Differences in the Quality of Family Relationships and Personal Responsibility among Users of Social Media Applications (A Descriptive Study)

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An extract from the master's dissertation prepared by the student in psychology

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ABSTRACT:

Background: The pervasive integration of social media into daily life has raised questions regarding its influence on interpersonal dynamics, particularly within the family unit, as well as its impact on individual traits such as personal responsibility.

Objective: This study aims to examine the differences in the perceived quality of family relationships and levels of personal responsibility among users of social media applications, considering key demographic variables.

Methods: A total of 501 participants (167 males and 334 females), aged 19 to 40 years and residing in the Riyadh region, were selected using a stratified random sampling technique. Data were collected through validated instruments: the Family Relationship Quality Scale (Fok et al., 2014) and the Personal Responsibility Scale (Ren et al., 2023).

Results: The findings revealed no statistically significant differences in family relationship quality across gender, age, education level, or daily duration of social media use. This suggests a relative stability in participants' perceptions of family cohesion regardless of demographic differences. However, significant differences were found in personal responsibility scores, favoring males and individuals in the 36–40 age group. No significant variation was observed based on education or usage time, indicating that personal responsibility may be more closely linked to internal psychological or social factors than to external demographic characteristics.

Discussion: The results suggest family relationship quality is stable across demographics and social media use, while personal responsibility varies by gender and age. This highlights the role of sociocultural and developmental factors, emphasizing the need for targeted digital literacy initiatives.

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Conclusions: The study highlights the importance of fostering digital literacy and encouraging the intentional use of social media platforms in ways that strengthen family cohesion and promote a sense of individual responsibility. These findings offer practical implications for educators, psychologists, and policymakers concerned with digital well-being and family dynamics.

Keywords: social media, family relationship quality, personal responsibility, digital behavior, demographic difference.

Introduction

Recent studies have looked at the impact of social media use on family relationships and personal responsibility among young people. While excessive use of social media can disrupt face-to-face family interactions. (Latif & Umber, 2025) The purpose of use is more effective than the time spent or the device used(Jafree & Khan, 2022) The use of social media for entertainment is linked to a decline in family relationships. (Latif & Umber, 2025) Non-social media users achieve better results in dimensions of household social capital such as interactions, cohesion, and surveillance(Geraee & Eslami, 2023) However, socioeconomic status influences these results, with upper-class users showing better cohesion and family control(Geraee & Eslami, 2023) For university students, especially females, the use of social media is associated with personal, family, and educational responsibility (Zeky & Mustafa, 2018)Recommendations include developing digital literacy programs, encouraging meaningful online communication, and implementing parental guidance initiatives to promote responsible use of social media and strengthen family relationships(Latif & Umber, 2025; Zeky & Mustafa, 2018)

The contemporary world is witnessing an unprecedented technological boom, which has reshaped the daily lives of individuals and societies at all levels. ‹Since the beginning of the third millennium, and especially in the last two decades, digital media has become an integral part of human reality through the widespread spread of the Internet, the development of smartphones, and the multiplicity of social media platforms. (Twenge et al., 2019) This digital revolution was not limited to facilitating access to information but went beyond that to bring about profound transformations in communication patterns, forming social relations, building individual and collective identity, and contributing to breaking spatial and temporal barriers, which strengthened digital interdependence at the expense of realistic interaction. (Kuss & Griffiths, 2017).

It is noted that the youth segment is the most engaged with social media platforms. With these rising numbers, there is an increasing need to understand the effects of this continuous digital interaction on the psychological, social, and behavioral aspects of the individual. Despite the opportunities these technologies hold for communication, learning, and entertainment, their overuse is a growing concern for researchers in the fields of psychology, sociology, and education, where many challenges have emerged. In light of this excessive use Among the most prominent of which are digital anxiety, distraction, social isolation, and poor quality of real-life relationships. (Montag et al., 2021)According to the findings of a recent report, it may lead to negligence in the performance of family duties, or schoolwork, or professional (Ren et al., 2023)

Where he sees (55%) of respondents) Hitman & Lewin, 2024 (,that taking responsibility is the key to personal and social success and has emphasized (Schemer et al., 2021) that excessive use of technology is associated with a decrease in the quality of family interaction, increased feelings of stress and isolation, and poor behavioral commitment, Based on the above, the current study

seeks to reveal differences in the levels of fear of missing events, the quality of family relationships, and personal responsibility among users of social media applications, with the aim of deepening scientific understanding about individual differences and the impact of the digital environment on psychological and social characteristics. Secure attachment contributes to building a supportive emotional environment, where family members can express their feelings without fear of rejection or criticism and are more resilient in the face of disagreements and conflicts. also; reinforces this style of attachment; Emotional regulation and the ability to provide mutual psychological support, which is one of the most important indicators of the quality of relationships Family (Johnson, 2019).

