratification. In contrast, these groups act as alternative support systems for women experiencing family loneliness, with a heightened sense of gratification correlating with active participation. Despite these findings, the study reveals the limitations of these groups in addressing all forms of loneliness, underscoring the vital role of offline interactions. Therefore, these results highlight the need to further explore the interplay between online and offline spaces in shaping women's experiences of loneliness and perceived gratification. The study also suggests that additional research is necessary to examine the applicability of these findings across different cultural contexts and a broader range of online groups.

Keywords

Closed Facebook groups, engagement, women, self-disclosure, loneliness.

1. Introduction

In the rapidly evolving digital era, how we communicate and forge relationships has undergone substantial transformations. Social media has profoundly impacted hundreds of millions of lives globally, a significance that has been the springboard for numerous research endeavors. The emergence of social media platforms such as Facebook has given rise to online communities, providing users with a platform to express their thoughts, share experiences, and form connections. Within this digital transformation, Facebook has significantly increased the number of closed groups. Notably, women's closed groups in Israel have become particularly prominent. These groups often command substantial memberships, spanning tens of thousands to a striking 100,000–150,000 and more.

Inspired by the Uses and gratifications theory, this study focuses on these groups, delving into their roles in their members' lives. Amidst the breadth of digital communities, women's 'closed' Facebook groups have attracted considerable attention. These distinctive platforms have evolved into dynamic digital spaces where women worldwide can engage, share personal narratives, and disclose aspects of their lives. Embarking on a detailed exploration of these closed women's Facebook groups, primarily within the Israeli context, this study aims to provide an in-depth understanding of the dynamics and benefits these platforms offer their members. The research objectives are multifaceted. Foremost, the study strives to elucidate the roles these online spaces serve in members' lives, particularly concerning patterns of self-disclosure, perceptions of social-emotional loneliness and family loneliness, and the varying levels of engagement within these groups. In addition, the study aims to shed light on how these elements interact and influence the members' perceptions of the groups' significance.

2. Theoretical Background

2.1. Social Media

The Web 2.0 era has seen a significant transformation with the growth of interactive social networking sites, evolving to accommodate a diverse range of digital interactions and communities. Recent literature has emphasized the multifaceted roles of social media in various settings (e.g., marketing strategies, communication channels, and public health), reflecting its pervasive influence across sectors (Dragseth, 2020; Fan, 2023).

Boyd and Ellison (2007) define social networking sites as platforms that allow people to create a public or semi-public profile, share this profile with others, and form relationships. Riegner (2007) defines a social networking site as a space created to connect people via web-based tools like email, chat applications, and blogs. Such participation connects participants with others who share interests, such as hobbies and business-related activities. Similarly, Pallis *et al.* (2011) describe a social networking site as a site where individuals meet to form relationships, with each user creating a list of others with whom they wish to connect, using a variety of tools to build a community, discuss and share knowledge, and participate in various activities.

A new flourishing area of study strives to understand what Litt (2012) calls the "imagined audience" in the context of social media, defining it as "the mental conceptualization of the people with whom we are communicating" (p. 331). Litt and Hargittai (2016) distinguish between an abstract and an imagined target audience and assume that most people have multiple imagined audiences that may vary from one posting to another. The imagined abstract audience is the user's default when they wish to experience self-expression. In contrast, the imagined target audience applies when they wish to attract the attention of a specific group of people. Scholars in this field analyze users of specific social media and their perceptions of their potential audiences (see, for example, Jung & Rader, 2016, on Facebook).

Gender differences in social support on social networks have been quantitatively assessed, revealing that women of all ages provide and receive more social support on these platforms

than men. This gender disparity underscores the nuanced ways social support dynamics manifest online, offering insights into the social fabric of digital communities (Tifferet 2020).

2.2. Closed Facebook Groups

Facebook, an online social networking platform launched in 2004, has become the world's largest. A significant feature of Facebook is its group functionality. When creating a group, initiators must select one of three privacy settings: public, closed, or secret. Each category encompasses a range of nuances concerning participation and content visibility. Although Facebook continually updates these privacy classifications and notifies its users, there is no guarantee that its users adequately note all changes. Critics argue that these frequent modifications impair users' ability to adequately protect their privacy (D'Arcy & Young, 2012). A public group allows unrestricted access to all Facebook users, a closed group permits participation by members only (but is viewable by all users), and a secret group is restricted to a selected few, with only these users having access to its content and awareness of its existence.

