The Relationship between FOMO and Academic Performance: Examining Both the Role of Social Media Use and Anxiety

Matthew G. Ascenzi (2759721)
Faculty of Social and Behavioural Sciences, Universiteit Utrecht
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Dr. Luzia Heu
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Abstract

The fear of missing out (FoMO) is described as the need for continuous inclusion within other individual lives through online mediums (Przybylski et al., 2013). This mentality, fueled by the distraction of social media and the anxiety FoMO instils, may distract adolescents from keeping ample attention on academic work. However, there is limited evidence regarding the association between FoMO and overall academic performance. This study aims to test said relationship using data from the Dutch Health Behaviour in School Aged Children (HBSC) study over a three-year period, with a sample consisting of 403 Dutch high school students aged 11–15 years. Results suggest that FoMO does not significantly predict academic performance or overall social media use. However, it is found that FoMO does significantly predict higher amounts of anxiety. This implies that FoMO leads to an increase in anxiety levels among students which may lead to future problems during adolescenthood such as impairment of memory and cognitive function.

Key Words: FOMO; Social media use; Anxiety; Academic performance; Adolescent

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In the modern world, the use of mobile technology and online applications dominates the lives of many adolescents globally. In The Netherlands alone, 93.5% of adolescents used the internet every day in 2019 (Nederlands Jeugdinstituut NJI, 2020), while 94% of adolescents between the ages of 12 and 18 reported using the internet to browse social media sites (CBS, 2019). Social media is described as any mobile and web-based technology that seeks to create an interactive platform where individuals can share, discuss, create, and modify user-generated content (Kietzmann et al., 2011). Online applications, especially social media platforms, such as Facebook, Twitter, and Instagram, have become an essential part of adolescents' everyday life and are important tools when staying connected to friends and family. This form of connection allows others to witness the activities others are engaging in through photo and video sharing which can lead to the fear of missing out (FoMO) (Przybylski et al., 2013).

FoMO is described as the desire to stay connected with what others are doing and the negative reaction one receives when one is not present in exciting activities shared by others (Przybylski et al., 2013). This may be because one may feel as if they are unable to partake in the interactions of others and their lifestyles (Alutaybi et al., 2020). Previous theory and research have found links between FoMO, high anxiety levels, and impaired cognitive levels which in turn may relate to poor academic outcomes (Wood, 2006). This connection is what drives research to study the effect FoMO may have on academic performance (Östberg et al., 2018) and how this effect can be explained.

The relationship between FoMO and academic performance is rarely examined as throughout research, the effects of social media use and anxiety levels on academic performance are mostly studied (Rosen et al., 2018, Junco and Cotten (2012), and Owens et al. (2012). However, recently, the emphasis on digital technologies, alienation from the social environment, and FoMO has been claimed to make a profound impact on overall academic performance as well (Qutishat & Sharour, 2019). The following research will focus on the effect of FoMO on academic performance and will examine the mediating role of social media use and anxiety between FoMO and academic performance.

FoMO, Social Media Use and Academic Performance

`A possible underlying mechanism for the relationship between FoMO and academic performance could be social media use. Individuals who have a high amount of FoMO have a greater desire to remain constantly up to date on what others are doing (Franchina et al., 2018) which is a possible explanation for why FoMO is positively associated with social media intensity (Roberts & David, 2019). It is also found that stronger FoMO predicted prolonged social media use, and how often per day adolescents use social media sites (Franchina et al., 2018) especially within a classroom setting (Alt, 2015).

The use of social media within a classroom becomes problematic as there are significant performance decrements when students are multitasking between a class and using social media (Rozgonjuk et al., 2018). For example, time spent on Facebook, emailing, and talking on the phone while doing homework was strongly and negatively related to overall GPA among college students (Junco and Cotton 2012). Several cross-sectional studies have indeed shown a link between media use and academic performance in college students. Rosen and colleagues (2018) determined that students with high levels of FoMO spent more time using technology in class which negatively impacted overall grades. The reason for this decline is because as students used their devices in class, the distraction from the class caused an overall decrease in cognitive ability. Similarly, Bjornsen and Archer (2015) used a mix-effects regression model to determine that cell phone use was negatively associated with test scores regardless of sex or grade point average. Ellis et al. (2010) conducted an exploratory study which found that test scores of students who frequently text in class have significantly lower grades than those who do not. They also conclude that because of these results, multitasking during class is a distraction that lowers grade performance. Using these studies as reference, it is important to consider social media use as an underlying mechanism when describing the relationship between FoMO and academic performance.