In contrast, insecure attachment, which may be in the form of anxious or avoidant attachment, leads to family relationships characterized by stress, misunderstanding, and emotional avoidance. People who have grown up with an anxious attachment pattern tend to overly seek closeness and support and may show excessive sensitivity to rejection. As for those with an avoidant pattern, they prefer increased independence and have difficulty expressing feelings or meeting emotional needs. For others (Mikulincer & Shaver, 2010) Boundary theory explains how the regulation of roles between work and personal life affects the quality of family relationships, assuming that individuals create psychological and behavioral boundaries that separate different areas of life.

Several recent studies indicate that the use of social media directly affects the quality of family relationships by affecting facial interaction, family time, and the level of emotional support (Albeladi, 2023) Excessive use of social media reduces the quality of family communication and increases feelings of isolation among family members, especially among adolescents and their parents, a study found. (Brown et al., 2024)

App communication may have a positive side in supporting family relationships if used purposefully and collaboratively, such as sharing family photos and group activities, according to a stud(Proctor et al., 2011) Compulsive use of social media is associated with a decline in sense of self-responsibility and increased delaying and distracting behaviors. In an experimental study (Liu & Ma, 2020)it turns out that the fear of missing events (FoMO) leads to excessive use of social apps, which hinders personal responsibility and affects life balance.

Recent literature has also addressed the impact of the use of social media on the quality of family relationships and the level of personal responsibility in light of the escalating overlap between family and professional roles. Boundary theory suggests that flexible boundaries between work and family may enhance family interaction if there are effective coping skills, such as flexible scheduling and remote work, but this flexibility may turn into a burden if it is not disciplined, leading to dispersion and low quality of family interaction. (Kossek & Lautsch, 2012) Strict boundaries ensure the protection of the family sphere, but they can create conflicts in inflexible work environments. (Kossek & Lautsch, 2012) Studies emphasize the importance of managing digital boundaries to improve family interaction, and one of the most successful strategies is Define rules for the use of technology and the practice of joint family activities(Allen et al., 2014)

This study is grounded in two central theoretical perspectives: Attachment Theory and Boundary Theory. Attachment Theory (Johnson, 2019; Mikulincer & Shaver, 2010) posits that individuals' attachment styles (secure, anxious, avoidant) shape the quality of their family interactions, emotional expression, and conflict resolution. In the context of social media use, secure attachment may foster resilience and cohesion within families despite the challenges of reduced face-to-face communication, while insecure attachment may exacerbate stress, misunderstandings, and emotional distancing, explains Boundary Theory(Allen et al., 2014; Kossek & Lautsch, 2012) how individuals manage the segmentation or integration of different life domains, such as family, work, and digital interactions. Poor management of digital boundaries may lead to family conflict, role interference, and lower quality of family interactions, whereas clear digital rules and

collaborative online activities can strengthen family cohesion and enhance personal responsibility.

Integrating these two perspectives provides the conceptual rationale for this study: from the lens of Attachment Theory, family relationship quality is expected to reflect emotional and relational patterns influenced by digital communication; from the lens of Boundary Theory, personal responsibility is expected to depend on individuals' ability to regulate the boundaries between their online and offline roles. This theoretical integration deepens the conceptual foundation of the study and clarifies the logic behind its hypotheses.

A Saudi study shows that heavy use of social media has been linked to deteriorating mental health and poor family function, particularly in women. (25-34 years), with the impact varying by platform, as WhatsApp was associated with positive interaction, while TikTok showed a link with higher levels of anxiety (Alwuqaysi et al., 2024) In South Africa, a study on 814 sharing that problematic use of the Internet negatively affects the performance of the family [21] Another study showed that communication addiction is associated with patterns of poor cohesion and loss of communication, mediated by the fear of missing events, which makes family resilience and cohesion protective factors (Groenestein et al., 2024)

In India, social media communication has been shown to promote bonding if it is family-oriented, while social media has been shown to enhance bonding when overused(Topino et al., 2023). Finally, a philosophical study highlighted the profound effects of digital transformation on personal identity and individual responsibility, as it confirmed that poor privacy and fragmentation of digital identity reduce the individual's awareness of the consequences of his actions, which requires promoting digital awareness and activating policies that protect identity and responsibility in the virtual environment(Trufanova, 2020)and In the past decade, social media apps have radically transformed the way individuals communicate and build their daily social environments. By 2024, more than 4.95 billion people around the world will use social media, accounting for more than 61.4% of the world's population(Ferla, 2024) While these platforms offer new opportunities for interaction, concerns remain. Recent research suggests that excessive use of social media is associated with reduced direct family interactions, emotional distancing, and disruption of communication within the family(Ali et al., 2024)

According to a study (Williams & Merten, 2011)teens who spend more than three hours a day on platforms like Instagram or TikTok reported a reduced sense of family cohesion by 25%. Compared to peers who reduced screen time. Moreover, parental monitoring and family closeness have been inversely associated with problems, and at the same time, the immersive and immediate nature of these applications seems to influence the development of personal and self-responsibility in users.

