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GENDER DIFFERENCES IN NOTIFICATION SYNDROME AND FEAR OF MISSING OUT AMONG ADOLESCENTS

Psychology

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ABSTRACT

Notification Syndrome is a modern behavioural phenomenon that feels real and immediate, often triggering an automatic response such as checking the phone, while FOMO refers to the persistent desire to stay connected with people in one's social network. The prime aim of this study is to identify the pattern of notification syndrome and FOMO in adolescent girls and boys. The sample was purposively selected: 50 boys and 50 girls from schools in North Gujarat. The data were collected with the help of the notification syndrome and FOMO components of the Internet Addiction Scale developed by Monika K. Shikari and B.D. Dhila. Results reveal that 11.80 % of adolescents have often and always experienced notification syndrome. While 16.20% experienced it sometimes, 25.20% rarely, and 46.80% never experienced it. Differences between boys and girls in notification syndrome were not significant (t = 0.39). Results for FOMO reveal that 22.80 % of adolescents have often and always experienced it. Additionally, 21.40% experienced it sometimes, 26.60% rarely, and 29.20% never. Differences in FOMO between boys and girls were significant at the 0.05 level. (t = 2.09). The significant positive correlation of 0.54 indicates that notification syndrome and FOMO co-occur.

KEYWORDS

Notification Syndrome, FOMO, Adolescents

In the digital age, smartphones have become central to adolescent communication, entertainment, and social identity. Mobile notifications—alerts from social media, messaging apps, games, and news platforms—create frequent interruptions and may encourage repeated checking behaviours. When individuals feel uneasy, distracted, or compelled to check their phones even when notifications are turned off or when they are busy, this pattern is often described as notification syndrome. Although not a formal clinical diagnosis, notification syndrome captures behavioural and emotional responses linked to persistent connectivity.

A related construct to notification syndrome is Fear of Missing Out (FOMO), defined as anxiety or concern that one may miss rewarding experiences, social events, or information that others are having or receiving (Przybylski et al., 2013). FOMO has been associated with problematic smartphone use, social media engagement, and lower psychological well-being (Elhai et al., 2016; Wegmann et al., 2017). Late adolescents may be especially vulnerable because peer belonging, social comparison, and identity exploration are highly salient during this developmental stage (Steinberg, 2014).

Smartphone habits are maintained through intermittent reinforcement. Oulasvirta et al. (2012) found that repeated checking behaviours become automatic and pervasive, often triggered by boredom or the mere presence of a phone. Notifications intensify this cycle by providing small, unpredictable rewards that encourage further checking. Roberts et al. (2015) argued that smartphone addiction involves not only technology use but also personality and emotional needs, such as the need for connection and stimulation.

Przybylski et al. (2013) developed a widely used FOMO scale and found that FOMO predicted greater social media engagement and lower mood. Elhai et al. (2016) reported that FOMO, need for touch, anxiety, and depression were related to problematic smartphone use. Similarly, Wegmann et al. (2017) showed that online-specific FOMO contributed to symptoms of internet-communication disorder.

Gender differences in FOMO and notification syndrome are mixed. Some studies suggest that girls use social media more intensely and may report higher FOMO, while others find that boys may engage more in gaming, doomscrolling, or sensation-seeking online behaviours. Andreassen et al. (2016) noted that addictive use of social media and video games is associated with psychiatric symptoms, but patterns vary by gender and platform. Kuss and Griffiths (2017) emphasised that social networking site addiction should be understood within a biopsychosocial framework.

Adolescents are also affected by broader screen-time trends. Twenge and Campbell (2018) found associations between higher screen time and lower psychological well-being among children and adolescents. Vorderer et al. (2016) described a "permanently online, permanently connected" condition in which individuals feel constant pressure to remain available. This context makes the study of notification syndrome and FOMO especially relevant for adolescents, who are navigating the transition to adulthood while remaining deeply embedded in digital social networks.

Research Questions

The present study investigates patterns of notification syndrome and FOMO among adolescent boys and girls. It aims to answer three questions:

(a) What will be the overall percentage frequency of Notification Syndrome in Adolescents?

(b) What will be the overall percentage frequency of FOMO among adolescents?

(c) What will be the gender differences in the overall percentage frequency of notification syndrome and FOMO among adolescents?

Hypotheses

1. There will be no significant difference in notification syndrome between adolescent boys and girls.
2. There will be no significant difference in FOMO between adolescent boys and girls.
3. There will be no significant positive correlation between notification syndrome and FOMO.