FoMO, Anxiety and Academic Performance

When individuals experience FoMO one may believe they are missing out and are not living a fulfilling life as compared to others. They may also feel "out of touch" regarding experiences and conversations happening across other social circles. As a result, emotions such as fear, worry and anxiety may begin to intensify (Przybylski et al., 2013). This becomes a problem for adolescents if they experience excessive anxiety as it causes complications within educational and social domains (Wood, 2006). This is because anxiety and related symptoms are

associated with impairment of memory and cognitive function, which in turn contributes to poor school performance and academic failure (Mazzone et al., 2007, Rozgonjuk et al., 2020).

Previous research has shown that FoMO affects individuals who have anxiety-related ailments, such as irritability and feelings of inadequacy (Abel et al., 2016). This causes a feedback loop as individuals who are anxious or have a desire to create stronger attachments to others. This consequently increases FoMO levels as individuals with anxiety are not physically close with others and are missing out on enjoyable, social time which may impede academic performance (Holte & Ferraro, 2020).

The relationship between high anxiety levels and low academic performance is well researched. Along with Mazzone et al. (2007) whose cross-sectional research found that higher levels of anxiety are negatively associated with school performance, Pine et al. (1999) cross-sectional study of 111 boys aged 7-11 shows that anxiety was strongly associated with poor memory ability. Owens et al. (2012) concluded that students with high levels of anxiety had lower levels of academic performance, due to anxiety contributing to low working memory and high levels of anxiety. Because of this, a valid assumption can be made that students who experience anxiety because of their high FoMO levels, will perform worse within a school setting.

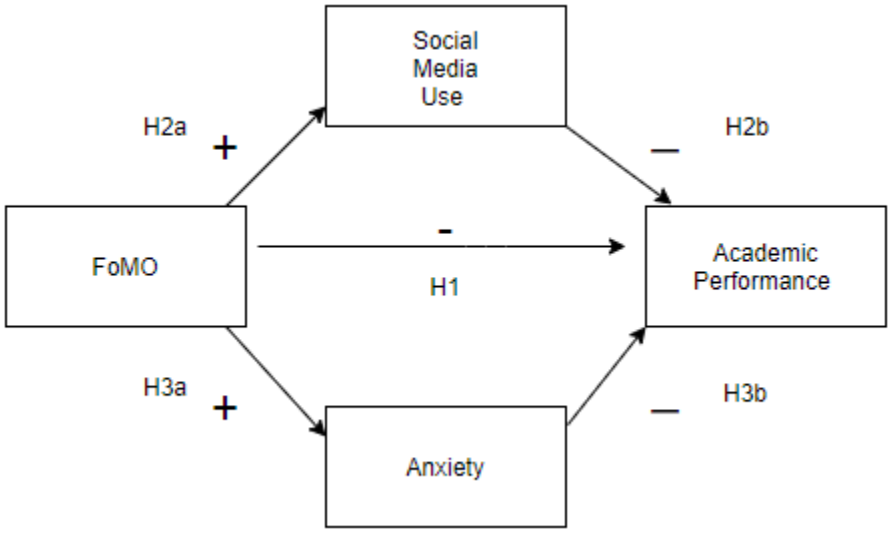
Current Study

Current literature rarely touches upon the direct relationship between FoMO and academic performance and mainly focuses on the possible effects of social media. Furthermore, most research has studied college and university students (Alt (2017) Casale and Fioravanti (2020), and Junco and Cotten (2012), which do not use sample populations from a younger cohort, such as those in elementary, middle, or high school. These studies, however, including those done by Qutishat & Sharour, (2019), Owens et al. (2012) and Mazzone et al. (2007) have tested the role of anxiety and social media use with academic performance and found significant results. Consequently, this research seeks to explain the direct relationship between FoMO and academic performance by using anxiety and social media use as mediators through a longitudinal approach.

