

# **FOMO and Relational aggression on Facebook**

Running head: FOMO and relational aggression on Facebook

Keywords: FOMO; Aggression; Facebook

POST PRINT (Please cite published version)

## **Abstract**

The use of Social Networking sites (SNS) has been associated with fear of missing out (FOMO) which is characterized by perceiving others as having more rewarding lives. The current study investigated whether FOMO is related to Facebook relational aggression through a desire to avoid inferiority and engagement in manipulative behaviors. Facebook users (N= 190, 87% female) completed an online survey assessing FOMO, striving to avoid inferiority, interpersonal manipulation, and Facebook relational aggression. Serial mediation analysis demonstrated that higher levels of FOMO were associated with increased desire to avoid inferiority, which in turn was associated with higher levels of interpersonal manipulation and subsequent higher reported rates of Facebook relational aggression. The research considers how FOMO is associated with socially aversive Facebook behavior to meet psycho-social needs deficits.

## Introduction

The digitisation of society has prompted a wealth of research on individual differences and online behavior, particularly in relation to social networking sites (SNS) such as Facebook.<sup>1, 2, 3</sup> One such individual difference is the ‘fear of missing out’ (FOMO). FOMO is a psychological state in which people become anxious that their social connections are leading more interesting and fulfilling lives than they themselves are.<sup>4</sup> Defined as a fundamental human motivation to feel attached and connected to others,<sup>5</sup> FOMO can result in perceived deficits in innate psycho-social needs.<sup>4</sup> Attempts to regulate these needs have been associated with compensatory online behaviors such as increased levels of social networking engagement, online self-presentation, and friending behaviors.<sup>4, 6, 7</sup> Furthermore, individuals displaying elevated levels of FOMO have reported several negative outcomes including increased Facebook related stress, Facebook intrusion, and decreases in life satisfaction.<sup>4, 5, 8</sup>

FOMO has been linked to self-determination theory<sup>4, 9</sup>, a motivational theory that posits that an individual’s motivations, behaviors, and wellbeing are intrinsically linked to three innate psychological needs: autonomy, competence, and relatedness. Individuals achieving high levels of intrinsic need satisfaction report positive effects in terms of psycho-social wellbeing.<sup>10, 11</sup> However, when attempts by an individual to satisfy their needs are thwarted, it has been shown to produce maladaptive psycho-social consequences.<sup>12</sup> Needs satisfaction can be impeded by the social comparisons an individual makes with others. Social comparison theory<sup>13</sup> suggests individuals will evaluate their attitudes, behaviors, and abilities by comparing themselves to others they see and interact with on a daily basis.

Access to social content afforded by SNS may lead individuals to engage in more frequent and potentially problematic social comparisons through the monitoring of Facebook friends’ profiles, behavior, and social relationships.<sup>2</sup> Frequent social comparisons have the capacity to

generate feelings of FOMO, threatening psycho-social needs as individuals perceive themselves as socially inferior and at risk of ostracism by their (online) social network.<sup>4</sup> Consequently individuals may engage in compensatory behaviors<sup>14</sup> which online may manifest as increased online self-disclosure and friending.<sup>6</sup> While a relationship between FOMO and relationally aggressive compensatory behaviors has not yet been clearly evidenced, it is feasible given that perceptions of social ostracism have been associated with anti-social compensatory behaviors<sup>15</sup>.

Anti-social compensatory behaviors are likely to be driven by an individual's desire to avoid perceptions of social inferiority<sup>16</sup> that stem from FOMO. In an attempt to create a more positive evaluation of themselves,<sup>17</sup> individuals may turn to behaviors such as interpersonal manipulation to decrease the status of others and boost their own psycho-social needs.<sup>15, 18</sup> This tendency to use social manipulation may then be related to online relational aggression. Relational aggression involves manipulating an individual's social network to damage relationships<sup>19, 20</sup> and functions to lower the social status of another individual whilst showing their own social value should not be ignored.<sup>21</sup>

Facebook provides users with several ways to manage social interactions with others<sup>22</sup> including opportunities to engage in relationally aggressive behavior. Facebook relational aggression may involve tagging individuals in embarrassing photos, deliberately ignoring someone on chat, or excluding them from seeing profile content.<sup>23</sup> Such acts of relational aggression undermine a target's rewarding social experiences, their social capital, and ultimately damages their status. In the context of FOMO, using strategies of exclusion and embarrassment may be particularly powerful in avoiding one's own feelings of inferiority by highlighting the inferiority of others. Therefore, higher levels of FOMO may ultimately prompt individuals to engage in more frequent Facebook relational aggression.

