

Fear of Missing Out on Social Media Platforms and its relationship to Self-Esteem among Adolescents in Jordan

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Abstract

The current study aimed to investigate Fear of Missing Out (FoMO) and Self-Esteem levels among 7th and 10th-grade students in private schools in Amman, Jordan. Additionally, the study aimed to explore the relationship between FoMO and self-esteem. The research also intended to examine differences in FoMO and self-esteem levels between male and female students and across different grade levels. The sample consisted of 590 students randomly selected from private schools in Amman for the academic year 2022/2023. To achieve the study's objectives, the researchers translated and utilized measures of FoMO and self-esteem. They verified the reliability and validity of these measures and administered them to the study sample. The study adopted a descriptive and correlational approach as the most appropriate, aiming to describe the levels of FoMO and self-esteem and reveal potential correlations between the two variables. The results indicated a low level of FoMO among students and a high level of self-esteem. A significant negative correlation was found between FoMO and self-esteem. There were also significant differences in FoMO and self-esteem levels across different grade levels, with 7th-grade students scoring higher in all dimensions. However, there were no significant differences in FoMO and self-esteem levels between male and female students, except for the "need for fame" dimension. Statistically significant differences were observed in FoMO levels attributed to grade level, favoring seventh-grade students in all dimensions. No statistically significant differences were found according to gender variables, except in the "need for fame" dimension. Results showed no statistically significant differences in self-esteem related to gender, but there were significant differences in self-esteem related to grade level, favoring tenth-grade students. The mean self-esteem score for tenth-grade students was 3.16, while it was 3.05 for seventh-grade students.

Keywords: Fear of Missing Out, FoMO, Self-Esteem, Social media platforms.

Introduction

Arab society, in general, and the family, in particular, face unprecedented challenges related to family-building and child-rearing, especially in an era characterized by rapid changes and advancements in digital technology applications. These technologies have recently become accessible to children before their parents. Consequently, the current era is classified as the digital age, marked by accelerated changes in information, skills, and classifications across various fields. This era has significantly impacted educational institutions, particularly the

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family, which serves as the fundamental building block for society and the upbringing of generations. Given the above, it is imperative to examine the advantages and disadvantages of the present digital era. Individuals can now access a vast amount of information within minutes, moving seamlessly between cultures and ideas to acquire knowledge at their convenience. However, a major drawback of this age is its potential negative impact on individuals' behavior and emotions, particularly in the absence of controls or limits. The greatest challenge for individuals lies in their ability to develop internal resilience that shields them from the adverse effects of digital age forms and tools, such as social media platforms.

On the other hand, continuing to follow and browse what is happening on social media platforms reduces some people's feelings of anxiety resulting from social exclusion (Franchina, et al., 2018). The admiration that an individual receives on his posts on social media platforms is positively related to an increase in his self-esteem (Burrow and Rainone, 2017), indicating that the self-esteem of some people is influenced by their perceived value to others, even in the virtual environment represented by the digital age. Rosenberg defined self-esteem as "a set of values, thoughts, and feelings that an individual holds about himself. It is the way the individual treats and respects himself, reflecting the extent to which he views himself (high - low), along with his characteristics, abilities, and behavior" (Rosenberg, 1965, P:5). Studies have also shown a relationship between the rate of use of social networking sites and low life satisfaction. This implies that people who extensively use social networking sites are more likely to experience lower life satisfaction. This may be attributed to comparisons with others, feelings of jealousy, and psychological pressures that these sites may impose on their users (Hawi & Samaha, 2017). Additionally, the levels of psychological happiness and satisfaction among users of social media platforms are influenced by comparing their real selves with the ideal virtual selves of others, which can have a detrimental effect on their sense of self-worth (Best & Taylor, 2014; Chou and Edge, 2012). Consequently, individuals may be more prone to experiencing anxiety and a sense of inadequacy.

Statement of the Problem

Through their experience with adolescents in primary school, the two researchers observed the emergence of a new variable that directly impacts students' self-esteem and social interactions. Students exhibited certain antisocial behaviors, likely attributed to the fear of missing out on

events on the social networking site, known as "FoMO." For instance, some students engaged in social comparisons, leading to diminished self-esteem. These symptoms are often linked to an unpleasant emotional state and are associated with depressive symptoms such as anxiety, low self-esteem, reduced life satisfaction, mood swings, and compulsive behavior. Additionally, it is noted that this condition is accompanied by some organic disorders, including lack of sleep, headaches, shortness of breath, and poor appetite. Students also exhibit fear of running out of Internet packages, withdrawal, and distress over the loss of enjoyment in activities they were previously accustomed to. Moreover, these students become preoccupied with excessively checking their phones and electronic devices to keep up with received notifications, and they obsessively engage in liking and commenting on all posts. This leads to a state of forced dependence, potentially causing students to neglect the reality around them and become addicted to the virtual world. This situation isolates the student from their social environment.

Hence, this study aims to answer the following main question: "What is the level of FoMO on social media platforms, and what is its relationship to self-esteem among a selected sample of adolescents in private schools in Jordan?"

The following sub-questions branch out from this main inquiry:

- What is the degree of FoMO on social media platforms and the level of self-esteem among a sample of adolescents in private schools in Jordan?
- Is there a statistically significant relationship, at a significance level of ($\alpha \leq 0.05$), between FoMO on social media platforms and self-esteem among a sample of adolescents in private schools in Jordan?
- Are there statistically significant differences, at a significance level of ($\alpha \leq 0.05$), between FoMO on social media platforms and adolescents' self-esteem, considering the variables of students' gender and grade (seventh and tenth)?

The significance of this study lies in its distinction as the first in Jordan to measure the fear of missing events and its correlation with self-esteem. While previous studies have explored the effects of social networking sites on students at this stage, they have not specifically addressed the topic of FoMO. This study aims to contribute to understanding students' behavior within a scientific framework and foundation, shedding light on the impacts of various social networking

sites. The application of this study will offer a scientific contribution by investigating the relationship between the fear of missing out on digital events on social media platforms (FoMO) and its correlation with self-esteem. Additionally, it will explore whether there are statistically significant differences due to gender and grade variables (seventh and tenth grades). This information will assist researchers and specialists in developing preventive and remedial programs to mitigate the negative effects of social media platforms.