In figure 1 the different hypotheses are displayed. First, it is hypothesized that over time, there is a negative relationship between FoMO and academic performance (H1). The second hypothesis is that social media use mediates the negative association between FoMO and

academic performance. Specifically, it is hypothesized that there is a positive relationship between FoMO and the use of social media (H2a), which negatively relates to overall academic performance (H2b). The last hypothesis is that over time, anxiety mediates the negative relationship between FoMO and academic performance. It is hypothesized that there is a positive relationship between FoMO and anxiety (H3a), which negatively relates to overall academic performance (H3b).

Figure 1. Research model



Methods

Design

This study uses data from the Digital Youth Study, an ongoing quantitative and longitudinal study (beginning in 2015) at Utrecht University (Boer et al., 2019, Peeters et al., 2018). The data was collected through online self-report questionnaires using Qualtrics survey software. For this study, wave 2 (2016) wave 3 (2017), and wave 4 (2018) were included (now referred to as T_1, T_2, and T_3 respectively). The first wave (2015) was excluded as it contains fewer participants.

Participants

Data collection was done using high school students within The Netherlands with 4716 participants in total in T_1, T_2 and T_3. An attrition analysis was performed to assess the main differences between those who completed the study and those who dropped out. It is important to note, however, that nonresponse was mainly due to class withdrawal as teachers may have been

absent or they could not schedule a time to complete the survey (Boer et al., 2019, Peeters et al., 2018). There were no significant differences between participants who dropped out and completed all three waves of the study. Those who have dropped out had the same levels of FoMO (*M*=1.64, *SD*=.67), as those who completed the study (*M*=1.64 *SD*=.69) (t (0.2) = 1076.3, p=0.84). However, dropouts have a slightly lower GPA (*M*=6.34, *SD*=.69) compared to those who completed the study (*M*=6.62, *SD*=.65) (t (-8.07) = 1248.8, p=1.61). The participants who did not complete the necessary items in all three waves were then removed from the data. Though 2788 participants did not disclose their gender, the majority who did were male dropouts (*N*=811) compared to females (*N*=284). After removing these participants, a total of 566 participants remained. 44.2% of the population consisted of males (*N*=164) and 55.8% were female (*N*=207). Regarding education level, 22.4% (*N*=83) are registered in VMBO classes, 25.6% (*N*=95) in HAVO, and 52.1% (*N*=193) in VWO. Ages ranged from 11-15 years old (*M*=13.04, *SD*=.88).

As the study is mainly focused on individuals who experience symptoms of FoMO, it was decided that those who do not experience FoMO (FoMO<1.0) should be excluded from the study as well. This decision was also made based on how skewed the overall data was because of the large number of participants who do not have any FoMO symptoms (*N*=195), thus creating a non-normal distribution. When comparing these two groups, there was only a slight mean difference in GPA for those in the non-FoMO group (*M*=6.25 compared to *M*=6.36). The mean age was 13.19 (*SD*=.947) and 60.5% (*N*=118) were males. In terms of education level, 31.3% were studying in lower educational classes (VMBO), 22.1% in middle (HAVO), and 46.7% in higher (VWO). After these participants were removed from the study, a final sample of 371 was reached.

Measurements

Fear of Missing Out

Using the Fear of Missing Out scale, (Przybylski, Murayama, De Haan, & Gladwell, 2013), five items were used to test an individual's FoMO level. Respondents were asked questions such as "I'm afraid others have more fun than I do" and "I worry when I find out that friends are having fun without me." Respondents answered using a 5-point scale where high values indicated high FoMO intensity (*1 = Not true at all*; 5= *Totally true*). Cronbach's α value was .736 which indicates a good level of reliability.

Social Media Use

Two items were used to assess the intensity of social media use (Van den Eijnden et al., 2018) which was reported in T_2. Respondents were asked "How often PER DAY do you look at your smartphone to see if a message, photo or videos was sent to you" and "How often PER DAY do you send a message, photo or video via your smartphone" Answer categories included: *Half an hour a day or less, and. More than 8 hours a day*. Factor loadings of both items were .926.

Anxiety

Six items were taken from the Youth Self-Report (YSR), which was studied in T_2 and is a screening tool for behavioural and emotional problems in both children and adolescents (CAMH, 2015). Respondents were asked questions such as "I'm too dependent on adults" and "I'm afraid to go to school." Using a 5-point scale, they were asked to indicate whether they experienced such emotions (*1=Never;5= All the time)*. Cronbach's α was .801 which indicates a very good level of reliability.