This study(Zibin et al., 2025) investigated how social media influences gendered interpersonal communication in Jordan using a mixed-methods approach. Quantitative data from 50 Facebook users revealed significant gender differences in nonverbal communication and communication roles but no differences in verbal communication or conflict resolution. Qualitative insights highlighted the impact of cultural norms on digital interactions, showing that traditional gender styles persist but are evolving in online contexts. As conducted by(Lai et al., 2023), the study on 1,740 Chinese college students found that passive social media use was positively associated with social anxiety, whereas active use was negatively associated. The findings also revealed that communication capacity partially mediated these relationships, highlighting its role in mitigating the impact of social media on social anxiety. As conducted by(Olpin et al., 2023), the study examined 482 married or cohabiting parents of children aged 3–13 to explore the relationship between parental social media use and family well-being. The findings showed that fathers' use of social media for entertainment and connecting with family and friends was positively associated with family health and resources, while mothers' social media use had no significant impact. No evidence linked parental social media use to negative family health outcomes.

Despite extensive research on social media, little is known about its impact on family relationship quality and personal responsibility within Arab societies, especially Saudi Arabia. This gap highlights the need for culturally grounded studies in this context."

This study aims to explore the differences in the level and quality of family relationships and individuals between users of social media applications. It seeks to identify variables that influence or modify these associations, such as age, usage patterns, family dynamics, and cultural expectations "The present study employed a descriptive analytical approach with a cross-sectional design to explore differences in the quality of family relationships and levels of personal responsibility among social media users.This study is original in linking family relationship quality and personal responsibility in the context of rapid digital and cultural transformations in Saudi society, providing practical insights for culturally relevant digital literacy programs.

Questions

1. What are the differences in the level of quality of family relationships according to demographic variables (gender, age, educational level, and duration of use of social media applications)?
2. What are the differences in the level of personal responsibility of social media users according to demographic variables (gender, age, educational level, and duration of use of social media applications)?

MATERIALS AND METHODS

Study Design

This study adopted a descriptive analytical methodology with a cross-sectional design to explore differences in family relationship quality and personal responsibility among social media users. The data were quantitative, collected via validated self-report questionnaires. The target population included social media users aged 19–40 years in the Riyadh region. A stratified random sampling method ensured demographic diversity (gender, age, education level, usage duration). The main variables were family relationship quality and personal responsibility as dependent variables, with demographic characteristics as independent variables. Data were analyzed using descriptive statistics, t-tests, ANOVA, and Pearson's correlation coefficients.

Participants

The original population of this study comprised all male and female users of social networking applications aged 19–40 years in the Riyadh region. A key limitation of the sampling strategy is its restriction to the Riyadh region, which may affect the generalizability of the findings to other contexts.

A total of 501 participants were selected using a stratified random sampling technique, ensuring diverse and comprehensive representation across demographic groups. The sample included 167 males (33.3%) and 334 females (66.7%), stratified by age into three groups: 19–25 years (29.9%), 26–33 years (39.9%), and 34–40 years (30.1%). Educational levels were also diverse: secondary or less (80 participants), bachelor's degree (220 participants), and postgraduate (101 participants). Daily social media usage duration varied, with 30 participants using less than 1 hour, 120 using 1–3 hours, 200 using 4–6 hours, and 151 using more than 6 hours per day. The most frequently used platforms were WhatsApp (120), Snapchat (140), Instagram (100), TikTok (90), and Twitter (51).

The sample size of 501 was justified based on recommendations from survey research methodology for achieving reliable estimates and sufficient statistical power (Cohen, 1992), in addition to aligning with similar studies (e.g., Ren et al., 2023; Alwuqaysi et al., 2024). This size ensured adequate representation to detect differences and test predictive relationships among variables. Stratified random sampling enhanced the accuracy and generalizability of results by reflecting balanced distributions of gender, age, education, and usage patterns, particularly regarding variables like fear of missing out (FoMO), family relationship quality, and personal responsibility. Participants were included if they met two key criteria: regular daily use of social media and belonging to the specified

age range, to reflect actual usage patterns within the target community.

Search Strategy

The search strategy involved consulting academic databases such as PubMed, PsycINFO, and Google Scholar using the keywords "social media," "family relationships," and "personal responsibility." The search was limited to studies published between 2010 and 2025 in English.

Inclusion and Exclusion Criteria

Participants were included if they were aged 19–40 years, used at least one social media application daily, and resided in Riyadh. Exclusion criteria involved non-users of social media, participants outside the age range, and incomplete responses.