Literature review

FoMO (Fear of Missing Out)

The concept of FoMO originated from Przybylski et al., (2013) where it was defined as the intense desire to communicate with others, to know what they are doing, and the intense fear of missing out on experiences that others have and the individual does not. According to the Oxford Dictionary (2013), it is defined as the fear or anxiety about the possibility of missing an exciting and enjoyable event elsewhere. Franchina et al., (2018) indicated that FoMO is the fear of missing new and exciting experiences that others go through, along with the feeling of the need to stay updated on what is new through social media platforms and be aware of what others are doing.

FoMO is associated with modern concepts such as JoMO, or the "Joy of Missing Out," defined by Aurel & Paramita (2021) as the happiness derived from leaving things, giving them up, and not chasing them. Aranda & Baig (2018) defined JOMO as the positive effects of trying to disconnect from digital life in the short or long term and enjoy life away from technology and its effects. In her research, Khaled, (2022) mentions the relationship between FoMO and JOMO as two sides of the same coin, both stemming from the awareness of multiple options and choosing from them; FoMO raises feelings of anxiety about the possibility of missing events, and the pleasure of giving up (JOMO) raises feelings of happiness and pleasure due to the ability to choose from and control several options in life, as well as the ability to give up for a better one.

Previous studies and theoretical literature have identified several indicators that help infer FoMO, such as the high frequency of social media platform use and discomfort when attempting to leave these platforms. This discomfort often results in being attached to the phone, continuous checking, and an inability to disconnect from devices, even while driving, posing a potential

danger. FoMO is evidenced by the fear of missing out on social events, leading to life dissatisfaction (Khaled, 2022; Przybylski et al., 2013).

FoMO is influenced by various social and psychological factors, heightening its potential harm. The internet and social media platforms serve as the primary sources of information and events, enabling individuals to constantly access what they may miss, be it a dinner, a new opportunity, or another experience. Continuous engagement with social media platforms, providing a constant view of what one is missing, can lead to dissatisfaction, anxiety, and feelings of inadequacy. FoMO may also result from social pressure to meet others' expectations and maintain a sense of belonging, as individuals fear ostracism and social exclusion, hindering their ability to interact and communicate effectively. Previous studies have shown that teenagers and young adults in their twenties are more prone to developing FoMO, likely due to increased immersion in social media platforms (Abel et al., 2016; Akbari et al., 2021; Astleitner et al., 2023; Chou and Edge, 2012).

Certain studies have demonstrated clear effects of FoMO; for instance, the need to know about new events can impact mood and contribute to depression, stemming from the fear of missing out on certain activities and excluding friends from shared experiences. Additionally, there is evidence of a negative relationship between life dissatisfaction and FoMO, as individuals struggle to keep up with witnessed events, leading to persistent feelings of low self-esteem, loneliness, and anxiety (Fitzgerald et al., 2023; Przybylski et al., 2013).

Explanatory Theories of FoMO

Self-Determination Theory

Przybylski et al. (2013) adopted Edward Deci & Richard Ryan's Self-Determination Theory to explain FoMO. According to this theory, when a person experiences happiness and psychological comfort, there is a need to satisfy efficiency, independence, and a sense of belonging for overall well-being. Failure to meet these needs can have a negative impact on an individual. Those with low satisfaction of basic needs might be inclined to use social media platforms as a means of communication, enhancing their social competence and providing an opportunity to deepen social bonds with others.

Compensatory Internet Use

Kardefelt-Winther (2014) noted in his paper that negative life situations can incentivize individuals to go online to alleviate their feelings. The basic principle of this theory lies in the

individual's reaction to psychological problems and life obstacles, or as a compensatory behavior for unsatisfied needs that can be fulfilled through the Internet and social media platforms.

Maslow's Hierarchy of Needs Theory

Can and Satici (2019) interpreted FoMO in light of Maslow's Hierarchy of Needs. According to this theory, FoMO is associated with social needs and appreciation needs in Maslow's hierarchy. Individuals with FoMO may have a strong desire to socialize, integrate, and seek recognition and appreciation from others. When experiences are missed, they may feel that these needs are not met, leading to feelings of anxiety and distress. They seek a sense of belonging by following the social activities of others and have a fear of missing events to avoid feeling undervalued by others.

Belonging Theory

Abel et al. (2016) interpreted FoMO on social media platforms within the framework of belonging theory (Roy F. Baumeister). They found that social exclusion induces a state of anxiety in individuals, as it results in an actual loss of the sense of belonging to those around them, including peers, family, and colleagues. Fearing social exclusion and ostracism, individuals strive to align with groups to avoid such exclusion. They make efforts to follow and keep up with these groups, aiming to avoid feeling inferior and disconnected. For example, an individual might choose to purchase a better or more expensive product to seize the opportunity for improvement or to maintain a sense of belonging to their circle of friends.

In such situations, individuals may alter their usual behaviors or purchasing choices due to social pressures and the fear of exclusion from their social circles. Teenagers, in particular, have a strong desire to belong to their groups and integrate with them. Constant communication on social media platforms can intensify feelings of resentment among individuals who struggle to keep up with the activities and discussions of their peers.

Self-Esteem

Rosenberg (1965) defined self-esteem as a set of values, thoughts, and feelings that an individual has about him/herself. It represents the way an individual treats and respects him/herself, determining the level of self-image (high or low), including characteristics, abilities, and behavior. Coopersmith (1967) emphasized that self-esteem refers to a person's evaluation of him/herself in terms of competence and merit, expressed through convictions and ideas that one believes in and asserts as valid.

Several factors influence self-esteem, including body image and how the individual perceives and evaluates their own body. Additionally, self-esteem is affected by the individual's social environment, including family upbringing and school environments (Zeigler-Hill, 2013).

Individuals with high self-esteem emphasize their abilities, strengths, and consider their self-worth as highly valuable. Their positive feelings towards themselves contribute to confidence and pride. High self-esteem individuals actively participate in social events, make new friends, and, according to Yarnell (2000), can utilize social media platforms in a balanced manner. Servidio (2023) adds that people with high self-esteem can use these platforms for communication, idea exchange, skill development, and personal growth.