The present study explored the underlying mechanisms of the relationship between FOMO and relational aggression on Facebook. A serial mediation model tested the mediating role of striving to avoid inferiority and interpersonal manipulation in the relationship between FOMO and relational aggression. The following hypotheses are proposed:

H1: FOMO will be positively associated with Facebook relational aggressive behavior.

H2: FOMO will positively influence an individual's reported desire to strive to avoid inferiority.

H3: The relationship between FOMO and Facebook relational aggressive behavior will be serially mediated through a desire to strive to avoid inferiority and engagement in interpersonal manipulation.

## **Method**

### ***Participants***

UK-based university students (N = 190, after the removal of 30 incomplete participant responses, Mean Age = 20.00 years; *SD* = 2.51 years, 166 females, 24 males), were recruited voluntarily from an institutional research participation scheme. All participants were required to confirm they were active users of Facebook prior to completing the survey. Level of Facebook engagement was not recorded in the current study.

### ***Measures and procedure***

Participants completed an online survey which included demographics, striving to avoid inferiority, FOMO, interpersonal manipulation, and Facebook relational aggression measures. The survey link was distributed via an institutional participation scheme and was optimized for use on desktop computers and mobile devices. Measures used for the present study were:

The Fear of Missing Out scale (FOMO)<sup>4</sup> is a 10-item measure (e.g., “*I fear others have more rewarding experiences than me*”, Cronbach’s  $\alpha = .89$ ). Participants responded on a 5-point scale ranging from 1= Not at all true of me to 5= Extremely true of me. Higher mean scores represented higher levels of FOMO.

The 31-item Striving to Avoid Inferiority scale<sup>14</sup> was used to measure insecure striving to avoid inferiority (e.g., “*I need to match what other people achieve*”, Cronbach’s  $\alpha = .94$ ). Participants responded on a 5-point scale from 0= Never to 4= Always. Twelve items were reverse scored. Higher mean scores demonstrated higher levels of striving to avoid inferiority.

The 4-item Interpersonal Manipulation subscale from the Need for Drama scale<sup>24</sup> measures the general tendency to manipulate others (e.g., “*sometimes it’s fun to get people riled up*”, Cronbach’s  $\alpha = .78$ ). Participants responded on a 7-point scale from 1= Strongly disagree to 7 = Strongly agree. Higher mean scores demonstrated a higher tendency to manipulate others.

Relational Aggression on Facebook<sup>23</sup> is a 19-item measure that asks participants to respond to items assessing relational aggressive behavior towards a friend on Facebook (e.g., “*I often ignore my friend when they try to speak to me on Facebook chat*”, Cronbach’s  $\alpha = .92$ ).

Participants responded on a 5-point Likert scale from 1 = Strongly disagree to 5 = Strongly agree. Higher mean scores demonstrated higher levels of Facebook relational aggression.

## **Results**

### ***Preliminary analysis***

Descriptive statistics and correlations for all study variables are presented in Table 1. Data for all indicators met assumptions of normality (i.e., skewness  $\leq 3$ , kurtosis  $\leq 7$ ).<sup>25, 26</sup> Missing values were imputed with mean scale values prior to analysis. Lending support to the

hypotheses, bivariate correlations indicated that FOMO was positively associated with striving to avoid inferiority,  $r = .51, p < .001$ , manipulation,  $r = .25, p < .001$ , and Facebook relational aggression,  $r = .15, p < .01$ . Intercorrelations between the variables provided good grounds for further testing of serial indirect effects (H3).

*[Insert table 1 here]*

### ***Mediation analysis***

A bootstrapped serial mediation<sup>27</sup>, using PROCESS<sup>28</sup>, a SPSS macro, was used to test the sequential relationships (PROCESS model 6) between the main study variables (H3). Resampling with 5000 iterations was used to provide a more accurate estimation of the indirect effects.<sup>28</sup> The analysis of mediation effects via PROCESS uses an analysis of the 95% BCa confidence intervals (CI) to indicate significance. The effects are considered statistically significant if the CI does not include zero<sup>27</sup>. In the analysis (see Figure 1), age and gender were entered as covariates. No support for H1 was evident with a non-significant total effect between FOMO and Facebook relational aggression,  $\beta = .08, 95\% \text{ BCa CI } [-.01, .16]$ . FOMO was also not a significant predictor of manipulation,  $\beta = .21, 95\% \text{ BCa CI } [-.01, .42]$ . H2 was supported with a significant positive relationship between FOMO and striving to avoid inferiority,  $\beta = .37, 95\% \text{ BCa CI } [.28, .47]$ .