Instruments

1. **Family relationship quality scale** Prepared by (Fok et al., 2014)It consists of (16) paragraphs distributed on three dimensions: cohesion, expression, and conflict. Paragraphs are corrected. By three categories: (Not applicable at all.) Applies (kind of applies a lot), Negative paragraphs Which is in the aftermath of the conflict. They are reversed before the scores are summed; the total score gives an indication of the quality of the family relationship (the higher the score, the better the relationship). The correlations between its dimensions and other measures of psychological and family well-being also showed an indication of appropriate convergence sincerity. As for stability, the Cronbach alpha coefficient for the entire scale is 0.86, which indicates a high level of stability. The stability coefficients of the sub-dimensions ranged between 0.72 for post-conflict and 0.81 for after cohesion and 0.77 for the dimension of expression, which ensures good internal consistency for each dimension separately. For the purposes of the current study, the authenticity of the virtual scale and content was verified by the arbitrators, reflecting a good internal harmony between the components of the tool. Where the correlation coefficient between the quality of family relationships and personal responsibility ($r = 0.52$, $p < 0.01$), and between the quality of family relationships and the fear of missing events ($r = –0.47$, $p < 0.01$), while the correlation coefficient between personal responsibility and fear of missing events ($r = –0.41$, $p < 0.01$). As the results of (Cronbach's Alpha) Overall (0.89), while the sub-stability coefficients ranged between (0.83) and (0.87), demonstrating high internal consistency for all dimensions of the scale.
2. **Personal Responsibility Scale** Prepared by (Ren et al., 2023)The Personal Responsibility Scale consists of 13 A paragraph distributed on three dimensions: perception of responsibility, sense of responsibility, and associated behavioral attitudes, using the Likert Hexagonal Scale. The results of the original study showed good structural validity verified by confirmatory factor analysis, as well as high stability with a Cronbach alpha coefficient (0.87) for the overall scale. In the current study, the validity of the scale was verified through apparent honesty and review of the arbitrators, and the sincerity of internal consistency was also verified, with values of 0.600 and 0.895, respectively. The Cronbach alpha coefficient totaled 0.809, indicating high internal stability and good reliability of the measuring instrument in the current environment.

Statistical

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics, including means, standard deviations, frequencies, and percentages, were calculated to summarize participants' demographic characteristics and responses. Inferential statistical analyses were performed to examine differences in family relationship quality and personal responsibility across demographic variables. Independent samples t-tests were used to assess differences between two groups (e.g., gender), and one-way analysis of

variance (ANOVA) was applied for comparisons among more than two groups (e.g., age, educational level, and social media usage duration). Post hoc analyses (Tukey's HSD) were conducted when ANOVA indicated significant differences. Pearson's correlation coefficient was used to examine the relationships between continuous variables. The significance level was set at $p < 0.05$ for all statistical tests.

Results

1. **Arithmetic averages and standard deviations of the averages of the quality of family relations and personal responsibility of study subjects**

The attached figure shows an accurate visual comparison of the average dimensions of the measures of the quality of family relations and personal responsibility, and the graphic shows that the highest average within family relationships was for the family cohesion dimension (3.75), while the conflict dimension (reversed) came lowest (2.90), which reflects the presence of some challenges in family interaction despite general cohesion. As for personal responsibility, Responsibility Awareness had the highest average (4.10), indicating a high awareness of responsibility among participants, followed by Responsibility Sensitivity (3.95) and Behavioral Attitudes (3.88), with a high overall average (3.98), reflecting overall behavioral maturity. This distribution supports the study's conclusions about a higher sense of personal responsibility, as opposed to relatively stable family relationships with spaces for improvement on the side of family conflict.

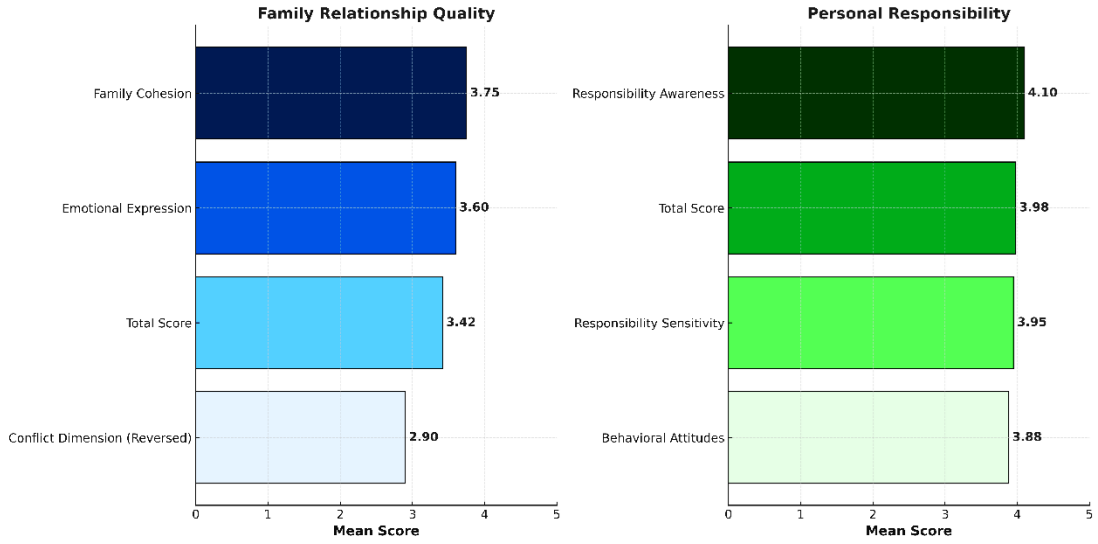

Figure 1. Mean scores of Family Relationship Quality and Personal Responsibility dimensions among social media users.