On the other hand, individuals with low self-esteem may seek refuge online for comfort and safety, potentially exacerbating the problem. This decline in self-esteem can be associated with Internet addiction and the compulsive use of social media applications. For instance, some individuals with low self-esteem may compensate for feelings of isolation and loneliness by extensively browsing social media platforms, which can lead to addiction and neglect of other essential activities (Servidio, 2023).

Theories that tried to explain self-esteem:

Rosenberg's Theory

Rosenberg focuses on family self-esteem, examining factors that either enhance or diminish an individual's self-esteem and the fluctuations in self-esteem at different life stages. Rosenberg categorizes the self into three divisions: the current self, representing how one perceives and interacts with oneself in the present; the desired self, depicting the individual's aspirations and ideal self; and the presented self, reflecting the image one likes to present to others (Rosenberg, 1995).

Coopersmith's Theory

Coopersmith defines self-esteem as an individual's personal judgment of him/herself, expressed through self-expression and behavioral patterns. Coopersmith distinguishes between two types of self-esteem: actual self-esteem, found in individuals who feel valued and recognize their importance and potential, and defensive self-esteem, observed in individuals who feel worthless and hopeless but are not conscious of these feelings (Coopersmith, 1981; Coopersmith, 1967).

Person-Centered Theory

Rogers' person-centered theory is based on a perspective of human nature that assumes individuals are driven by a tendency to realize and value themselves. Rogers emphasizes that self-concept develops gradually from childhood through social relationships and environmental influences. The child's interaction with the surrounding social environment shapes their perception of both positive and negative qualities. There is a need for positive self-appreciation, originating from the individual before seeking external validation, known as positive self-esteem (Rogers, 1969).

The researchers believe that all theories explaining self-esteem converge on the notion that it begins in childhood and is influenced by the external environment. Childhood and adolescence play pivotal roles in shaping self-esteem. Consequently, an individual's experiences, comparisons with others, and life events significantly impact their self-esteem, including the effects of comparing oneself on various social media platforms, where the inability to achieve everything seen may significantly reduce self-esteem.

Previous studies:

Khaled (2022) conducted a study with the aim of identifying the correlation between FoMO, addiction to social networks, and the pleasure of missing out (JOMO). The results revealed a statistically significant positive correlation between FoMO and social network addiction among university students. No statistically significant differences were found between males and females regarding FoMO.

Tandon et al. (2021) conducted research to understand the negative aspects of using social media platforms and its correlation with FoMO. The results indicated a positive correlation between the use of social media platforms and FoMO. Furthermore, the use of social media platforms was associated with fatigue and mental exhaustion.

In contrast to previous studies, Akbari et al. (2021) conducted a study that showed no relationship between Internet use and FoMO. FoMO Internet use did not appear to be related to symptoms of depression, anxiety, stress, or the level of life satisfaction.

Zunic et al. (2017) conducted research to understand the effects of social media platforms and self-esteem on FoMO and deviant behavior. The results revealed a statistically significant relationship between individuals with low, normal, and high self-esteem in their weekly use of

social media platforms. The relationship was negative, indicating a high use of social media platforms among individuals with low self-esteem.

It is evident from the above that the topic of FoMO on social media platforms is relatively new and still lacks extensive studies and research. There is a shortage of both Arab and foreign studies on the subject, and, according to the researchers' knowledge, the existing studies have primarily focused on university students. These studies center around the relationship between FoMO and the use of social media platforms, as seen in studies by Khaled (2022) and Tandon et al. (2021). The results consistently indicate a statistically significant relationship between FoMO and the use of social media platforms.

Conversely, a study by Akbari et al. (2021) found no relationship between Internet use and FoMO. However, it is worth noting a discrepancy in the results of these studies concerning the gender variable. While some studies, such as those by Abel et al. (2016) and Khaled (2022), found no statistically significant differences between males and females in FoMO, others, like Zunic et al. (2017), reported a statistically significant relationship in favor of females.

Method

Design

This study adopted a descriptive and correlational approach, considering it the most suitable for achieving the study's objectives. This approach aims to describe the levels of FoMO and Self-Esteem and to uncover any correlation between these two variables. The study included variables: FoMO, Self-Esteem, gender (male, female), grade (seventh, tenth). The scales were submitted to ten arbitrators, comprising faculty members specialized in psychological counseling, measurement and evaluation, and special education, and the level of consensus among the arbitrators reached an impressive 90%. Adjustments to certain paragraphs were implemented in response to the constructive feedback provided by the arbitrators.

Sample

The study population comprised all seventh and tenth-grade students enrolled in the private schools of the University District Directorate in Amman for the academic year (2022/2023), totaling 14,074 male and female students. Private schools were chosen specifically due to the widespread use of smartphones and frequent engagement with social media platforms among students, making it convenient for implementing the scale. Typically, students from private

schools come from higher social strata, influencing their economic status, leading to widespread smartphone usage. The sample size necessary for the study was determined using the Stephen Thamison equation, resulting in a minimum sample size of 374 male and female students. These students were randomly selected from the study population using a cluster sampling method, involving the random selection of eleven schools. Subsequently, two divisions were randomly chosen from each school, and the study criteria were applied to these divisions, resulting in a final study sample of 590 students.

Table 1

Characteristics of samples (N = 590)

		Grade		
variable		Seventh	Tenth	Total
Gender	Male	154	119	273
	Female	160	157	317
Total		314	276	590

Ethical Consideration

The Currents study was approved by the research ethical committee. The Consent procedures, data privacy protections, and other safeguards are implemented to protect participants. This comprises obtaining informed consent from participants, maintaining confidentiality of their information, to minimize any potential harm. Adhering with ethical considerations helps uphold the well-being and rights of participants in the study.

Instrument

FoMO scale

The researchers translated the scale (Sette et al., 2019) for collecting data on FoMO, subsequently submitting it to four English language specialists for back translation. The scale was then presented to Arabic experts specializing in counseling and psychology to assess the appropriateness of the language. In its initial form, the scale consisted of 20 items in the negative direction, designed to measure FoMO among seventh and tenth-grade students. The scale comprises four dimensions: the "Need to Belong" dimension with questions numbered 1-5, the "Need for Popularity" dimension with questions 6-10, the "Anxiety" dimension with questions 11-15, and the "Addiction" dimension with questions 16-20. The scale employs a Likert four-

point grading system, where responses are ranked as follows: "I do not agree" (1) for one point, "I slightly do not agree" (2) for two points, "I agree" (3) for three points, and "I totally agree" (4) for four points. The maximum points a student can obtain are 76, while the minimum is 19. The average scores estimating the level of FoMO were categorized into three equal groups: (1.00-1.99) for a low score, (2.00-2.99) for a medium score, and (3.00-4.00) indicative of a high degree of fear of missing events.