*[Insert figure 1 here]*

In PROCESS, serial mediation tests all possible indirect effects (see Table 2). A significant serial indirect effect was found between FOMO and relational aggression, via striving to avoid inferiority and subsequent interpersonal manipulation, supporting H3. Higher levels of FOMO were associated with individuals harbouring an increased desire to strive to avoid inferiority, which in turn was associated with higher levels of reported interpersonal manipulation, and resultant higher reported rates of Facebook relational aggression. The overall tested model

produced a completely standardised indirect effect,  $\beta = .15$  95% BCa CI [.06, .26], which was indicative of a modest overall effect size for the model. No other indirect effects tested as a result of the model were significant, indicating that striving to avoid inferiority and interpersonal manipulation did not mediate the relationship between FOMO and Facebook relational aggression when considered separately.

*[Insert table 2 here]*

### ***Discussion***

The present study explored the relationship between FOMO and the use of relational aggression on Facebook. While no direct relationship was evident between FOMO and Facebook relational aggressive behavior (H1), individuals experiencing higher levels of FOMO were driven to avoid feelings of inferiority (H2). Furthermore, the results demonstrated a serial indirect effect (H3), in that individuals experiencing FOMO had an increased desire to strive to avoid inferiority, which in turn resulted in higher levels of engaging in interpersonal manipulation, and subsequent higher reported rates of Facebook relational aggression.

FOMO is characterized by feelings that others have more exciting and rewarding lives and poor life satisfaction.<sup>4</sup> Therefore, it was not unexpected that such feelings should result in a bid to avoid feelings of inferiority. Subsequent engagement in social manipulation, that in turn excludes and embarrasses Facebook friends, appear to act as compensatory behaviors to mitigate against inferiority. Embarrassment or shaming another individual functions to damage reputation, whilst exclusionary behaviors aim to remove a rival that may be preventing achievement of a goal.<sup>20</sup> Both strategies minimise the perceived psych-social threat from their Facebook friends' seemingly more rewarding lives<sup>4</sup>. Although individuals may still experience FOMO, their manipulative behavior may 1) alleviate their own feelings

of inferiority and 2) draw the attention of other Facebook users to the target of their relational aggression, thus directing negative evaluations towards that user. In so doing, it is likely that an individual may experience a boost to their psycho-social needs.

### ***Conclusion***

The results demonstrate that Facebook users experiencing FOMO engage in online relational aggression to avoid their own feelings of inferiority. The present study develops previous research by showing that individuals experiencing FOMO may engage in socially aversive behavior to address psychosocial needs deficits. However, the study is not without limitations. This study did not include engagement with Facebook. FOMO may be a cyclic behavior<sup>4,6</sup> whereby individuals who experience FOMO may spend more time online which may then lead to stronger feelings of FOMO and, potentially, more aggressive online behavior. Individuals who are constantly connected to Facebook may be more likely to experience this cycle compared to casual users. Future longitudinal research should further investigate the relationship between Facebook engagement, FOMO, and online aggression with a larger representative sample.

The current study has implications for digital literacy. It is important for online users to be educated on managing their social relationships. Engaging in relational aggression online may have short term benefits but individuals experiencing FOMO may find themselves in a state of “self-regulatory limbo”<sup>4</sup> and if aggression becomes part of this cycle the individual is unlikely to experience decreased FOMO and healthier social relationships.

## References

1. De Zúñiga, H G, Diehl, T., Huber, B., & Liu, J. (2017). Personality Traits and Social Media use in 20 countries: How Personality Relates to Frequency of Social Media Use, Social Media News Use, and Social Media Use for Social Interaction. *CyberPsychology, Behavior, & Social Networking*, 20, 540-552,10.1089/cyber.2017.0295
2. Lee, E, & Cho, E. (2017). When Using Facebook to Avoid Isolation Reduces Perceived Social Support. *Cyberpsychology. Behavior, and Social Networking*, 21,32, 10.1089/cyber.2016.0602
3. Lin, J-S, Lee Y-I.,Jin, Y., & Gilbreath, B. (2017). Personality Traits, Motivations, and Emotional Consequences of Social Media Usage. *CyberPsychology, Behavior, & Social Networking*, 20, 615-623,10.1089/cyber.2017.0043.
4. Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29, 1841-1848, 10.1016/j.chb.2013.02.014.
5. Blachnio, A., & Przepiórka, A. (2018). Facebook intrusion, fear of missing out, narcissism, and life satisfaction: A cross-sectional study. *Psychiatry Research*, 259, 514-519, 10.1016/j.psychres.2017.11.012.
6. Buglass, S. L., Binder, J. F., Betts, L. R., & Underwood, J. D. M. (2017). Motivators of online vulnerability: The impact of social network site use and FOMO, *Computers in Human Behavior*, 66, 248-255, 10.1016/j.chb.2016.09.055.
7. Salim, F., Rahardjo, W., Tanaya, T., & Qurani, R. (2017). Are Self-Presentation Influenced by Friendship-Contingent Self-Esteem and Fear Of Missing Out? *Makara Human Behavior Studies In Asia*, 21, 70-82, 10.7454/mssh.v21i2.3502.