2. **Differences in the level of quality of family relationships according to demographic variables (gender, age, educational level, and duration of use of social media applications)?**

Table (1): Differences in Family Relationship Quality and Its Dimensions by Demographic Variables

Independent Variable	Dimension / Total Score	t	(Sig.)
Gender	Family Relationship Quality (Total)	-1.70	0.089
	Family Cohesion	-1.45	0.148
	Emotional Expression	-1.60	0.112
	Conflict Dimension	-0.95	0.341
Age	Family Relationship Quality (Total)	2.26	0.081
	Family Cohesion	2.10	0.098

	Emotional Expression	1.95	0.121
	Conflict Dimension	1.22	0.293
Education Level	Family Relationship Quality (Total)	0.60	0.549
	Family Cohesion	0.48	0.611
	Emotional Expression	0.65	0.529
	Conflict Dimension	0.71	0.483
Social Media Usage Time	Family Relationship Quality (Total)	0.901	0.463
	Family Cohesion	0.77	0.572
	Emotional Expression	0.83	0.490
	Conflict Dimension	0.91	0.444

The results of the table indicate no statistically significant differences in the overall score of the Family Relationships Quality Scale or its three dimensions (cohesion, expression, and conflict) based on gender, age, educational level, and duration of social media use. All significance values (Sig.) were higher than the approved significance level of 0.05. These results reflect a degree of consistency in participants' perceptions of the quality of their family relationships, regardless of their demographic characteristics. This may indicate that these relationships are influenced by deeper factors that go beyond apparent characteristics such as gender or age.

3. **Differences in the level of family relationship quality based on demographic variables (gender, age, educational level, and duration of social media use)?**

Table (2): Differences in Personal Responsibility and Its Dimensions According to Demographic Variables

Independent Variable	Dimension / Total Score	t	(Sig.)
Gender	Personal Responsibility (Total)	2.34	0.020
	Responsibility Awareness	2.00	0.046
	Responsibility Sensitivity	2.15	0.035
Age	Personal Responsibility (Total)	3.62	0.013
	Responsibility Awareness	3.20	0.021
	Responsibility Sensitivity	3.50	0.010
Education Level	Personal Responsibility (Total)	1.748	0.175
	Responsibility Awareness	1.10	0.336
	Responsibility Sensitivity	1.20	0.298
Social Media Usage Time	Personal Responsibility (Total)	0.588	0.672
	Responsibility Awareness	0.88	0.574
	Responsibility Sensitivity	0.92	0.552

The results showed statistically significant differences in personal responsibility and its dimensions (total score, perception of responsibility, and sense of responsibility) according to gender and age. Males and older age groups recorded higher averages, reflecting greater awareness and responsibility in those groups. Conversely, no statistically significant differences were found according to educational level or duration of social media use, indicating that these variables do not significantly affect individuals' levels of personal responsibility.

4.Are there significant differences in Fear of Missing Out (FoMO) levels according to the primary purpose of social media use and the dominant content type consumed?

Table 3. Two-way ANOVA Results for Purpose of Use × Content Type on FoMO

Source	df	F	Sig. (p)	η^2 (Eta squared)
Purpose of Use	3	4.85	0.003**	0.03
Content Type	4	6.10	0.001**	0.05
Purpose × Content	12	1.75	0.056	0.02
Error	481	—	—	—
Total	500	—	—	—

Note: $p < 0.05$; $p < 0.01$

The two-way ANOVA revealed that *FoMO* levels differed significantly according to both the primary purpose of social media use ($F(3,481) = 4.85$, $p = 0.003$, $\eta^2 = 0.03$) and the dominant content type consumed ($F(4,481) = 6.10$, $p = 0.001$, $\eta^2 = 0.05$). These findings indicate that *FoMO* is influenced not only by how long individuals use social media but also by the qualitative aspects of their engagement. Specifically, participants who reported entertainment or social interaction as their main purpose, and those whose dominant content type was entertainment or social/chat content, showed higher *FoMO* levels compared to other groups.

The interaction between purpose of use and content type was not statistically significant $F (12,481) = 1.75$, $p = 0.056$), suggesting that the influence of each factor is independent rather than multiplicative. In other words, the effect of purpose on FoMO does not depend on the type of content consumed, and vice versa.