The existing literature primarily targets women's closed Facebook groups focusing on maternal-related subjects (Gleeson *et al.*, 2022; Johnson, 2014; Grimes *et al.*, 2014). Some researchers, such as Younas *et al.* (2020), delve into women's closed groups in patriarchal societies like Pakistan, where mutual support is sought. Professional-oriented, women's closed Facebook groups were the subject of study by Pruchniewska (2019). However, the focus of the present study is broader, examining women's groups concerned with a variety of topics, not just one.

Gleeson *et al.* (2022) demonstrated that closed online mothers' groups allowed childbearing women to combat isolation and form supportive, evolving friendships within a small, private, and trusted circle. Fedorowicz *et al.* (2022) examined the use of a closed Facebook group for quick engagement and feedback from patients and the public concerning a primary care-based research project. The scholars suggest that a closed Facebook group provides flexibility beneficial to research teams and interested participants, promoting broad participation without the typical need for training.

Closed Facebook groups run by women constitute a significant part of virtual communities within Israeli cyberspace. Many of these groups boast tens of thousands of members and a wide spectrum of activities. Some are designed for individuals who interact daily, such as those sharing a living environment. In contrast, others are populated by members who only know each other online.

Weiser (2000) provides a comprehensive study showing that women primarily use the internet to establish and maintain interpersonal relationships and as a source of knowledge, while men use it primarily for entertainment and pleasure. Other studies have also found that women are more likely than men to use the internet primarily for social interactions (Amichai-Hamburger & Ben-Artzi, 2003), and McAndrew and Jeong (2012) found that women engaged in more activities, spent more time and had more friends on Facebook than men. Studies have indicated gender differences concerning self-disclosure. For example, Farinosi and Taipale (2018) found that while women tend to be more concerned about privacy and may disclose less personal contact information, they may also be more motivated to disclose private information for certain purposes. They were less likely to reveal their phone number but more likely to indicate their religion, favorite music, and books than men. Tifferet and Vilnai-Yavetz (2014) found common acceptance of such gendered behavior patterns on Facebook. That said, other studies have not found significant gender differences in patterns of social networking site usage (Kim & Chock, 2017; Tang *et al.*, 2016).

2.3. Perceived Gratifications

The long-established theories of "uses and gratification" remain among the most influential theory in media studies (Lev-On, 2017; Xie *et al.*, 2024). Classic studies of this ilk typically identify

five distinct types of social and psychological needs that media can fulfill: cognitive, affective, personal integrative, social integrative, and diversion (Katz *et al.*, 1973; Katz *et al.*, 1974). Ruggiero (2000) argues that studies have provided several alternative cluster categories, but most studies still utilize those originally recommended by Katz *et al.* (1973).

Uses and gratification studies probe the primary needs of audiences potentially fulfilled by new media (Rafaeli & Ariel, 2008; Stafford *et al.*, 2004). This approach has been employed to study numerous types of media, including the internet (Song *et al.*, 2004), MP3 players (Ferguson *et al.*, 2007), YouTube (Haridakis & Hanson, 2009), smartphones (Ariel *et al.*, 2017; Malka *et al.*, 2018; Vezzoli, 2023), and artificial intelligence (Niu *et al.*, 2024).

This perspective considers the audience to be active and goal-oriented in media consumption (Rubin, 2002). Media choices depend on the selections and facilities that the various media offer. boyd (2011) claims that social network users see these as spaces where they may, for example, initiate and maintain social relationships with friends and acquaintances, flirt with friends of friends, form romantic relationships, establish business relationships, and discuss sociopolitical issues. The users' motivation is to share information with others, interested or not, especially to see and be seen. Young (2009) also discusses the benefits of sharing information on social networking sites, such as increasing social capital and enhancing perceived social support. Taddicken (2013) uses the term "perceived social relevance" to refer to the relative importance of various social networking sites to users' lives. The current study applies the concept of perceived gratification to describe the subjective ways in which online groups are perceived or experienced by their users in the context of providing gratification.