Method

Participants

Researchers purposively selected 100 late adolescents (50 boys and 50 girls) from schools in Palanpur city, North Gujarat. Late adolescence is typically defined as approximately 17 to 19 years of age. All participants reported using a mobile phone or smartphone.

Tools

Notification syndrome and FOMO were assessed using the Internet Addiction Test (IAT) developed by Monika Shikari and B. D. Dhila (2026). The IAT comprises 30 items rated on a five-point Likert scale of 1, 2, 3, 4, 5, corresponding to never, rarely, sometimes, often, and always, respectively. The IAT consists of six areas or subscales of Internet Addiction, namely notification syndrome, fear of missing out, doomscrolling, loneliness, disruption of daily life and dopamine rush. Each subscale has five statements, with minimum and maximum scores of 5 and 25, respectively. In this study, the researcher examined only two areas/subscale: notification syndrome and fear of missing out. The test-retest correlation coefficient for the whole IAT was 0.86; for notification syndrome and fear of missing out, it was 0.81 and 0.77, respectively. The IAT developed by Monika Shikari and B. D. Dhila (2026) showed concurrent validity of 0.73 with the IAT developed by Kimberly Young (1998).

Procedure

The researchers collected the data through in-person visits to the schools. Instructions clarified that there were no right or wrong answers and that responses would remain confidential. The researcher analysed the data using descriptive statistics (frequencies and percentages), means, standard deviations, independent-samples t tests, and Pearson correlation. The significance level was set at $p < .05$ and $p < .01$.

Results

Results for notification syndrome

Table 1 presents the frequency percentages for notification syndrome among late adolescent boys and girls. Overall, the average responses were: Never = 46.80%, rarely = 25.20%, Sometimes = 16.20%, Often = 6.40%, and Always = 5.40%. Boys reported Never = 44.80%, rarely = 28.40%, Sometimes = 14.80%, Often = 5.20%, and Always = 6.80%. Girls reported Never = 48.80%, rarely = 22.00%, Sometimes = 17.60%, Often = 7.60%, and Always = 4.00%.

Table 1: Frequency percentages for notification syndrome in adolescent boys and girls.

Statement	Gender	Responses				
		Never	Rarely	Someti	Often	Always
You feel uneasy if you keep mobile notifications turned off.	Boys	60	26	10	Nil	04
	Girls	54	18	24	04	Nil
	Average	57	22	17	02	02
You get distracted from your work due to the habit of checking notifications on your mobile.	Boys	48	26	20	04	02
	Girls	44	26	12	12	06
	Average	46	26	16	08	04
Even when you are busy with work, you check whether a notification has arrived on your mobile or smartphone.	Boys	38	32	14	06	10
	Girls	48	16	22	10	04
	Average	43	24	18	08	07
When you wake up, you immediately check your mobile phone for notifications.	Boys	48	24	10	12	06
	Girls	62	18	08	08	04
	Average	55	21	09	10	05
You immediately restart the internet on your mobile after turning it off.	Boys	30	34	20	04	12
	Girls	36	32	22	04	06
	Average	33	33	21	04	09
Percentage of total average frequency for Notification Syndrome	Boys	44.80	28.40	14.80	05.20	06.80
	Girls	48.80	22.00	17.60	07.60	04.00
	Average	46.80	25.20	16.20	06.40	05.40

Table 2: Mean and t-Value for Notification Syndrome between Late Adolescent Boys and Girls.

Variable	N	Mean	Correlation	Significant Level
Notification Syndrome	100	9.87	0.54	0.01
FOMO	100	12.53		

Table 2 shows the independent-samples t-test for notification syndrome. Boys (M = 10.02, SD = 3.81) and girls (M = 9.72, SD = 3.94) did not differ significantly, t = 0.39, non-significant.

Results for Fear of Missing Out (FOMO)

Table 3 presents the frequency percentages for FOMO. Overall, the average responses were: Never = 29.20%, rarely = 26.60%, Sometimes = 21.40%, Often = 9.20%, and Always = 13.60%. Boys reported Never = 26.00%, rarely = 25.20%, Sometimes = 20.00%, Often = 9.20%, and Always = 19.60%. Girls reported Never = 32.40%, rarely = 28.00%, Sometimes = 22.80%, Often = 9.20%, and Always = 7.60%.

Table 3: Frequency percentages for FOMO in late adolescent boys and girls.