Indications of the validity of the scale in the current study:

To assess the apparent sincerity of the FoMO scale, the scale was submitted to ten arbitrators, comprising faculty members specialized in psychological counseling, measurement and evaluation, and special education. The primary objective was to evaluate the scale concerning the comprehensiveness of its paragraphs, the precision of linguistic expression, the clarity of content, and the identification and rectification of inappropriate sections or the proposal of new ones. The arbitrators' insights regarding the scale were systematically gathered, and the initial form of the scale consisted of twenty paragraphs. Notably, no paragraphs were omitted, and the level of consensus among the arbitrators reached an impressive 90%. Adjustments to certain paragraphs were implemented in response to the constructive feedback provided by the arbitrators.

In terms of discriminatory semantics and to ensure the integrity of the scale's construction, it was administered to a sample comprising 33 male and female students from outside the study sample but within the community. Pearson's correlation coefficients were computed between responses to the paragraphs and the overall scale score, elucidating the correlation between paragraph semantics and the degree of the scale. Discrimination coefficients for all paragraphs exceeded 0.3, with the exception of paragraph No. 9, stating, "I am indifferent to my friends' reactions to my posts," which exhibited a discrimination coefficient below 0.3. Consequently, this paragraph was removed from the scale. The criterion for retaining a paragraph necessitates a correlation coefficient with the total scale degree not falling below 0.3, indicative of robust discriminatory significance in the paragraphs and affirming the sincerity of their construction. Following the removal of the aforementioned paragraph, associations between the remaining paragraphs and the dimensions of the need to belong dimension ranged from 0.469 to 0.528, the need for popularity dimension ranged from 0.385

to 0.601, the anxiety dimension ranged from 0.312 to 0.598, and the addiction dimension ranged from 0.353 to 0.453, all falling within an acceptable range.

Upon the completion of the honesty application on the FoMO scale, the final version now comprises four dimensions and 19 paragraphs.

Indicators of FoMO Scale Reliability

To ensure the stability of the FoMO scale, the internal consistency coefficient for all dimensions was computed using the Cronbach alpha equation. Additionally, a retesting method with a two-week interval was employed on an exploratory sample comprising 33 male and female students from outside the study sample but within the community. The internal consistency coefficients for the dimensions of the scale ranged from 0.66 to 0.74, which falls within an acceptable range. It is noteworthy that the coefficients for the test-retest stability of the FoMO scale dimensions ranged from 0.61 to 0.81, demonstrating statistical significance.

Self-Esteem Scale

Rosenberg's self-esteem scale, adapted for the context of this study, was utilized and translated by the researcher Ibrahim Aseel (2015), customized for the Jordanian environment. The scale consists of ten paragraphs, each with four response choices: Strongly agree (4 marks), Agree (3 marks), Disagree (2 marks), Strongly disagree (1 mark). The maximum achievable score is 40, while the minimum is 10. The average self-esteem levels were categorized based on the highest response minus the lowest response, divided into three levels: a low level (1.00-1.99), a medium level (2.00-2.99), and a high level (3.00-4.00), taking into consideration the negative scoring of statements with numbers 3, 5, 8, 9, and 10.

Indicators of the validity and reliability of the scale in the current study

To assess the apparent validity of the self-esteem scale, it was presented to ten arbitrators, consisting of faculty members specialized in psychological counseling, measurement and evaluation, and special education. The purpose was to evaluate the scale based on the comprehensiveness of its paragraphs, the accuracy of linguistic wording, the clarity of the content, and the identification of any inappropriate paragraphs or suggestions for new ones. The arbitrators' feedback on the scale was collected, and no paragraphs were deleted or modified. The agreement percentage among the arbitrators was 90%.

Regarding the discriminative aspects of the scale, the significance of the paragraph correlation with the overall score of the scale was determined by administering the scale to 33 male and female students in the seventh and tenth grades. The values of the paragraph correlation coefficients with the total score of the scale ranged between 0.315 and 0.578, all of which were statistically significant.

Reliability of Self-Esteem Measurement Interpretation

To assess the reliability of the scale, we calculated Cronbach's alpha coefficient and employed a test-retest method with a two-week interval. This approach was applied to a sample of 33 male and female students, resulting in an internal consistency coefficient of 0.761. The stability coefficient was determined to be 0.854, indicating statistical significance.

To address the study's questions, we computed arithmetic means and standard deviations. Additionally, we employed both the paired t-test and analysis of variance. Furthermore, we extracted Pearson's correlation coefficient to examine the relationship between the dimensions of the FoMO scale and the self-esteem assessment scale.

Data Collection:

The researchers administered the two study scales to the members of the study sample using a paper-and-pencil method. They conducted visits to randomly selected schools for comprehensive data collection. The researchers distributed the questionnaire among the students, explained the questionnaire, how to fill it out, and replied to the students' questions concerning the questionnaire. The first page of the scale was dedicated to providing clear instructions on how to accurately complete the required data for the study sample members. It emphasized the importance of answering all paragraphs of the standards and clarified that all information would be treated as confidential, used solely for scientific research purposes. Then the papers were collected from the students. The responses were 610, and only 20 were excluded due to stereotypical responses or lack of basic data

Data Analysis:

The normality test and Linearity using Skewness and Kurtosis test were made for the FoMO and self-esteem, the results shows that there is a normality distribution for both variables (Table 2) and ANOVA test (table 3). In addressing the study questions, the researchers calculated arithmetic means and standard deviations. They extracted the Pearson correlation coefficient and employed a two-way analysis of variance, as well as multiple analysis of variance, considering

variables such as students' gender and grade. This analysis focused on students' responses to the dimensions of the "FoMO" scale and the self-esteem scale.

All analyses were conducted in the university's statistical laboratory.