Research has investigated the underlying motivations for social media use and the benefits users perceive from engaging on these platforms. Various desires drive social media users to pursue information, social connections, personal expression, and entertainment. These factors significantly influence their ongoing contributions to the content and selection of specific platforms (Xiaodan *et al.*, 2020). Studies have revealed that the motivations behind social media engagement are complex and have profound implications for user satisfaction, well-being, and online and offline behaviors. Gratifications derived from social media can positively affect user engagement, leading to sustained usage and influencing behaviors, such as information-seeking business communication and purchasing decision-making processes (Shabahang *et al.*, 2022). Gratifications from social media use may also differ according to the time of day, with varying motivations influencing usage at different times for various activities such as posting content (Li *et al.*, 2022). Furthermore, social influences and platform features such as accessibility and interactivity are critical in forming users' perceived gratifications and ongoing engagement with social media (Xiaodan *et al.*, 2020).

2.4. Engagement

The uses and gratifications theory emphasizes the critical role of both intrinsic and extrinsic motivations in understanding user acceptance and engagement with information technologies. It posits that individuals intentionally select media channels to satisfy specific needs, including social interactions, information acquisition, and entertainment, thereby directly linking engagement with the fulfillment of these needs (Luo *et al.*, 2011).

Silaban *et al.* (2022) discovered that entertainment-oriented behaviors such as watching travel vlogs significantly boost customer engagement compared to information-seeking behaviors. Huang *et al.* (2017) identified a positive association between entertainment and various facets of customer engagement, highlighting that the quest for pleasure and enjoyment is a key driver of user engagement. They illuminated the mediating role of engagement in connecting uses and gratification factors with crucial outcomes, such as purchase intentions.

Moreover, motivational orientations, such as self-presentation and community belonging, are essential for analyzing user behavior on platforms like Facebook (Whiting & Williams, 2013). When applied to social media, uses and gratifications expose a broad spectrum of user

gratifications, ranging from social interactions and information sharing to surveillance. This underscores the diverse motivations for media use and contextual factors influencing engagement (Rodríguez-Ardura & Meseguer-Artola, 2020).

Since the emergence of social media, scholars have focused on engagement with and within social media platforms (Brodie *et al.*, 2013). Being engaged “is to be involved, occupied, and interested in something” (Higgins 2006, 442). Mollen and Wilson (2010) define online engagement as “a cognitive and affective commitment to an active relationship with the brand as personified by the website” (p. 923). Porter *et al.* (2011) define engagement as behavior that reflects online-community members’ willingness to participate and cooperate with others.

Users contribute to social media content by making comments and following posts. Contributing to these posts facilitates interaction and engagement within the user community. In this context, engagement refers to the frequency of activity in which users participate in closed Facebook groups (see, for example, Shu-Chuan, 2011). Van Doorn *et al.* (2010) show that social media engagement originates from motivations consistent with the uses and gratification theory. User engagement is related to user satisfaction and is often viewed as positive human-computer interaction (Quesenbery, 2003).

2.5. Self-Disclosure

Self-disclosure serves several purposes, such as increasing mutual understanding and building trust between partners (Laurenceau *et al.*, 1998). Disclosure enables a person to recognize and interpret meaning from processes and experiences (Frattaroli, 2006). Turn-taking or reciprocity in disclosure is common in interactions (Dindia, 2000) and fosters a commitment to respond with a similar level of intimacy to others’ disclosures (Rotenberg & Chase, 1992). Furthermore, self-disclosure reciprocity is vital in a relationship’s early stages (Won-Doornink, 1979). Finally, self-disclosure is a means of achieving interpersonal intimacy, with sharing personal information essential for creating intimacy through dialogue between romantic partners (Greene *et al.*, 2006).

Scholars have studied online self-disclosure since social networks have become part of our lives. Online platforms allow people to open up and expose their intimate feelings more than without computer mediation (Suler, 2004). The nature of social networking sites encourages self-disclosure (Walsh *et al.*, 2020). For example, the Facebook status update box asks, “What’s on your mind?” and invites participants to share personal information. Online social networks provide a user-friendly platform that makes sharing photographs, status updates, and other information easy (Schumaker & van der Heide, 2011).