Discussion

The results of the study showed with regard to the quality of family relationships, the absence of significant differences between males and females in the current study is consistent with the results of the Joyous study (2020). Which did not find differences in the quality of family relationships attributed to sex, but the study of (Alwuqaysi et al., 2024) She explained that the negative impact of the use of social media on family relationships was clearer among women, which indicates the existence of cultural differences or differences in patterns of use between males and females that may not always be reflected in the perception of the quality of relationships but rather in their behavioral dimensions. The study of (Trufanova, 2020) ، Discussing the weakness of individual responsibility in the digital space, she supported the idea that societal pressures and cultural shifts affect individuals' perception of their own responsibilities. The results of the study are also consistent with what it indicated. Study(Ren et al., 2023)which showed that the level of personal responsibility is affected by educational factors and cultural contexts, which explains the superiority of males in this variable in the local environment of the study. Accordingly,

Regarding differences in the quality of family relationships according to the age variable, the results of the study showed that there are no statistically significant differences at a significance level (0.05) between age groups. The researcher attributes this to the fact that the quality of family relationships is often influenced by structural and contextual factors within the family, such as the style of upbringing, the level of family communication, and flexibility in solving problems, more than the biological age of individuals, as Asha Modern family relationship models have suggested that relationship quality does not change radically with age but is associated with characteristics such as understanding, empathy, and mutual support. (Ferla, 2024; Fok et al., 2014; Olson-Buchanan & Boswell, 2006) Also agree with the results of the study (Lunde et al., 2022) which She asserts that the quality of household performance has been affected more by excessive use of the Internet than by demographic characteristics such as age. With regard to differences in personal responsibility according to the age variable: The results showed statistically significant differences. At the level of 0.05, between age groups. The age group of 36 to 40 years The highest average for personal responsibility, which is consistent with the psychosocial development of individuals at this stage of life, where the individual has gone through multiple experiences in work, family, and public life,

which promotes a sense of commitment and self-discipline, This is in line with Erickson's theory of "psychosocial developmental stages," which asserts that an individual in late adulthood seeks stability and achievement, which pushes him towards greater responsibilities(Maree, 2022)

These findings can be further interpreted through the lens of Social Capital Theory, which posits that strong family bonds (bonding capital) create stable patterns of support and cohesion, thereby buffering the effects of demographic differences and digital usage time. In contrast, variations in personal responsibility are more consistent with the Uses and Gratifications Theory, emphasizing that media effects are contingent upon the user's motives (e.g., entertainment vs. communication). This theoretical integration clarifies why family relationship quality remains stable across groups, while personal responsibility is more sensitive to age and gender differences.

Interestingly, the age group (19-25) years came in second place in terms of average personal responsibility, which may seem contrary to traditional expectations. However, the researcher explains that this group represents the segment of young people who are going through an important transition, where they face the challenges of higher education or the beginnings of professional life, which are experiences They require a great deal of self-reliance and self-regulation. In addition, this category grew up in a digital environment that drives the development of self-skills and individual achievement, which may contribute to enhancing their responsibility early on. The previous result is consistent. With a study(Ren et al., 2023) She focused on developing a measure of personal responsibility and noted that this value is enhanced with cognitive and social maturity. ‹Supported by a study (Brown et al., 2024) which showed that older individuals show a higher awareness of individual responsibility in the digital environment compared to younger groups, However, the progress of the youth category (19-25 years), immediately after the largest category in terms of level of responsibility, contradicts some traditional expectations, which many previous studies have not indicated. However, this difference can be explained in light of digital transformations that require young people to take responsibility early in light of academic and professional challenges, as alluded to in study (Singh & Tyagi, 2023) that addressed emerging adults.

With regard to the quality of family relations according to the variable of educational level, the result of the study showed there are no statistically significant differences between different levels of education. This finding suggests that the quality of family relationships is not significantly affected by the level of education and that there are other factors that may be more influential, such as personality, social interaction, or lifestyle within the family. As consistent with the study of (Trufanova, 2020) which showed that the quality of family relations is mainly affected by the way social communication is used and not by educational qualification.

In line with prior research, the current study confirms that the type of use rather than its duration is the critical predictor of family cohesion (Albeladi, 2023; Ali et al., 2024) However, the stability of family relationship quality across gender and age groups diverges from findings in Saudi-based samples that reported negative associations between intensive use and family functioning, particularly among females(Alwuqaysi et al., 2024) Regarding personal responsibility, our results are consistent with (Ren et al., 2023; Trufanova, 2020) who highlight the influence of sociocultural expectations and digital identity on responsibility development. This comparison underscores both contextual and cultural variations in how social media use shapes family and individual domains.

collective construct governed by established familial norms and rituals, which are less vulnerable to individual-level demographic changes. Conversely, personal responsibility is an individual trait influenced by developmental stage, social expectations, and self-regulation skills, making it more susceptible to variation by gender and age. Thus, while family cohesion remains resilient, responsibility demonstrates greater sensitivity to the dynamics of digital engagement and life-course roles.