Statement	Gender	Responses				
		Never	Rarely	Sometimes	Often	Always
Life without the internet seems meaningless or useless.	Boys	24	28	22	02	24
	Girls	20	26	30	10	14
	Average	22	27	26	6	19
When you are offline, you might feel bored or not enjoy yourself, but you feel happy when you go online.	Boys	10	26	34	10	20
	Girls	16	44	26	04	10
	Average	13	35	30	07	15
When your mobile data runs out, you try to go online via Wi-Fi.	Boys	20	18	24	18	20
	Girls	24	28	24	20	04
	Average	22	23	24	19	12
You become restless when your mobile is out of sight.	Boys	44	24	10	08	14
	Girls	66	12	18	02	02
	Average	55	18	14	05	08
If you have to spend the entire day without the internet, you feel restless.	Boys	32	30	10	08	20
	Girls	36	30	16	10	08
	Average	34	30	13	09	14
Percentage of total average frequency for FOMO	Boys	26.00	25.20	20.00	09.20	19.60
	Girls	32.40	28.00	22.80	09.20	07.60
	Average	29.20	26.60	21.40	9.20	13.60

Table 4: Mean and t-value for Fear of Missing Out (FOMO) between adolescent boys and girls.

Variable	N	Mean	SD	t value	Significant Level
Boys	50	13.56	5.59	2.09	0.05
Girls	50	11.50	4.15		

Table 4 shows the independent samples 't' test for FOMO. Boys (M = 13.56, SD = 5.59) scored significantly higher than girls (M = 11.50, SD = 4.15), t = 2.09, p = .05.

Table 5: Correlation between notification syndrome and Fear of Missing Out (FOMO) of internet addiction.

Variable	N	Mean	SD	t value	Significant Level
Boys	50	10.02	3.81	0.39	Non-Significant
Girls	50	9.72	3.94		

The correlation value of 0.54 indicates a moderate positive relationship between notification syndrome and FOMO.

DISCUSSION

The results can be explained in several ways. Boys and girls did not differ significantly in notification syndrome. This may be because mobile notifications affect both genders similarly. Notifications are designed to grab attention, and adolescents almost always have smartphones. Oulasvirta et al. (2012) found that phone checking becomes a habit. Once this habit forms, gender may matter less than the phone's mere presence.

Also, late adolescents of both genders want to belong and stay connected with friends (Steinberg, 2014). This need is not limited to one gender. Boys and girls may now have similar access to smartphones, so their notification habits may be similar. Finally, the self-report items may not capture real differences. Social desirability and memory bias can hide gender differences.

Boys scored higher on FOMO than girls. One reason may be that boys spend more time in online gaming and live streaming. These activities are fast-paced. Missing a match or an update can create a strong fear of missing out (Andreassen et al., 2016). Boys may also be more sensitive to online rewards like wins and rankings (Steinberg, 2014). Another reason is freedom. In some families, boys may have more freedom to use their phones and stay online later. This greater exposure can increase FOMO. Girls may also underreport FOMO because they are expected to be less distracted. Response style may also play a role: boys and girls may understand the FOMO items differently.

Notification syndrome and FOMO were positively correlated (r = .54, p = .01), meaning adolescents who fear missing out also check notifications more often. One reason is negative reinforcement. FOMO creates worry about missing information. Checking a notification reduces this worry temporarily (Przybylski et al., 2013; Elhai et al., 2016). So, the adolescent keeps checking to feel better.

Notifications also come at random times. Sometimes they are boring, and sometimes they are exciting. This unpredictable reward pattern makes checking more likely, similar to gambling (Oulasvirta et al., 2012). Also, FOMO and notification checking may share common causes, such as anxiety, low self-control, or a strong need for belonging (Wegmann et al., 2017). Finally, the relationship may be a cycle: FOMO leads to checking, checking gives brief relief, but then FOMO returns stronger.

The findings have practical implications for late adolescents, parents, educators, and mental health professionals. Schools and colleges can promote digital literacy and healthy smartphone habits, including turning off non-essential notifications, scheduling offline periods, and encouraging face-to-face interaction. Counsellors may use cognitive-behavioural strategies to address FOMO-related anxiety and compulsive checking. Parents and educators can model balanced technology use and support late adolescents in developing self-regulation skills as they transition to adulthood.

CONCLUSION

This study found that notification syndrome was common among late adolescents but did not differ significantly by gender. FOMO was significantly higher among boys than girls. Importantly, notification syndrome and FOMO were positively correlated, suggesting that late adolescents who fear missing out are more likely to compulsively check notifications. These findings highlight the need for digital well-being interventions that address both notification management and FOMO-related anxiety during the critical developmental period of late adolescence.

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