Findings

Normality

To check normality, this study applied the statistical methods of Skewness and Kurtosis. Hair et al. (2010) and Byrne (2010) argue that data is considered normal if skewness is between -2 and +2, and kurtosis is between -7 and +7.

Table 2
skewness and kurtosis values for the FoMO

Report	Self-Esteem total score	Fear total score	Fear degree 1	Fear degree 2	Fear degree 3	Fear degree 4
Skewness	-.640	.845	1.127	.974	.464	.700
Std. Error of Skewness	.101	.101	.101	.101	.101	.101
Kurtosis	.354	.916	.837	.253	-.265	-.034
Std. Error of Kurtosis	.201	.201	.201	.201	.201	.201

The results in Table (2) show that the skewness and kurtosis values for the FoMO scale and its sub-dimensions, as well as the Self-Esteem scale, fall within the normal range (-2 to +2 for skewness and -7 to +7 for kurtosis). This indicates that the data is normally distributed for both scales.

Linearity

Table 3
ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig .
self-esteem* FoMO	Between Groups	(Combined)	27.570	47	.587	3.023	.000
		Linearity	15.706	1	15.706	80.937	.000
		Deviation from Linearity	11.864	46	.258	1.329	.077
	Within Groups		105.174	542	.194		
	Total		132.744	589			

The table shows that the results of the analysis of variance indicate that the deviation from linearity is not statistically significant (Sig. value = 0.077 > 0.05). This suggests the presence of a linear relationship between the variables of self-esteem and the FoMO.

Table 4

Characteristics of samples (N = 590)

variable	Grade			Mean FoMO	Std.Deviation FoMO	Mean self- esteem	Std.Deviation self-esteem
	Seventh	Tenth	Total				
Male	154	119	273	1.92	0.48	3.14	0.41
Female	160	157	317	1.83	0.51	3.08	0.52
Mean FoMO	1.96	1.78					
Std.Deviation	0.52	0.45					
Gender FoMO							
Mean	3.05	3.16					
self-esteem							
Std.Deviation	0.45	0.49					
self-esteem							
Total	314	276	590				

First question: What is the degree of FoMO on social media platforms and the level of self-esteem among a sample of adolescents in private schools in Jordan?

Table 5

Mean Scores and Standard Deviations of FoMO Dimensions for Seventh and Tenth Grade Students in Descending Order

Number factors	Factors	Arithmetic mean	Standard deviation	Rate	Level
3	Anxiety	2.16	0.71	1	Medium
4	Addiction	1.95	0.66	2	Low
2	Need for popularity	1.69	0.68	3	Low
1	Need to belong	1.65	0.63	4	Low
FoMO as a whole		1.87	0.50	-	Low

Table 5 presents the FoMO scores on social media platforms, indicating a low overall mean of 1.87. The Anxiety dimension has the highest average, scoring a mean of 2.16, suggesting a moderate level. In contrast, the Fear of Belonging dimension ranks fourth with a mean of 1.65, signifying a low level. This indicates that the FoMO levels among the students were low, and they did not exhibit a high degree of FoMO.

Table 6

Mean Scores and Standard Deviations of Self-Esteem Ratings for the Study Sample on Self-Esteem Scale in Descending Order

Number items	Items	Arithmetic mean	standard deviation	Rate	Level
2	I feel I had good qualities.	3.46	0.62	1	high
1	I feel I'm a valuable person like anyone else.	3.42	0.75	2	high
4	I have the capability to carry out work like most people.	3.29	0.74	3	high
10	I feel less deserving than others.	3.23	0.93	4	high
5	I have nothing to be proud of.	3.23	0.96	5	high
6	I'm thinking positively about myself.	3.21	0.78	6	high
9	I feel I can't do anything right.	3.16	0.87	7	high
7	I feel good about myself.	3.08	0.85	8	high
3	Feeling like I was a failure.	2.93	0.91	9	Medium
8	I wish I had more self-esteem.	2.09	0.99	10	Medium
Self-Esteem as a whole		3.11	0.47	-	high

In Table 6, it is evident that self-esteem among seventh and tenth-grade students in private schools in the district of Al-Jamea is high, with a mean score of 3.11. This stands in stark contrast to the findings of FoMO, which revealed low scores. The results indicate that students in the schools exhibit elevated levels of self-esteem.

Second question: Is there a statistically significant relationship, at a significance level of ($\alpha \leq 0.05$), between FoMO on social media platforms and self-esteem among a sample of adolescents in private schools in Jordan?

Table 7

Pearson Correlation Coefficients between FoMO Scale Dimensions and Self-Esteem Scale.

Tools	Correlations	Need to belong	Need for popularity	Anxiety	Addiction	FoMO as a whole
Self-Esteem	Pearson Correlation	-.410	-.166	-.217	-.290	-.364
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Note: Statistically significant at the 0.01 level. ($\alpha \leq 0,01$)

In Table 7, all correlation coefficients between the self-esteem scale and the FoMO scale were negative. This negative correlation indicates an inverse relationship between self-esteem and FoMO on social media platforms: as self-esteem increased, FoMO decreased, and as self-esteem decreased, FoMO on social media platforms increased. This signifies a clear association between FoMO and self-esteem, highlighting that high levels of FoMO and self-esteem do not coexist.

Third question: Are there statistically significant differences, at a significance level of ($\alpha \leq 0.05$), between FoMO on social media platforms and adolescents' self-esteem, considering the variables of students' gender and grade (seventh and tenth)?

Table 8

Mean Scores and Standard Deviations of FoMO Dimensions and the Overall Scale Based on Gender and Grade Level.

Dependent Variable	variable	Mean and Std. Deviation	Need to belong	Need for popularity	Anxiety	Addiction	FoMO as a whole
Gender	Male	Mean	1.7	1.82	2.15	1.98	1.92
		Std. Deviation	0.65	0.68	0.68	0.6	0.48
		N	273	273	273	273	273
	Female	Mean	1.61	1.58	2.17	1.93	1.83
		Std. Deviation	0.6	0.67	0.73	0.71	0.51
		N	317	317	317	317	317
Grade	Seventh grade	Mean	1.74	1.79	2.22	2.04	1.96
		Std. Deviation	0.66	0.71	0.73	0.68	0.52
		N	314	314	314	314	314
	Tenth grade	Mean	1.55	1.57	2.09	1.86	1.78
		Std. Deviation	0.57	0.63	0.68	0.63	0.45
		N	276	276	276	276	276

Table 8 highlights notable variations in mean scores and standard deviations among responses to the FoMO scale dimensions and the overall scale, categorized by gender and grade level (seventh and tenth). To evaluate the significance of these differences, we conducted a Multivariate Analysis of Variance (MANOVA), and the results are presented in Table 9.