Academic Performance

Academic performance was measured using the student's GPA as provided by the schools. GPA was calculated by using the average grade of the six most important courses and scores ranged from 0 to 10.

Procedure

The adolescent participants were instructed to complete an online survey during school hours while being supervised by a research assistant. Before beginning the survey, the adolescents were informed that their participation was both voluntary and anonymous. They were also told that they may quit participation at any moment without penalty. Parents were also informed about the content of the study and were able to refuse their child's participation. The study was conducted in line with? the Declaration of Helsinki and was approved by the board of ethics of the Faculty of Social Sciences at Utrecht University (FETC16-076 Eijnden).

Statistical Analysis

First, a regression analysis was conducted to test the relationship between the independent variable FoMO and the dependent variable, academic performance. Next, in line with the method by Baron and Kenny, two different regression analyses will be used to examine whether social media use or anxiety mediated the relationship between FoMO and academic

performance. Age, gender, and educational level were used as control variables. All analyses were performed using IBM SPSS Statistics Version 24.

Results

Relatively low FoMO and anxiety levels were reported among the participants of this study, though this is contrasted by the high amount of social media use. Furthermore, for Dutch grading standards, a GPA of 6 is considered satisfactory. Table 1 includes the descriptive statistics of all study variables. Table 2 examines the bivariate correlations for all study variables.

Table 1

Descriptive statistics of all study variables.

	Mean	Standard Deviation
Age	13.04	0.88
Social Media Use	4.31	1.41
Anxiety	1.80	0.66
FoMO	1.98	0.62
Academic Performance	6.30	0.65

Table 2

Bivariate correlations for all study variables.

	1.	2.	3.	4.	5.	6.	7.
1. FoMO	1						
2. Social Media Use	.119*	1					
3. Anxiety	.259**	.137**	1				
4. Academic Performance	-.052	-.092	.067	1			
5. Gender	.079	.094	.242**	.161**	1		
6. Age	.017	.115*	-.036	-.066	0.17	1	
7. Education Level	.019	.002	-.183**	-.278**	.217**	.129*	1

* $p \leq .05$

** $p \leq .01$

To examine the direction and size of the linear relationship between the different variables in this study (including mediators and control variables), Pearson's correlation coefficients (*r*) were calculated. The bivariate correlation between FoMO and academic performance was negative and weak, r (369) = -.05, p =.310. The strongest bivariate correlation in the sample is between FoMO and anxiety with a negative and moderate correlation of r (369) = .26, $p < .001$, meaning that higher levels of FoMO predict higher levels of anxiety. The correlation between anxiety and gender is second in strength, with a positive and moderate bivariate correlation of, r (369) = .24, $p < .001$.

Regarding the other mediating effects, there is a positive and moderate-strong bivariate correlation between anxiety and academic performance r (369) = .68, p =.196. A negative and weak bivariate correlation between FoMO and social media use r (369) = -.12, p =.022. And finally, a negative and weak bivariate correlation was found between social media use and academic performance r (369) = -.09, p =.064.

Main Effect

To test the hypothesis that FoMO can affect an individual's overall academic performance, a hierarchical multiple regression analysis (MRA) was used. Before this test was done, however, several assumptions were tested, and checks were performed. First, both boxplots and stem-and-leaf plots showed that there were four multivariate outliers within the dataset. A second check was done by using Mahalanobis distance, which confirmed the multivariate outliers as they did exceed the critical $\chi 2$ for df = 6 (at $\alpha = .01$) of 18.475. These outliers were then removed from the study. Every variable examined within the regression thereafter is free from univariate outliers and is normally distributed. Next, the normal probability plot and the histogram of standardized residuals show that each variable contained approximately normally distributed errors, as did the normal P-P plot of standardized residuals, which showed points were completely on the line. A scatter plot of residuals also showed that the assumptions of linearity and homoscedasticity of residuals were also met. Finally, tolerance values were high for all variables included in the models, indicating that multicollinearity is not a concern.