Lai and Young’s (2015) study of self-disclosure patterns on social networking sites, particularly on microblogging platforms, found that popularity and interpersonal needs significantly affect self-disclosure. Chan and Cheng (2004) find that people report more self-disclosure online than offline relationships. The asynchronous nature and the lack of nonverbal cues in most social networking site activity affects people’s level of intimate disclosure (Suler, 2004). One of the most attractive features of online social networking is that users can share updates about their status, feelings, thoughts, and actions with friends and strangers (Valenzuela *et al.*, 2009). On the other hand, public disclosure of personal information can be problematic concerning identity theft, stalking, and harassment (Nosko *et al.*, 2010). As Taddicken points out: “Self-disclosed information on the internet is therefore persistent, replicable, scalable, searchable and shareable” (2013, p. 250).

Schlosser (2020) investigated the dynamics of self-disclosure and self-presentation in the social media context. This study explored online communication attributes that facilitate self-disclosure, including anonymity and diminished richness of information, alongside those that favor self-presentation, such as the capacity for asynchronous communication, exposure to multiple audiences, and the opportunity for feedback. These findings suggest that individuals portray themselves online consistently with their offline personas, underscoring the reflection

of their digital identities in real-world selves and contexts. In deciding what to share on social media, individuals consider the nature of the content and the platform and select environments where they expect a positive reception for their disclosures. Despite the distinctive features of online communication, its essence remains deeply connected to tangible reality, indicating that real-world identities and norms significantly influence digital interactions.

However, with the inclination to share, privacy is a considerable concern. The structure of social media platforms can inadvertently prompt oversharing, potentially diverging from prudent decision-making processes (Krämer & Schäwel, 2020). Studies have shown that social networking sites' participants are cautious about their privacy and are aware of the dangers (Boyd & Ellison, 2007; Young, 2009). Nonetheless, intimate self-disclosure in cyberspace is quite common (Taddicken, 2013; Valenzuela *et al.*, 2009) due to users' desire to share personal information, albeit their awareness of the associated potential dangers (Edwards & Brown, 2009). In addition, the anonymity of online social networks enables lonely people to share intimate information (Bonetti *et al.*, 2010).

Luo and Hancock (2020) identified pleasure and fulfillment as the primary incentives for using social media. This pursuit can take various forms such as experiencing a sense of connection, engaging in authentic self-expression, or obtaining peer support. The mode of sharing experiences on social media platforms significantly affects the extent of derived emotional benefits. For instance, public sharing on platforms such as Facebook is likely to generate stronger feelings of support and connectedness compared to more private forms of sharing.

In this regard and based on our understanding of the extant literature reviewed above, we hypothesize the following:

- H1. A positive correlation will be found between self-disclosure and perceived gratification; the greater the degree of self-disclosure, the more positive the perceived gratification.
- H2. Engagement will mediate the correlation between self-disclosure and perceived gratification: self-disclosure will contribute to engagement and, in turn, perceived gratification.

2.6. Loneliness

Existing studies of the relation between solitude and the online environment are inconclusive and contradict one another (Nowland *et al.*, 2017). Some studies show that internet users frequently report higher levels of loneliness (Kalpidou *et al.*, 2011; Lou *et al.*, 2012). At the same time, other studies contend that social networking sites reduce loneliness by providing socializing opportunities and controlling interactions (Valkenburg & Peter, 2009; Vergeer & Pelzer, 2009). Skues *et al.* (2012) also found that the larger a person's social network, the less lonely they feel.

Research on online activity and loneliness offers two competing perspectives on these conflicting findings (Valkenburg & Peter, 2007): The "displacement hypothesis" posits that users take advantage of the medium to substitute online relationships for the relative lack of offline relationships. Conversely, the "simulation hypothesis" posits that the internet succeeds in reducing loneliness because it expands the possibilities for creating new relationships online.

According to the uses and gratifications theory, lonely individuals may seek media, including social networking sites, to fulfill their interpersonal needs. Nevertheless, evidences present a mixed picture regarding the efficacy of such media interactions in compensating for loneliness, influenced by the severity of loneliness and other underlying factors. Wang *et al.* (2008) explore the nuanced relationship between various forms of loneliness and parasocial interactions through the lens of the uses and gratifications theory. They proposed that individuals experiencing loneliness due to a lack of interpersonal relationships might turn to the media as a source of gratification, seeking companionship. However, they also suggested that mediated communication might not alleviate more profound loneliness. Expanding on this framework, Wang (2018) investigated the use of mobile phones among Japanese adults, revealing

that utilizing phones for social interactions can diminish feelings of loneliness, whereas using them for entertainment purposes may paradoxically increase loneliness due to reduced face-to-face interactions. This dichotomy implies that media usage can impede or enhance social connectivity contingent on the nature of use.