Table 9

MANOVA analysis for the effect of the variables of students' gender and grade on the responses of seventh and tenth-grade students on the FoMO scale dimensions.

Source	Factors	Type III Sum of Squares	df	Mean Square	F	Partial Eta Squared
Gender Hotelling = 0.400 F = 5.881 P=0.000	Need to belong	1.024	1	1.024	2.622	0.106
	Need for popularity	7.850	1	7.850	17.421	*0.000
	Anxiety	0.209	1	0.209	0.413	0.520
	Addiction	0.277	1	0.277	0.630	0.428
Grade Hotelling = 0.360 F = 5.269 P=0.000	Need to belong	5.000	1	5.000	12.804	*0.000
	Need for popularity	6.219	1	6.219	13.802	*0.000
	Anxiety	2.761	1	2.761	5.471	*0.020
	Addiction	4.640	1	4.640	10.540	*0.001
Error	Need to belong	229.212	587	0.390		
	Need for popularity	264.508	587	0.451		
	Anxiety	296.193	587	0.505		
	Addiction	258.403	587	0.440		
Corrected Total	Need to belong	235.526	589			
	Need for popularity	279.460	589			
	Anxiety	299.082	589			
	Addiction	263.472	589			

Note: Statistically significant at the 0.05 level. ($\alpha \leq 0.05$)

Table (9) indicates that there are no statistically significant differences among the means of student responses on FoMO scale dimensions based on gender variable, except for the need to popularity dimension. Additionally, the table indicates the existence of statistically significant differences among the means of student responses on the FoMO scale dimensions based on grade variable, in favor of seventh-grade students across all dimensions. The table also shows apparent differences in the means and standard deviations of student FoMO scale dimensions as a whole based on the variables of gender and grade. To verify the significance of differences between the means, a Two-Way ANOVA analysis was conducted, as illustrated in table (10).

Table 10

Two-Way ANOVA Analysis of the Impact of Gender and Grade Level on Seventh and Tenth-Grade Students' Ratings on the FoMO Scale as a Whole.

Source	Type III Sum of Squares	Df	Mean Square	F	Partial Eta Squared
Gender	0.765	1	0.765	3.096	0.079
Grade	4.484	1	4.484	18.155	*0.000
Error	144.973	587	0.247		
Corrected Total	150.460	589			

Note: Statistically significant at the 0.05 level. ($\alpha \leq 0.05$)

Table 10 illustrates the lack of statistically significant differences in the responses of seventh and tenth-grade students on the FoMO scale as a whole based on the gender variable. However, it does reveal statistically significant differences in the responses of students on the FoMO scale as a whole based on the grade level variable. Seventh-grade students had a mean score of 1.96, while tenth-grade students had an average score of 1.78. This implies that there is no variation in FoMO levels between males and females; however, there is a notable difference based on grade level. Seventh-grade students exhibit higher FoMO scores compared to their tenth-grade counterparts.

Table 11

Mean Scores and Standard Deviations of Self-Esteem Scale Responses Based on Gender and Grade Level.

Source	Source	N	Mean	Std. Deviation
Gender	Male	273	3.14	0.41
	Female	317	3.08	0.52
	Total	590	3.11	0.47
Grade	Seventh grade	314	3.05	0.45
	Tenth grade	276	3.16	0.49
	Total	590	3.11	0.47

Table 11 shows significant differences in the mean scores and standard deviations of students' responses to the self-esteem scale based on gender and grade level (seventh and tenth). A Two-Way ANOVA analysis was performed to determine the significance of these differences, and Table 12 presents the findings.

Table 12

Two-Way ANOVA Analysis for the Effect of Gender and Grade Level on Self-Esteem Ratings for the Study Sample.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig
Gender	0.582	1	0.582	2.566	0.110
Grade	1.890	1	1.890	8.325	*0.004
Error	133.235	587	0.227		
Corrected Total	135.591	589			

Note: Statistically significant at the 0.05 level. ($\alpha \leq 0.05$)

According to Table (12), that there were no statistically significant differences level in the responses of seventh and tenth-grade students to the self-esteem scale based on gender. On the other hand, when exploring the responses based on grade level, statistically significant differences are found. This suggests a notable distinction, indicating that tenth-grade students tend to express higher self-esteem, boasting an average score of (3.16), compared to their seventh-grade counterparts, who averaged (3.05). This implies that there is no gender-based variation in self-esteem levels, but a significant disparity emerges when considering grade levels, favoring tenth-grade students in terms of higher self-esteem scores.

Discussion, Conclusion and Implications

Regarding the first question: What is the degree of FoMO on social media platforms and the level of self-esteem among a sample of adolescents in private schools in Jordan, the findings indicate that FoMO levels among students on social media platforms were of a 'low' magnitude, with an average score of 1.87. This differs from the results of several studies, including Anwar et al. (2021) and Tandon et al. (2021), where the FoMO was reported to be between moderate and high. Conversely, the dimension of anxiety exhibited the highest average score at 2.16, categorically classified as moderate, while the dimension reflecting the need for belongingness registered the lowest average score at 1.65. The diminished FoMO level, averaging 1.87 and aligning generally with a moderate range, along with the attenuated score in the dimension of the need for belongingness, can be explained through the lens of Self-Determination Theory. This theoretical framework emphasizes that the psychological well-being and contentment of individuals necessitate the fulfillment of competence, autonomy, and a sense of belonging –

integral components for cultivating well-being. Within the academic context, students immersed in a scholastic milieu characterized by peer density may experience an amplified sense of belonging to a collective that furnishes shared experiences, challenges, and commensurate opportunities. The symbolic act of donning a school uniform or emblem, collectively agreed upon, contributes to the construction of a group identity, thereby fortifying students' perception of being integral to a larger entity. This fosters an augmentation of their sentiments of belongingness, competence, and autonomy. Furthermore, the communal identity acts as a catalyst for emotional support among students as they confront various challenges. Hence, despite students' proclivity for engagement with social media platforms, the FoMO levels remain comparatively subdued (Przybylski et al., 2013).