The purpose of the first hierarchical MRA was to examine the relationship between the independent variable "FoMO" and the dependent variable "academic performance." age, gender, and education level were used as control variables along with social media use (T_2) and anxiety

(T_2). These variables accounted for a significant 10.9% of the variance in academic performance, R^2 = .10, F (5, 361) = 8.82, p < .001. On step 2, FoMO was added to the regression equation, and accounted for a small additional 0.03% of the variance in academic performance, ΔR^2 = .097, ΔF (1, 360) = 1.34 p= .247. When combined, the six predictor variables explained 22.1% of the variance in academic performance, R^2= .11, adjusted R^2 = .09, F (6, 360) = 7.58, p < .001.

Table 3 shows the unstandardized (*B*) and standardized (*β*) regression coefficients, and statistical significance (*p*) for all predictors on each step of the hierarchical MRA.

Table 3

Unstandardized (B) and Standardized (β) Regression Coefficients, and statistical significance (p) for Each Predictor Variable on Each Step of a Hierarchical Multiple Regression Predicting Academic Performance (N = 367)

Control variables	*t*	*df*	*B*	*β*	*p*
Step 1					
Gender	2.286	361	.158	.120	.023
Age	-1.758	361	-.065	.089	.080
Educational Level	5.144	361	.136	.266	p < .001
Social Media Use	-1.986	361	-.046	-.100	.048
Anxiety	-.246	361	-.014	-.013	.806
Step 2					
Gender	2.321	360	.160	.122	.021
Age	-1.722	360	-.064	-.087	.086
Education Level	5.070	360	.134	.263	.086
Social Media Use	-1.879	360	-.044	-.095	.061
Anxiety	.089	360	.005	.005	.929
FoMO	-1.160	360	-.066	-.061	.247

Overall, it can be concluded that FoMO at T_1 was not significantly related to academic performance at T_3 when controlling for age, gender, and educational level, b = -.066, t (366) = -1.16, p= .247. Because of this result, the strategy for testing mediation hypotheses by Baron and Kenny cannot be used as there is no significant direct effect between FoMO and academic performance. Despite this result, an exploration of the pathways suggested within H2 and H3 will still be completed to further examine the different relationships within the study.

FoMO as a Predictor of Social Media Use

To examine the relationship between independent variable FoMO and dependent variable social media use, a hierarchical MRA was used. In Step 1 of the hierarchical MRA, age, gender, education level, academic performance (T_3) and anxiety (T_2) were used as control variables and accounted for a nonsignificant 4.3% of the variance in social media use at T_2 R^2 = .043, F (5, 361) = 3.34, p= .007. In step 2, FoMO was added to the regression equation, and accounted for an additional 0.6% of the variance in social media use, ΔR^2 = .033, ΔF (1, 360) = 2.32 p= .128. When combined, the six predictor variables explained 9.2% of the variance in social media use, R^2 = .049, adjusted R^2 = .033, F (6, 360) = 3.1, p= .006.). Finally, it is concluded that FoMO at T_1 was not significantly related to social media use at T_2, b = .194, t(366) = -1.52, p= .128.

FoMO as a Predictor of Anxiety

The relationship between independent variable FoMO and dependent variable anxiety was examined next using a hierarchical MRA. Step 1 used age, gender, education level, academic performance (T_3) and social media use (T_2) as control variables which accounted for a significant 9% of the variance in anxiety at T_2, R^2 = .09, F (5, 361) = 7.15, p < .001. On step 2, FoMO was added to the regression equation, and accounted for a significant additional 7.1% of the variance in social media use, ΔR^2 = .071, ΔF (1, 360) = 30.52 p < .001. When combined, the six predictor variables explained 25.1% of the variance in anxiety, R^2 = 0.16, adjusted R^2 = .15, F (6, 360) = 3.1, p < .001. Finally, it is concluded that higher FoMO at T_1 was significantly related to higher anxiety at T_2, b = .270, t(366) =5.52, p < .001

Social Media Use as a Predictor of Academic Performance

Next, the pathway which examined social media use as a predictor of academic performance was checked. In step 1 of the hierarchical MRA, age, gender, education level, FoMO (T_1) and anxiety (T_2) which accounted for a significant 10.3% of the variance in academic performance at T_3, R2 = .10, F (5, 361) = 8.33, p < .001. In step 2, social media use was added to

the regression equation, and accounted for a non-significant additional 0.9% of the variance in social media use, ΔR2 = .009, ΔF (1, 360) = 3.53 p= .061. When combined, the six predictor variables explained 21.5% of the variance in academic performance, R^2 = .0.11, adjusted R^2 = .09, F (6, 360) = 3.86, p < .001. Finally, it is concluded that social media use at T_2 was not significantly related to academic performance at T_3, b = -.044, t(366) =-1.88, p= .06

