Examining the Flow Experience in Final Fantasy XIV Online through the Lens of Player Personality and Motivation to Play

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INTRODUCTION

The COVID-19 pandemic has led to increased involvement in video game related activities, including Massively Multiplayer Online Role-Playing Games (MMORPGs) (Nielsen, 2020). Specific to MMORPG's, this genre of game can integrate with a player's sense of self, and often reinforces continued play which leads to an experience of enjoyment and purpose due to elements of psychological flow which activate during gaming periods. Further investigation is needed on how personality theory and psychological flow expand multidisciplinary understanding of motivational conditions involved in online video game play.

While many MMORPGs currently exist, *Final Fantasy XIV Online* (FFXIV) (Square Enix, 2010) offers a well-supported and expanding gameplay for this genre. Understanding psychological responses for individuals playing FFXIV could provide actionable insights for the development of further positive impacts in games pertaining to player personality (Kaufmann, 2021; Vahlo & Hamari, 2019), gameplay motivations (Yee et al., 2012; Korkeila & Hamari, 2020; Vanderlei Fernandes et al., 2020), and flow (Andrade & Pontes, 2017). Thus, the current study utilized valid and reliable measure for personality factors, motivation for gameplay, and psychological flow to examine the impact of these player experiences. Results from this study add to the international discussion regarding healthy gameplay, games as a mechanism for self-reflection, and personal development.

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METHODOLOGY

Participants And Procedures

This study utilized an anonymous international sample of Final Fantasy XIV Online players. Participants completed an online survey distributed via social media and online sub-communities organized around this game in October of 2021. Websites utilized to distribute the survey consisted of social media frequented and widely available internationally (i.e. Facebook groups, Twitter, Discord servers, and reddit). Inclusion criteria for participation in the survey was being 18 years of age or older and no exclusion criteria was outline. The total sample size was 1,571 participants (n = 1,571).

The research questions for this study were designed to explore relationships between various personality features of the player, association with psychological flow, and how enjoyment and game preferences are experienced throughout gameplay. These questions are listed as follows:

Research Question 1: Is there a significant relationship between personality factors and motivation for playing Final Fantasy XIV Online?

Research Question 2: Is there a significant relationship between personality factors and the experience of psychological flow during the play of Final Fantasy XIV Online?

The instruments used to address the aforementioned research questions were the Big Five Inventory (BFI) (John & Srivastava, 1999), the LONG Dispositional Flow Scale (DFS-2) (Johnson et al., 2014), and the Motivation for Playing Online Games Questionnaire (MPOGQ) (Yee et al., 2012). Using IBM SPSS Statistics 27.0 software, nonparametric bivariate correlation analysis was utilized to examine any statistically significant correlations between dimensions of personality factors (i.e. extraversion, agreeableness, conscientiousness, neuroticism, and openness) and dimensions of motivation factors (i.e. advancement, mechanics, competition, socializing, relationships, teamwork, discovery, role play, and escape) for playing FFXIV Online. In addition, multiple regression analysis with stepwise regression was utilized to explore if there was a significant association between personality factors and the experience of psychological flow while playing FFXIV Online.

RESULTS

Of the total sample (n = 1,579), 30.5% reported they play an average of over 40 hours a week over the past three months, 17.2% play an average of 31-40 hours per week, 26.3% play an average of 21-30 hours, 21.8% play an average of 11-20 hours, and only 4.2% play 1-10 hours on average a week over the past three months. As can be seen in Table 1, dimensions of BFI personality factors and MPOGQ motivational factors indicated highly significant positive correlations with a large effect size, indicating a strong association, between BFI personality factors advancement and mechanics at .54 ($p<.001$) and competition at .45 ($p<.001$). Table 1 also shows that dimensions of BFI personality factors and MPOGQ motivational factors indicated highly significant positive correlations with a small effect size, indicating a lesser association, between advancement and socializing at .15 ($p<.001$), relationships at .13 ($p<.001$), customization at .13 ($p<.001$), escapism at .10 ($p<.001$), extraversion at .12 ($p<.001$), and conscientiousness at .10 ($p<.001$). Furthermore, advancement had a significantly negative correlation with a very small effect size, indicating a lesser association, agreeableness at -.09 ($p<.001$), and neuroticism at -.07 ($p<.001$).