Furthermore, López *et al.* (2019) delved into secondary school students' loneliness levels concerning their motives for using social networking sites, guided by the uses and gratifications framework. Their findings indicate that lonelier teenagers exhibit a higher propensity to use these sites for relationship-building purposes. However, this does not necessarily translate into a greater sense of social inclusion for those experiencing severe loneliness.

Deters and Matthias (2013) found that the frequency of posting Facebook status updates, regardless of the comments received, significantly reduces the sense of loneliness users feel. Furthermore, in a meta-analysis of thousands of papers on Facebook and loneliness, Song *et al.* (2014) found a positive correlation between Facebook use and loneliness. More specifically, lonely people tend to use Facebook; it is not that Facebook causes its users to feel lonely. Finally, DiTommaso *et al.* (2004) propose a social-emotional loneliness scale, a multidimensional scale for measuring loneliness for adults used to assess loneliness in the present study.

Based on our review of the literature mentioned above, we hypothesize the following:

- H3. A positive correlation will be found between perceived gratification and a) social loneliness and b) family loneliness (the two subdivisions of social-emotional loneliness).
- H4. Engagement will mediate the correlation between a) social loneliness and b) family loneliness (the two subdivisions of social-emotional loneliness) and perceived gratification.

3. Methodology

3.1. Participants

This research utilized a structured survey that included 70 closed questions. The respondents first answered a screening question to confirm that they had participated in at least one closed Facebook group for Israeli women. The final sample comprised 526 Israeli women. Each respondent provided sociodemographic data. Respondents were 18 and over, with a mean age of 39.2 (SD = 13.2). Most respondents were married (61%), had at least a high school-level education (60%), and identified as secular (55%). The sample of respondents was obtained from Midgam Project Web Panel, a company that provides infrastructure services for internet research. The company uses the stratified sampling method based on the Israeli Central Bureau of Statistics data and determines quotas by age and gender.

3.2. Research Variables

3.2.1. Independent variables

Self-disclosure was measured as an independent variable using the Self-Disclosure Index (SDI) identified by Miller *et al.* (1983), a 10-item scale measuring self-disclosure on a range of personal issues. Using a Likert scale ranging from 0 (not discussing the issue at all) to 4 (fully and completely discussing the issue), participants indicated the extent to which they agreed with each of the statements (for example, "Things I have done which I am proud of"; "What is important to me in life"). The internal reliability of the scale was high ($\alpha = .915$).

Social-emotional loneliness was measured as an independent variable using the SELSA-S identified in DiTommaso *et al.* (2004), a 15-item multidimensional scale for measuring loneliness. We extracted two relevant subscales/dimensions of SELSA: social and family loneliness. Using a 7-point scale, participants indicated the extent to which they agreed with the statements (for example, "My family cares about me"; "I can depend on my friends for help"). The internal reliability of the general social-emotional loneliness scale was $\alpha = .881$. The social and family loneliness subscales' reliabilities were $\alpha = .81$ and $\alpha = .85$, respectively.

3.2.2. Dependent Variable: Perceived Gratifications

Perceived gratification was measured as a dependent variable using an 18-item scale to assess the degree of gratification an online group provides each user. Participants indicated the extent to which they agreed with the statements (e.g., "I am willing to write about any topic in the group"; "The group is a source of comfort and support") using a Likert scale ranging from 1 (completely disagree) to 5 (completely agree).

An exploratory factor analysis (EFA) was conducted on the 18 items to investigate the underlying factor structure. The analysis used principal factoring with a direct Oblimin rotation to allow for correlations between factors. The rationale for this is that some of the items would likely be related conceptually. The analysis failed to reveal a clear factor solution, with none of the 18 items loading significantly on distinct factors, as per the commonly accepted threshold of 0.40. The inadequate factor loadings support treating the survey items as a single index variable. This is further substantiated by the internal consistency reliability of the composite index variable (Cronbach's alpha = .84), suggesting a high degree of inter-item coherence.