The study interprets the results for the dimension of anxiety, which manifested at a moderate level, through Maslow's Hierarchy of Needs theory. In this framework, social needs and the need for security occupy an intermediate position in the hierarchy. This aligns with the dimension of the need for belongingness, which obtained the lowest score among the four dimensions in the current study, while the anxiety dimension registered the highest score. This may be explained by the external pressures exerted on students to conform to societal norms or social expectations. Such pressures can generate anxiety related to fitting in or being accepted by peers, leading to internal conflicts when students face choices between societal expectations, such as adhering to rules and norms, and the expectations of their friends, such as engaging in risky behaviors or breaking established rules. According to the theory of belongingness, students may seek conformity with groups to avoid exclusion, actively striving to keep pace with these groups to avoid feelings of inadequacy. Conflicting values among students can create a sense of internal conflict, resulting in feelings of anxiety, guilt, or pressure to conform to a set of values at the expense of others (Can & Satıcı, 2019; Khaled, 2022).

On the other hand, the low degree of the need for belonging dimension may be associated with the addiction dimension, which came with an arithmetic mean of (1.95), closer to the average degree. Students experiencing a decline in meeting basic needs, such as belonging, may be drawn to using social media platforms as a means of communication with others. Some turn to these platforms to feel part of a larger social network, irrespective of their affiliation with a particular group or society. According to the theory of compensatory use of the Internet, students who do not belong to groups may feel that they are missing out on social events or gatherings.

Social media platforms fulfill their sense of belonging, as students may resort to using them to alleviate the negative feelings associated with not belonging to specific friend groups. This can lead students to feel a sense of belonging through social media platforms, without fulfilling their true need for belonging with their peers. This vulnerability can make some students more prone to addiction. When a student loses the feeling of belonging to his group, he may spend more hours following social media platforms, leading to an increase in addiction (Kardefelt-Winther, 2014; Tandon et al., 2021).

The results concerning students' self-esteem ratings in seventh and tenth grades indicated a 'high' level. This can be interpreted in the light of both Rosenberg's Self-Esteem Theory and Person-Centered Theory. Both theories agree that individuals assess and value themselves through interactions with others and their social environment. Schools serve as spaces where students can develop their talents and skills, showcase them to others, receive reinforcement, and enhance their confidence and self-esteem. Academic achievements, participation in extracurricular activities, and positive feedback from teachers and peers contribute to nurturing students' self-worth within the school environment. In the basic stage, students interact with each other, creating a positive social environment with their peers and integrating with them. Schools offer various activities and social engagements with the community, coupled with support and encouragement from family, teachers, and friends, leading to an increase in students' self-esteem. The high degree of independence among students in the school stage results in a more complete and positive self-presentation to others. According to Rosenberg and Rogers, students derive their self-esteem from the social environment, particularly from their colleagues and friends, with whom they have more mature relationships than in previous school stages, such as kindergarten and primary school. This may explain the observed high level of self-esteem among seventh and tenth-grade students (Rogers, 1969; Rosenberg, 1965).

As for the second question: Is there a statistically significant relationship, at a significance level of ($\alpha \leq 0.05$), between FoMO on social media platforms and self-esteem among a sample of adolescents in private schools in Jordan, all correlation coefficients between FoMO and self-esteem were negative, indicating an inverse relationship. As self-esteem increased, FoMO decreased, and conversely, as self-esteem decreased, FoMO increased on social media platforms. This aligns with findings from Servidio (2023) and Zunic et al. (2017), who, in their studies on university students, also reported an inverse relationship between the fear of missing out on

events and self-esteem. These results can be attributed to the interconnectedness of the two constructs, elucidated through Rogers' Self Theory. Rogers divides the self into three components: the real self, the social self, and the ideal self. Through repetitive engagement with social media platforms, individuals may realize a significant disparity between what they follow and aspire to, and what they can realistically achieve or currently are. This realization could render them incapable of meeting certain social requirements that may surpass their abilities on some social media platforms. Additionally, they may struggle to keep up with the activities of their peers on these platforms, further exacerbated by the continuous flow of updates and information about the experiences of others. The pressure to stay constantly connected and fear of missing out on these experiences can create a sense of anxiety. Furthermore, social media platforms often present an idealized image that is challenging for many to attain or even approach. This creates a significant gap between the real self, as referred to by Rogers, and the ideal self, negatively impacting an individual's self-esteem. In essence, the portrayal of an idealized image on social media platforms contributes to a negative impact on self-esteem as individuals perceive a substantial divide between their authentic selves and the idealized versions presented online (Rogers,1969).

In addition, self-esteem plays a crucial role in shaping individuals' interactions with social media platforms. Individuals with high self-esteem view these platforms as tools to facilitate the achievement of their goals, rather than an end in themselves. Consequently, they utilize these platforms in positive ways, such as sharing accomplishments and receiving positive feedback from friends. This not only enhances their self-esteem but also fosters a sense of belonging and support. Through engagement with social platforms, they exchange ideas, experiences, and communicate with others, contributing to the development of their skills and capabilities. Furthermore, they leverage the Internet to acquire new skills and broaden their knowledge. In essence, individuals with high self-esteem don't use social media platforms as a means to boost their self-esteem; instead, their high self-esteem permeates various aspects of their lives (Servidio, 2023; Zunic et al., 2017)

Conversely, individuals with low self-esteem often turn to social media platforms in an attempt to elevate their spirits and enhance their self-esteem. Unfortunately, this behavior tends to have a negative impact, resulting in feelings of self-inferiority and dissatisfaction. While browsing social media platforms, they compare themselves with others, experiencing a sense of inferiority,

which contributes to a further decline in self-esteem. Moreover, excessive use of social media platforms can lead to isolation from the real world and a loss of contact with actual people, intensifying feelings of isolation and inferiority. Consequently, the self-esteem of these individuals becomes rooted in the fear of missing out on events and news on social media platforms, rather than being grounded in the ability to cultivate self-esteem and improve overall quality of life (Servidio, 2023; Zunic et al., 2017).