		Advancement	Mechanics	Competition	Socializing	Relationship	Teamwork	Discovery	Role-Play	Customization	Escapism	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
Advancement	Pearson Correlation	1	.535**	.446**	.152**	.134**	.035	-.037	-.034	.131**	.102**	.124**	-.093**	.103**	-.074**	.010
	Sig. (2-tailed)		.000	.000	.000	.000	.162	.147	.182	.000	.000	.000	.000	.000	.003	.693
Mechanics	Pearson Correlation	.535**	1	.317**	.057*	.099**	.013	-.059*	-.066**	.064*	-.039	.076**	-.072**	.188**	-.133**	-.005
	Sig. (2-tailed)	.000		.000	.024	.000	.599	.019	.009	.011	.123	.003	.004	.000	.000	.856
Competition	Pearson Correlation	.446**	.317**	1	.127**	.133**	.102**	-.059*	-.048	.046	-.020	.146**	-.207**	-.034	-.120**	.021
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.020	.056	.068	.434	.000	.000	.178	.000	.399
Socializing	Pearson Correlation	.152**	.057*	.127**	1	.471**	.340**	.240**	.294**	.188**	.138**	.416**	.395**	-.004	-.067**	.214**
	Sig. (2-tailed)	.000	.024	.000		.000	.000	.000	.000	.000	.000	.000	.000	.869	.008	.000
Relationship	Pearson Correlation	.134**	.099**	.133**	.471**	1	.231**	.214**	.258**	.190**	.108**	.352**	.144**	.008	.070**	.232**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.752	.005	.000
Teamwork	Pearson Correlation	.035	.013	.102**	.340**	.231**	1	-.169**	-.065**	-.046	-.161**	.241**	.192**	-.055*	-.127**	.025
	Sig. (2-tailed)	.162	.599	.000	.000	.000		.000	.010	.068	.000	.000	.000	.028	.000	.322
Discovery	Pearson Correlation	-.037	-.059*	-.059*	.240**	.214**	-.169**	1	.397**	.302**	.201**	.071**	.118**	.049	.085**	.329**
	Sig. (2-tailed)	.147	.019	.020	.000	.000	.000		.000	.000	.000	.005	.000	.052	.001	.000
Role-Play	Pearson Correlation	-.034	-.066**	-.048	.294**	.258**	-.065**	.397**	1	.406**	.324**	.085**	.126**	-.084**	.162**	.353**
	Sig. (2-tailed)	.182	.009	.056	.000	.000	.010	.000		.000	.000	.001	.000	.001	.000	.000
Customization	Pearson Correlation	.131**	.064*	.046	.188**	.190**	-.046	.302**	.406**	1	.246**	.040	.018	-.091**	.132**	.234**
	Sig. (2-tailed)	.000	.011	.068	.000	.000	.068	.000	.000		.000	.115	.476	.000	.000	.000
Escapism	Pearson Correlation	.102**	-.039	-.020	.138**	.108**	-.161**	.201**	.324**	.246**	1	-.097**	.011	-.148**	.369**	.054*
	Sig. (2-tailed)	.000	.123	.434	.000	.000	.000	.000	.000	.000		.000	.655	.000	.000	.033
Extraversion	Pearson Correlation	.124**	.076**	.146**	.416**	.352**	.241**	.071**	.085**	.040	-.097**	1	.202**	.099**	-.269**	.262**
	Sig. (2-tailed)	.000	.003	.000	.000	.000	.000	.005	.001	.115	.000		.000	.000	.000	.000
Agreeableness	Pearson Correlation	-.093**	-.072**	-.207**	.395**	.144**	.192**	.118**	.126**	.018	.011	.202**	1	.104**	-.217**	.112**
	Sig. (2-tailed)	.000	.004	.000	.000	.000	.000	.000	.000	.476	.655	.000		.000	.000	.000
Conscientious-ness	Pearson Correlation	.103**	.188**	-.034	-.004	.008	-.055*	.049	-.084**	-.091**	-.148**	.099**	.104**	1	-.324**	.069**
	Sig. (2-tailed)	.000	.000	.178	.869	.752	.028	.052	.001	.000	.000	.000	.000		.000	.006
Neuroticism	Pearson Correlation	-.074**	-.133**	-.120**	-.067**	.070**	-.127**	.085**	.162**	.132**	.369**	-.269**	-.217**	-.324**	1	-.033
	Sig. (2-tailed)	.003	.000	.000	.008	.005	.000	.001	.000	.000	.000	.000	.000	.000		.188
Openness	Pearson Correlation	.010	-.005	.021	.214**	.232**	.025	.329**	.353**	.234**	.054*	.262**	.112**	.069**	-.033	1
	Sig. (2-tailed)	.693	.856	.399	.000	.000	.322	.000	.000	.000	.033	.000	.000	.006	.188	
	N	1579	1579	1579	1579	1579	1579	1579	1579	1579	1579	1579	1579	1579	1579	1579

Table 1: Correlation between personality factors & motivation for playing FFXIV

Multiple regression analysis with stepwise regression indicated the model explained 10% of the variance in psychological flow, $F(5, 1573) = 35.77$, $p < .05$. Collinearity diagnostics indicated good model fit (VIF <10). As can be seen in Table 2, conscientiousness was most highly positively associated with psychological flow (b = .13), followed by openness (b = .12), extraversion (b = .04), and agreeableness (.02). Neuroticism was negatively associated with psychological flow (b = -.01).

Personality Factor	B	Beta	p
(Constant)	.613		.000
Extraversion	.039	.067	.010
Agreeableness	.016	.019	.438
Conscientiousness	.127	.176	.000
Neuroticism	-.071	-.126	.000
Openness	.115	.133	.000

Table 2: Regression results for personality factors on psychological flow

CONCLUSION

The findings from this study indicate how player personality affects in-game motivation and activities while also considering impacts of psychological flow. This study found a significant relationship between personality factors and motivation for playing FFXIV. The study found a significant relationship between the personality factors of escapism, extraversion, and conscientiousness and the in-game motivational factors of socializing, relationships and customization. This can be indicative of how individuals with certain personality types may be more motivated than others to engage in gameplay that produces positive experiences. Results also found a highly positive significant association between overall psychological flow and the personality factors of conscientiousness, openness, extraversion, and agreeableness. Future research can utilize this evidence to examine how gameplay can lead to personal growth and advancement in self-awareness. Understanding who one becomes when they play online video games can be more pronounced as further game developers, researchers, and players move into new game experiences with these concepts in mind.

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