3.2.3. Mediating Variable: Engagement

Engagement was measured as a mediating variable using a 4-item index assessing the frequency of activities users engaged in within the closed groups. Participants indicated the extent to which they engaged in each activity: reading, sharing, commenting on others' posts, and uploading their posts. The scale ranged from 1 (never) to 6 (every hour). The internal reliability of the engagement index was high ($\alpha = .73$). Statistics on the research variables are presented in Table 1.

Table 1. The Descriptive Statistics of Research Variables.

Variable	Minimum	Maximum	Mean	SD
Perceived gratifications	1	5	2.65	0.71
Engagement	1	6	2.62	0.80
Self-disclosure	0	4	1.43	0.86
Social-emotional loneliness	1	7	2.88	1.25
Social loneliness	1	7	3.02	1.35
Family loneliness	1	7	2.06	1.32

Source: Own elaboration.

4. Results

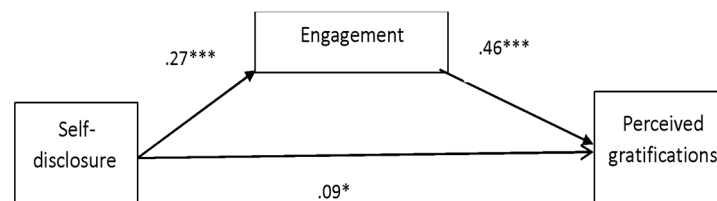
We found that 90% of participants surveyed used Facebook at least once a day and 78% several times a day. Of the participants, 75% reported being members of women's closed groups, and the average group membership was 4.9 (SD = 5.37). Furthermore, 80% reported that they read posts at least once a day and 54% that they did so several times a day; 15% commented on posts at least once a day, 3% wrote posts at least once a day, and 7% shared links at least once a day. Most women (74%) reported that they either did not know any or only a few other group members beyond online activities. For more than half the women (52%), the main motivation to join these groups was stated as "seeking help and advice from other women," while the rest said it was "having fun" (41%) or "relief from boredom (38%)."

4.1. Hypothesis Testing

A Pearson Correlation calculation was made between self-disclosure and perceived gratification (H1). Table 2 shows a significant positive correlation between self-disclosure and perceived gratification ($r = .274, p < .001$). The greater the self-disclosure, the more positive the perceived gratification.

To examine the mediating role of engagement in the relationship between self-disclosure and perceived gratification (H2), we used Hayes's (2018) PROCESS (Model 4) bootstrapping command with 5,000 iterations. The analysis treated self-disclosure as a predictor variable, engagement as the mediator, and perceived gratification as the dependent variable. Results show that a 95% confidence interval for the indirect effect of self-disclosure on perceived gratifications through engagement did not include 0 (95% CI [-.007, -.012] with 5,000 resamples). Moreover, results showed that the 95% confidence interval for the indirect effect of self-disclosure on perceived gratification through engagement did not include 0 (95% CI [.067, .180] with 5,000 resamples, $F(2, 289) = 36.93, p < .001, R^2 = 20.36\%$). In short, analysis through the model identified indicated a significant indirect effect of self-disclosure on perceived gratification through engagement (see Figure 1).

Figure 1. Model of Self-Disclosure Mediating Perceived Gratifications.



Note. * $p < .05$, *** $p < .001$

Source: Own elaboration.

Pearson Correlation calculations were also made to examine the correlation between social-emotional loneliness and perceived gratification (H3). Table 2 shows no significant correlation between social-emotional loneliness and perceived gratification ($r = -.070, p > .005$). Significant correlations were also not found between perceived gratification and social loneliness (H3a) ($r = -.051, p > .005$) or family loneliness (H3b) ($r = -.065, p > .005$).

Table 2. Correlation Matrix for Research Variables.