With regard to personal responsibility according to the educational level variable: The result also

indicated a lack of statistically significant effect of educational level on personal responsibility. Although there was little variation in arithmetic averages between groups (with the highest average among graduate subjects being 3.57, followed by secondary at 3.56, and university at 3.49), these differences were not statistically significant, meaning that taking responsibility may be related to other factors such as life experiences or individual personality traits, rather than materially with educational level. The previous result corresponds to With a study (Mueller & Kempen, 2023) Which focused on the decline in the sense of personal responsibility as a result of integration into the digital world, without linking this decline to the educational level but rather to behavioral and cultural factors while Differ with what can be concluded from the study(Singh & Tyagi, 2023) which developed a measure of personal responsibility among university students and indicated that there are differences in some dimensions of responsibility depending on the academic year (an indicator close to the level of education), which may suggest that academic achievement can be related in some way to the level of responsibility, although this has not been experienced directly. The researcher explains These results show that educational level is not a decisive factor in influencing variables.

Education The Three (FOMO), quality relations, family, and personal responsibility. Despite some slight differences between the arithmetic averages of the education groups, these differences were not statistically significant. This can be explained by the fact that these psychosocial variables are influenced by factors that are more complex than just educational level, such as social environment, personal experiences, or individual traits.

Regarding the quality of family relationships according to the variable of the duration of use of social media applications: The result also showed there are no statistically significant differences between different groups depending on the number of hours of use. This finding suggests that spending more time on social media apps is not necessarily associated with a deteriorating quality of family life. The researcher attributes that it may be as a result of the flexibility of individuals in organizing their time between the family and the applications or because of the different nature of family relationships that are not directly affected by the duration of use of these applications (Abel et al., 2021) The above finding is consistent with the findings of the study(Alwuqaysi et al., 2024; Topino et al., 2023) (Groenestein et al., 2024) Which indicated that the use of social media may have a positive impact on family relationships if used for family communication purposes, which means that the influencing factor is the type of use and not the number of hours.

Also, partially consistent with the thresh A (Trufanova, 2020) Which confirmed that social media may strengthen family ties if used in supportive contexts for the family and disagrees with the study of(Alwuqaysi et al., 2024; Topino et al., 2023) (Groenestein et al., 2024)Which has shown that the intensive use of social media leads to a deterioration in family functions or the quality of family relationships. Regarding personal responsibility according to the variable of the duration of use of social media applications: The results also indicated No statistically significant effect depending on For the number of hours of daily use of social media applications on a sense of personal responsibility.

The study interpreted these results in light of theories of attachment, psychosocial development, and managing the boundaries between work and family life, confirming that personal responsibility is affected by the cultural and educational context more than by educational or temporal characteristics. It also showed that the quality of family relationships depends on structural family factors (such as the pattern of interaction and understanding) and not on superficial characteristics such as age or duration of use of applications. The study recommends directing awareness efforts towards the conscious use of digital technologies and promoting a culture of balance between digital and family life while proposing future studies that address the quality of digital use and its interaction with the psychological and social characteristics of individuals.

The results indicated that females reported higher FoMO levels than males, especially when social

media was used mainly for entertainment or social interaction, and when the dominant content was entertainment-oriented. This finding is consistent with prior studies (Groenestein et al., 2024; Liu & Ma, 2020) which show that entertainment and social motives heighten FoMO due to social comparison and constant peer updates. The main effects of purpose and content suggest that FoMO is shaped more by qualitative aspects of use than by time spent online, aligning with Uses and Gratifications Theory. The absence of significant interaction effects implies that gender differences remain stable across different purposes and content types. Future research should include more detailed measures of motives and content to refine these insights.

The findings reflect how digital technologies reshape cultural norms, family communication, and responsibility among youth, showing that digital transformations are not only technical but also social and cultural forces.

The observed differences in personal responsibility across gender and age groups carry important practical implications. The finding that males and older participants scored higher on responsibility suggests the need for interventions that specifically support younger users and females in developing responsibility-related skills. Culturally sensitive approaches, such as family-based digital literacy programs, peer mentoring, and awareness campaigns tailored to the Saudi context, could help strengthen responsibility without conflicting with prevailing social norms. Educational institutions may also integrate responsibility training into curricula through project-based learning, digital citizenship modules, and community engagement activities. Such strategies would not only foster responsible social media use but also promote broader psychosocial maturity among youth.