Anxiety as a Predictor of Academic Performance

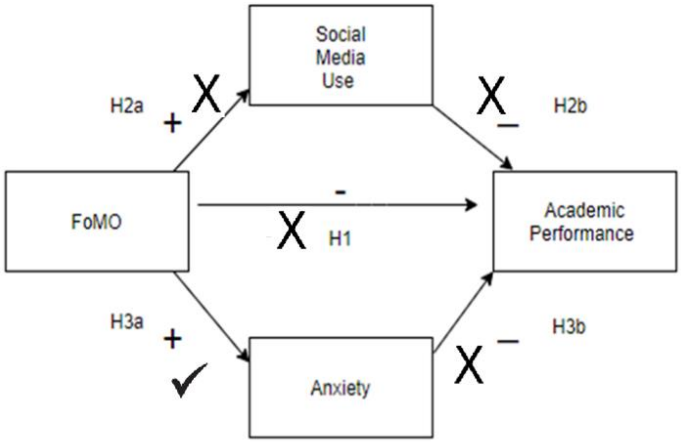
Finally, to determine if anxiety was a predictor of academic performance, a final hierarchical MRA was done. In step 1, age, gender, education level, FoMO (T_1) and social media use (T_2) which accounted for a significant 11.2% of the variance in academic performance at T_3, R^2 = .11, F (5, 361) = 9.12, p < .001. In step 2, anxiety was added to the regression equation, and did not add any additional percentage to the variance, ΔR^2 = .11, ΔF (1, 360) = .008 p= .929. When combined, the six predictor variables explained 22.4% of the variance in anxiety, R^2 = .0.11, adjusted R^2 = .97, F (6, 360) = 3.86, p < .001. Finally, it is concluded that anxiety at T_2 was not significantly related to academic performance at T_3, b = -.005, t(366) =-.089, p= .929.

Discussion

The study was designed to test the relationship between FoMO and academic performance over three years using longitudinal data. Results suggest a positive relationship between FoMO and anxiety but were not significantly related to one's academic performance at the T_3 level. Anxiety and social media use at T_2 also did not significantly predict academic performance at the T_3 level. Figure 2 visually represents which relationships presented in this study are significant.

Figure 2

Research model with illustrations describing significant and non-significant relationships.



Results suggest that there is no significant association between FoMO and academic performance (H1), From a theoretical perspective, receiving positive online updates may increase students' confidence and self-conception. Though FoMO itself has been known to create feelings of dissatisfaction and low self-concept (Taylor et al., 2014), students who have a strong sense of self-concept are more secure and confident in their ability to succeed and will be more likely to put more effort into their studies (Flook et al., 2005). In research from Kaya and Bicen (2016) a qualitative study in which 632 high school students were asked how social media use affected their academic behaviour. They found that through their peers' social media updates. students are more aware of academically and socially acceptable behaviour and learn to avoid destructive behaviour. According to Kaya and Bicen (2016), students will, for example, join extra-curricular activities if they see their peers enjoying their time, or if the activity is socially desirable such as a sport. This keeps students in school for longer and helps them avoid risky behaviour such as skipping class.

It is also surprising that for this data set, individuals experiencing FoMO-like symptoms do not seem to have an increase in social media use (H2a), nor does such use affect academic performance (H2b). This, however, can be explained by looking at the sample means for FoMO and concluding that this population, on average, does not display high levels of FoMO on a scale ranging from 1 to 5. If the population disclosed a higher amount of FoMO, then it may predict higher amounts of social media use as individuals will check social media more often. On a similar note, the average participant disclosed that they did not often use social media. The average participant uses social media only 6-10 times a day, a low amount, considering the

questionnaires anchors went up to “more than 40 times a week.” Because of this, there was not much variance regarding social media use which would have strengthened the correlation.