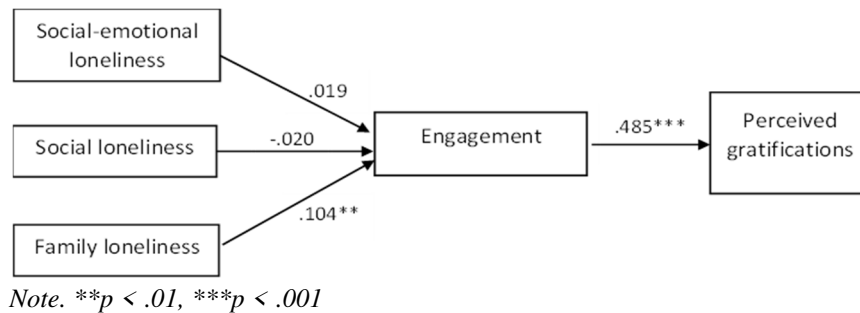
	Family loneliness	Social loneliness	Social-emotional loneliness	Self-disclosure	Engagement
Perceived gratifications	-.065	-.051	.070-	.258***	.545***
Engagement	.159**	.029	.013	.289***	
Self-disclosure	.005	.035	.022		
Social-emotional loneliness	.711***	.749***			
Social loneliness	.468***				

Note. ** $p < .01$, *** $p < .001$

Source: Own elaboration.

Hayes' (2018) PROCESS bootstrapping command with 5,000 iterations (Model 4) was used to examine the role that engagement plays in mediating the relationship between social-emotional loneliness and perceived gratification (H4). The analysis treated social-emotional loneliness as a predictor variable, engagement as the mediator, and perceived gratification as the dependent variable. Results indicate that the 95% confidence interval for the indirect effect of social-emotional loneliness on perceived gratification through engagement did include 0 (95% CI [-.1225, .043]). Moreover, the 95% confidence interval for the indirect effect of social-emotional loneliness on perceived gratification through engagement did include 0 (95% CI [.070, .029]). In other words, the model did not indicate an indirect effect of social-emotional loneliness on perceived gratification through engagement (see Figure 2).

Figure 2. The Mediating Model of Loneliness on Perceived Gratifications.



Source: Own elaboration.

The same results were found using social loneliness as a predictor. In contrast to this trend, results showed that the 95% confidence interval for the indirect effect of family loneliness on perceived gratification through engagement did not include 0 (95% CI [-.205, -.046]). In addition, results showed that the 95% confidence interval for the indirect effect of family loneliness on perceived gratification through engagement did not include 0 (95% CI [-.084, -.017]; $F(2,289) = 55.60, p < .001, R^2 = 27.79\%$). In other words, the model did indicate an indirect effect of family loneliness on perceived gratification through engagement, as Figure 2 shows.

5. Discussion

By analyzing data from questionnaires distributed to Israeli women, we sought to learn about members' characteristics in closed Facebook groups for women, their activity patterns within these groups, their perceptions of them, and their gratification from them.

Our findings align with the uses and gratifications theory, which emphasizes audience activity in selectively using media to satisfy socio-emotional needs. The quest for community, empathy, and validation drives engagement within these groups, fulfilling fundamental human needs for bonding, and reducing isolation. Specifically, these findings indicate that the more members exhibit openness and willingness to share, the higher the group's significance in their lives, as measured by the gratification index variable. We found that women's groups on Facebook are a significant arena of activity for women, who tend to benefit from exposing various aspects of their personal lives. However, it was found that the relationship between these two variables is mediated by engagement. This positively affects each group's perception as a significant factor in its users' lives. Women who regularly respond within the group, write posts and share content with other members reap more significant benefits than those with a passive presence limited to reading posts and sporadic reactions. These findings are consistent with what Taddicken calls "the reciprocity of self-disclosure" (2013, p. 251); online gestures of self-disclosure will lead to like responses and deepen intimacy between participants.

The current study reveals the intrinsic value of women's closed Facebook groups in fostering genuine self-expression and reciprocity. The significant positive link between self-

disclosure and perceived gratification indicates that these platforms provide a trusted space for vulnerable sharing and support seeking without judgment, thus enhancing users' sense of validation and belonging. Crucially, active engagement strengthens reciprocity between disclosure and gratification. These digital communities amplify the users' perceived sense of care, empathy, and mutual understanding by encouraging participation through comments and posts.

The study also offers findings on the relationship between social-emotional loneliness and attribution of these women's groups' significance in members' lives, although not comprehensively compared concerning each variable. Contrary to the study's hypotheses, no positive correlation was found between the level of the surveyed women's social-emotional loneliness and the degree of importance they attributed to groups concerning the sense of social isolation. In other words, women's groups do not adequately offset the social experience of women's loneliness. In addition, changes in engagement did not affect the relationship between the two variables.