8. Beyens, I., Frison, E., & Eggermont, S. (2016). "I don't want to miss a thing": Adolescents' fear of missing out and its relationship to adolescents' social needs, Facebook use, and Facebook related stress. *Computers in Human Behavior*, *64*, 1-8, 10.1016/j.chb.2016.05.083.
9. Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York:Plenum
10. Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of personality*, *63*(3), 397-427.
11. Véronneau, M. H., Koestner, R. F., & Abela, J. R. (2005). Intrinsic need satisfaction and well-being in children and adolescents: An application of the self-determination theory. *Journal of Social and Clinical Psychology*, *24*(2), 280-292.
12. Soenens, B., Vansteenkiste, M., Luyten, P., Duriez, B., & Goossens, L. (2005). Maladaptive perfectionistic self-representations: The mediational link between psychological control and adjustment. *Personality and Individual Differences*, *38*(2), 487-498, 10.1016/j.paid.2004.05.008
13. Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117-140, 10.1177/001872675400700202.
14. Gilbert, P., McEwan, K., Bellew, R., Mills, A., & Gale, C. (2009). The dark side of competition: How competitive behavior and striving to avoid inferiority are linked to depression, anxiety, stress and self-harm. *Psychology and Psychotherapy: Theory, Research and Practice*, *82*, 123-136, 10.1348/147608308X379806.
15. Williams, K.D. (1997). Social ostracism. In R.M. Kowalski (Ed.), *Aversive Interpersonal Behaviors*, (pp. 133–170). New York: Plenum.

16. Basran, J., Pires, C., Matos, M., McEwan, K., & Gilbert, P. (2018). Styles of leadership, fears of compassion, and competing to avoid inferiority. *Frontiers in psychology*, 9, 10.3389/fpsyg.2018.02460
17. Gilbert, P., Broomhead, C., Irons, C., McEwan, K., Bellew, R., Mills, A., ... & Knibb, R. (2007). Development of a striving to avoid inferiority scale. *British Journal of Social Psychology*, 46, 633-648, 10.1348/014466606X157789.
18. Williams K. D. (2001). *Ostracism: The Power of Silence*. New York: Guilford.
19. Asher, Y., Stark, A., & Fireman, G. D. (2017). Comparing electronic and traditional bullying in embarrassment and exclusion scenarios, *Computers in Human Behavior*, 76, 26-34, 10.1016/j.chb.2017.06.037.
20. Archer, J., & Coyne, S. M. (2005). An Integrated Review of Indirect, Relational, and Social Aggression. *Personality and social psychology review*, 9, 212-230, 10.1207/s15327957pspr0903\_2.
21. Leary, M. R., Twenge, J. M., & Quinlivan, E. (2006). Interpersonal rejection as a Determinant of Anger and Aggression. *Personality and Social Psychology Review*, 10, 111-132, 111-132, 10.1207/s15327957pspr1002\_2.
22. Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13, 210–230, 10.1111/j.1083-6101.2007.00393.x.
23. Abell, L., & Brewer, G. (2014). Machiavellianism, Self-Monitoring, Self-Promotion and Relational Aggression on Facebook. *Computers in Human Behavior*, 36, 258-262, 10.1016/j.chb.2014.03.076.
24. Fankowski, S., Lupo, A. K., Smith, B. A., Dan'EL, M., Ramos, C., & Morera, O. F. (2016). Developing and testing a scale to measure need for drama. *Personality and Individual Differences*, 89, 192-201, 10.1016/j.paid.2015.10.009.

25. Kim, H.Y. (2013). Statistical notes for clinical researchers: assessing normal distribution using skewness and kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52–54, 10.5395/rde.2013.38.1.52.
26. Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, NY: Guilford Press.
27. Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891, 10.3758/BRM.40.3.87.9.
28. Hayes, A. F. (2015). “*The Process Macros for SPSS and SAS*” Available at <http://www.processmacro.org/index.html> Accessed on 24/10/2018