Further reasoning includes recent literature that suggests social media is an often-overlooked tool in academia and may help increase overall GPA. One qualitative study done by Aljuboori et al. (2020) on Iranian university students shows that many participants believe that social media is a reliable source of academic information, and they use social media as a means of reducing time, effort, and money in obtaining academic information. Social media use not only directly influences learning outcomes, but also aids students in attaining social acceptance from others and adapt to university culture, both of which are detrimental to improving learning outcomes (Yu et al., 2010).

The significant positive association between FoMO at T_1 and anxiety at T_3 (H3a) is unsurprising as FoMO reflects the worry individuals feel when they notice their peers are having rewarding experiences when they are absent (Dossey, 2020), one feels as if they are being "left behind" by their peers (Salem, 2019). In this study, participants, on average, do not experience extreme levels of anxiety, however, symptoms such as fear, nervousness and over-dependence on adults are still present. The lack of relationship between anxiety and academic performance (H3b) contrasts with existing studies that claim that having small levels of anxiety may be beneficial for academic success (Putwain & Daly, 2013). Though this is not what was initially predicted, this does fall in line with a variety of different studies. Research from Putwain and Daly (2013) studied 96 students aged 12-14 on how they performed on mathematical computer tests. Individuals who have moderate anxiety levels had higher test results if the participant had good working memory. This could be explained through the notion that anxiety can be used as a motivator as higher levels of anxiety are usually associated with higher levels of effort which positively affects performance (Hardy & Hutchinson, 2007). This is also made evident in performance studies with nursing students (McEwan & Goldenberg, 1999), where highly anxious participants learned quicker. This was attributed to the higher amount of anxiety they felt because of their fear of failure. This suggests that anxiety may be necessary for academic success due to the increase in motivation students feel when placed under appropriate amounts of pressure. For this study, there was no association between anxiety and academic performance though this can be attributed to different factors. Unlike Hardy & Hutchinson (2007) and McEwan & Goldenberg, (1999), this research did not study the fear of failure or academic

motivation. This was also made evident in the anxiety questionnaire where no such topics were touched upon. Future studies should adapt the questionnaire to include such topics to better represent anxiety caused by academic stressors.

Strengths and Limitations

One of the strengths of this study was how high school students were the main participants as they are rarely seen within FoMO-related studies as most literature thus far has focused on university students. The research's longitudinal design is also beneficial as it allows to examine whether the predictor precedes the outcome which aids in a better understanding of whether they may be a causal relationship between FoMO and academic performance. Furthermore, the study uses items from the Fear of Missing Out scale, (Przybylski et al., 2013), which is deemed a reliable questionnaire to determine FoMO and has been used and adapted for multiple studies across the globe such as in Turkey and Italy (Can & Satici, 2019).

There are however some important limitations. Firstly, the longitudinal data, though advantageous when examining causal relationships compared to correlational data, does not allow to test for causality. The sample also had a lack of variance within the variables of interest such as FoMO and anxiety which interferes with determining a significant association between predictors. Finally, the homogeneous population is a concern as the study was only conducted in high schools within The Netherlands.

Implications

For future implication and practices, the study should be replicated globally, as one may be able to consider different factors as to how FoMO, anxiety and social media use affects academic performance. For example, Singapore, which has one of the highest rates of academic-related anxiety (Ng, 2020), may strengthen the relationship between anxiety and academic performance. If the study was conducted in China, the global leader in social networking (Tang et al., 2021), there may be an increase in the variance in social media use which may increase FoMO levels and decrease academic performance. By accounting for differences between countries future research will be more effective at reducing the negative outcomes of FoMO, anxiety and high social media use.

Conclusion and Future Directions

The participants in this study, on average, have very low symptoms of FoMO, anxiety, social media use and have satisfactory grade point averages. Using hierarchical MRA’s, results

show that there is no significant relationship between FoMO and academic performance. Despite this, a positive correlation was found between FoMO and anxiety levels which aligns with previous research done by Przybylski et al. (2013).

Future directions must seek to reduce the symptoms of FoMO and aid students in managing their anxiety and monitoring the amount of time spent on social media. This is an important direction because of its rapid development and evolution, the prevalence of social media in everyday life is consistently remaining relevant (Young, 2017). An example of such measures can be through stressing the importance of "unplugging" oneself from the online world at least for temporary periods (Brown & Kuss, 2020), thus allowing students to focus more on interpersonal development and academic performance.

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