However, a positive correlation was found between family loneliness (a sense of loneliness in the family context) and assessing the group's place in the participants' lives. The more isolated the women were in this respect, the higher the group's gratification in their lives. Additionally, it was found that engagement mediates the relationship between the two variables. In other words, participants who experience feelings of family loneliness must participate actively to achieve the most benefit from these groups. The more active and involved women are in the groups, the higher the perceived gratification in their lives. This demonstrates the group's potential to serve as an alternative, supportive framework for a failing family system. The contribution of closed groups to women suffering from family loneliness might be identified within the broader social context. The women's online group activity may meet some of their needs, but it is no full substitute for offline engagement, face-to-face encounters, and communal recreation. The sense of support, solidarity, and belonging, and the fact that the group is a source of advice and assistance in decision-making processes, may explain their central role in women who experience family loneliness. The closed group adequately meets the main functions associated with family relationships, particularly for women whose level of participation is high.

The study's findings indicate that women's closed Facebook groups have considerable potential to satisfy needs, fill substantial gaps in members' lives, and provide them with alternatives to the dysfunctional aspects of their lives. Nevertheless, at the same time, these groups are not a panacea, and Facebook groups are not perceived as an entirely valid way to obviate loneliness. The correlation between family loneliness, engagement, and gratification suggests that online community participation can provide meaningful relief from loneliness associated with specific external support deficits. By offering empathy, advice, and encouragement from peers facing similar family struggles, these groups help combat isolation in targeted contexts of inadequate familial support. Nonetheless, they ultimately serve as complementary structures rather than as comprehensive support structures.

The concept of "third place" (Oldenburg, 2001) claims that, in the modern world, people's time is invested in the home (the "first place") and at work (the "second place"). The "third place" comprises all the other sites where people can escape from the first and second places and gather for social activities, such as parks, cafés, street corners, and pubs. These places foster a sense of community, provide support, and promote equality among members. Therefore, it is reasonable to consider online social networks a "third place." (e.g., Soukup, 2006). However, online communities also intersect with the other two places since the internet *allows* people to enter the third place, even at work or home.

This research shows the high significance attributed to membership in women's groups by members from different backgrounds and radically different personality characteristics and needs. The findings were similar for women who tend to be open –those who seek common areas of activity to satisfy their needs– and women who report experiencing social and emotional loneliness. While these contradictory characteristics may coexist (social openness

may mask loneliness, for example), it is reasonable to assume that they represent different types of women in most instances.

The rapid cultural changes the internet and social networking sites have ushered in have created new social dilemmas and contradictions (Curran *et al.*, 2012). As a result, basic concepts explored for years in psychology, sociology, and cultural studies, such as privacy, disclosure, membership, collaboration, and intimacy, take on new meanings concerning the online environment (Amichai-Hamburger *et al.*, 2013; Dalessandro, 2018; Joinson & Paine, 2007). Although, in many situations, the online world seems to imitate and reflect what is happening in the offline world, thereby blurring the distinctions between the two, the present study indicates that, in situations such as the one we have analyzed concerning Israeli women's closed Facebook groups, online activities meet needs that may not be fulfilled in the offline realm.

5.1. Research Limitations and Future Studies

The current study focused on large Facebook women's groups in Israel, and, thus, its findings may not necessarily apply to the inner dynamics of smaller or more specifically focused women's groups, for example, or those associated with a different culture. Future studies should examine a more varied set of women's closed groups on Facebook.

The complex nature of the findings on different kinds of loneliness and the role that closed Facebook groups may play in their members' lives encourage further examination of the phenomenon. Particular attention should be devoted to more aspects of the interaction between online and offline spaces by examining activity patterns in closed Facebook groups and the users' characteristics and perceptions. Future research could broaden this exploration to include other social media platforms, such as Instagram, Twitter, or LinkedIn, and cultural contexts.

While our research methodology relied on questionnaires, future studies could benefit from qualitative methods like interviews or focus groups. These methods could offer a more nuanced understanding of women's experiences. Finally, future research could explore the dynamics and impacts of men's closed groups on social media to provide a comparative perspective. This could illuminate potential gender differences in online group behaviors and experiences.

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