Regarding the third question: Are there any statistically significant differences, at a significance level of ($\alpha \leq 0.05$), between FoMO on social media platforms and adolescents' self-esteem, considering the variables of students' gender and grade (seventh and tenth), The results indicated no statistically significant differences in students' responses to the FoMO scale based on gender, while significant differences favoring seventh-grade students were observed based on grade level. Concerning the gender variable, there is a lack of available studies, to the researchers' knowledge, that have explored the level of fear of missing out on events among students in the basic stage. Studies have been conducted in which researchers addressed the level of fear of missing out on events as one dimension among university-stage students, and the findings of the present study align with those of (Khaled, 2022), It differs from the study of Anwar et al. (2021) who said that males have higher degrees of "FoMO" than females. The absence of statistically significant differences in FoMO scale responses may be attributed to the similarities in age-related circumstances between genders and their shared experiences in the school setting. Both males and females are likely to encounter similar social experiences and common challenges, and it is expected that they have comparable levels of exposure to social media platforms and experience similar effects. Additionally, both genders may employ similar adaptive mechanisms for dealing with stress and anxiety. The lack of statistically significant differences in self-esteem attributed to the gender variable could be explained by the availability of similar academic, familial, and social conditions and influential experiences that shape and enhance self-esteem for both genders. Both genders are exposed to similar social and cultural factors that impact the development of self-esteem (Astleitner et al., 2023; Zunic et al., 2017)

Regarding the grade level variable, this difference can be attributed to the typical developmental stage of seventh-grade students. Generally, students in the seventh grade may lack the maturity and awareness to distinguish between reality and fiction. They may have limited social experience and a heightened concern about fitting in with their peers, potentially leading to a

higher level of Fear of Missing Out (FoMO). Seventh-grade students may feel the need to constantly monitor social media platforms with their friends to avoid missing any events. Conversely, tenth-grade students, with more social experience and confidence in their relationships, may exhibit a lower level of FoMO.

The observed statistically significant differences in self-esteem related to the grade level variable, favoring tenth-grade students, may be explained by the likelihood that the aspirations and goals of tenth-grade students are more mature and well-defined. Tenth-grade students typically have greater influential experiences than seventh-grade students, and crucially, they have a clearer self-image, a better appreciation of their qualities, and a heightened awareness of their strengths and weaknesses. Consequently, they can more effectively determine their contributions and discern what is suitable for their participation.

In terms of self-esteem, the results indicated no statistically significant differences attributable to the gender variable. The findings of the current study can be elucidated concerning the gender variable by considering that the circumstances (academic, family, and social) and influential experiences influencing the formation and enhancement of self-esteem are nearly identical for both genders. Additionally, they are exposed to similar social and cultural factors impacting self-esteem development, such as patterns of family upbringing, school environments, and media messages. Both genders experience comparable levels of life satisfaction, achievement, and support from the social environment, notwithstanding the different sources of self-esteem among individuals. Both males and females have their own external and internal sources influencing the construction of their self-esteem. (Yarnell ,2000)

Regarding the presence of statistically significant differences in self-esteem attributed to the academic grade variable, favoring tenth-grade students, this can be explained by the fact that tenth-grade students often have more mature and specific ambitions and goals. Their influential experiences surpass those of seventh-grade students. Most importantly, their self-image, appreciation of their qualities, and awareness of their strengths and weaknesses are clearer. Consequently, they can effectively determine what activities they can participate in and what may not be suitable for them. Additionally, they can identify a group of friends that align with their values. Tenth-grade students have more opportunities to engage in activities or hobbies that contribute to their sense of self-esteem, as the cumulative effect of these experiences, activities, and participations directly impacts their self-esteem (Tetzner et al., 2017)

Implication

The findings indicate that educators should prioritize diminishing students' FoMO to elevate their self-esteem and deter behaviors linked to social media use within the education sector. It is imperative for educational institutions to cultivate an atmosphere fostering students' sense of belonging, thereby encouraging communication and collaborative learning. To facilitate interaction among students, schools can arrange cultural and social events fostering cooperation and community interaction. Parents are urged to actively monitor their children's social media engagement, establishing limits to address FoMO and enrich their self-esteem. Furthermore, parents should receive information about resources related to FoMO, offering practical guidance on fostering healthy and secure internet and social media usage for their children. School administrations can also contribute by organizing activities that diminish inequalities among students, thereby augmenting their self-esteem and alleviating feelings of inadequacy. Additionally, to effectively engage the community, it is vital to increase awareness of FoMO through programs and initiatives promoting communication and collaboration among individuals. Genuine friendships beyond social media platforms should be encouraged. By implementing these suggestions collaboratively, educators, parents, schools, and the local community can collectively influence students' well-being and mitigate the adverse consequences of FoMO.

Conclusion

This study conducted research on the levels of FoMO among students and examined the relationship between these levels and self-esteem. It is the first of its kind in Jordan. Based on its results, we recommend counselors and educators to focus on reducing the level of FoMO among students with the aim of improving their self-esteem and preventing problematic behavior associated with excessive use of social media platforms. Additionally, we suggest conducting further studies on the topic of FoMO due to the importance of technology in our present time. This topic can be connected to variables such as self-efficacy, personality traits, parenting styles, career choices, JoMO, and electronic addiction. Considering changing the study sample to explore variations in FoMO levels among students at different age stages could also be valuable. Conducting these future studies will contribute to a deeper understanding of the effects of FoMO on students and will help in developing appropriate strategies for dealing with social media in the

context of education. Furthermore, it will raise awareness about the importance of balance in using modern technology and avoiding the negative impact of excessive use of social media platforms. In an era where technology plays a significant role in the lives of students, it is crucial to equip them with the skills and knowledge needed to navigate the digital world responsibly and maintain their psychological well-being.

Limitation and Future Directions

The results of this study should be considered in light of several limitations. First, concerns may arise about the accuracy of the measurement tools used and the reliability of the results obtained from the students, as participants might be hesitant to express their true feelings. The study was also confined to seventh and tenth-grade students in private schools in the University District - Amman, excluding categories of students in public schools and other grade levels. We recommend that researchers conduct additional studies examining the relationship between the fear of missing out on social media platforms and self-esteem across diverse age groups and geographic regions. Furthermore, we propose the development of guidance programs to mitigate the risk of fear of missing out on events (FoMO) among school and university students.

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