The absence of statistically significant differences in family relationship quality across demographic variables may be explained by the strong role of structural and cultural factors in shaping family cohesion in Saudi society. Regardless of gender, age, or education level, family interactions are often governed by shared cultural values, religious norms, and collective family practices that provide stability across groups. This finding diverges from some studies(Alwuqaysi et al., 2024; Singh & Tyagi, 2023) that reported demographic variations, which may reflect differences in cultural settings, sampling methods, or the measurement tools used. Another plausible explanation is that family relationship quality is more influenced by the type and quality of social media use than by demographic characteristics, consistent with research highlighting that purposeful use may enhance cohesion, while excessive or passive use may erode it. Thus, the present findings contribute to a nuanced understanding, suggesting that demographic factors alone are insufficient to predict family relationship quality without considering broader cultural and usage-related dynamics.

All so, the absence of significant demographic effects on family relationship quality and the mixed findings in the literature suggest that additional unmeasured variables may be at play. Personality traits, such as conscientiousness or neuroticism, and mental health status, including anxiety or depression, could strongly influence both family dynamics and individual responsibility. For example, individuals high in conscientiousness may display greater responsibility regardless of their demographic group, while those experiencing psychological distress may report strained family relationships irrespective of their social media usage patterns. These factors highlight the complexity of psychosocial outcomes in digital contexts and should be considered in future research.

Conclusion

In light of the study's findings, it appears that the influence of social media applications on family relationships and personal responsibility is neither direct nor uniform. Instead, it is shaped by various factors, including cultural context, individual usage patterns, and family dynamics. These results highlight the need for fostering digital literacy and encouraging self-responsibility within families to mitigate potential negative effects. Future research should adopt a more nuanced and targeted approach to explore these relationships across different social and cultural settings.

Limitations, recommendations, strengths

Despite the important scientific contribution provided by this study in understanding the relationship between the use of social media applications and the quality of family relations and personal responsibility, it is not without some methodological limitations, as its geographical scope was limited to the Riyadh region only, which limits the possibility of generalizing the results to other societies that differ in cultural or social composition. The study also relied on self-reporting tools that may be influenced by personal biases or the desire for social compatibility. On the other hand, the study did not address the impact of the quality of application use or the nature of the content interacted with but focused on the duration of use only, which may overlook accurate qualitative effects. However, the strengths are the use of a relatively large sample (501 participants) and its diversity in terms of gender, age, and educational level, as well as the use of measures with reliable psychometric characteristics and multiple statistical analyses that allow for deeper interpretation of the data. Based on the results, the study recommends focusing on the quality of digital use, not just its quantity, and developing awareness programs aimed at enhancing the digital balance skills of young people, as well as directing families towards strategies for effective communication and managing digital borders within the family. It also recommends the importance of conducting longitudinal and comparative cultural studies in the future to explore changes in family interaction patterns and personal responsibility in light of the rapid development of digital technologies.

Furthermore, restricting the sample to the Riyadh region may have introduced potential sampling bias. Social norms, socioeconomic differences, and patterns of social media use in Riyadh may not fully represent other Saudi regions, particularly rural or less urbanized areas. These contextual variations could influence both family relationship quality and personal responsibility, thereby limiting the external validity of the study. Future research should therefore aim to include participants from multiple regions or employ nationally representative samples to strengthen the generalizability and applicability of the findings across diverse cultural and social contexts.

A limitation of this study is the absence of direct measures of personality traits and mental health status, which may influence both family relationship quality and personal responsibility.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study, as part of a master's thesis, adhered to the general framework of research ethics applicable to postgraduate students and researchers. Ethical approval was obtained from the Institutional Review Board (IRB) at Imam Mohammad Ibn Saud Islamic University (IMSIU), following the university's official guidelines. The study incorporated key ethical safeguards, including obtaining written informed consent from all participants and ensuring the confidentiality and anonymity of the collected data. All procedures complied with the ethical standards set out in the Declaration of Helsinki (2013 revision).

HUMAN AND ANIMAL RIGHTS

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or research committees, including the ethics committee established at the university for this purpose, and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Consent for publication was obtained as an integral part of the online survey administered to the target population. Participants were informed that their consent was required to proceed with the study and to provide responses. All collected data were treated with strict confidentiality and anonymity, with no personal identifiers or names recorded.

STANDARDS OF REPORTING

This predictive cross-sectional survey adhered to the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) guidelines to ensure transparency and rigor in reporting. Ethical approval was obtained from the university's ethics committee established for this purpose. Participation was voluntary, and informed consent

was required at the beginning of the online survey. All data were collected anonymously and treated with strict confidentiality to protect participants' privacy.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

Availability of Data and Materials

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request.

List of Abbreviations

FoMO: Fear of Missing Out

ANOVA: Analysis of Variance

SPSS: Statistical Package for the Social Sciences

IRB: Institutional Review Board

Authors' Contributions

Haifa Mubarak Al-Anazi contributed to the study design, development of research instruments, data collection, analysis and interpretation of results, and drafting of the initial manuscript. Professor Yahya Mohammad Khatatbeh supervised all stages of the research, provided methodological guidance, critically reviewed and edited the manuscript, and approved the final version for publication. All authors reviewed the results and approved the final manuscript.

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