

Having to versus Wanting to Play: Background and Consequences of Harmonious versus Obsessive Engagement in Video Games

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Abstract

The present research examined the background and consequences of different styles of engagement in video game play. Based on self-determination theory¹ and the dualistic model of passion,² the authors hypothesized that high levels of basic psychological need satisfaction would foster harmonious passion for video play, supporting the subjective sense that play is something one *wants* to do. It was also predicted that low levels of need satisfaction would promote obsessive passion for games and contribute to the feeling that game play is something one feels compelled to or *has* to do. It was expected, in turn, that passion for play would directly influence player outcomes closely tied to games, moderate links between play and well-being, and relate to overall levels of well-being as a function of basic need satisfaction. As expected, results showed that low levels of basic need satisfaction were associated with more obsessive passion, higher amounts of play, greater tension following play, and low game enjoyment, whereas high levels of need satisfaction did not predict hours of play but were associated with more harmonious passion, game enjoyment, and energy following play. Moderation analyses showed that high amounts of play related negatively to well-being only to the extent that players reported an obsessive passion and that the unique relations between passion and overall levels of player well-being were quite small once controlling for their basic need satisfaction in daily life. Discussion of the current findings focuses on their significance for understanding disordered play and the value of applying a theory-based approach to study motivation for virtual contexts.

Introduction

MANY PEOPLE HAVE EXPRESSED CONCERN that video games have a detrimental influence on the psychological and physical well-being of players.³ Recent research focused on these concerns suggests that high amounts of video game play relate to lower school performance, reduced social adjustment, and a disordered style of play akin to clinically identified behavior dependencies.⁴ One recent study suggests that the disordered use of video games could be more widespread than once expected and that as many as 1 in 10 regular video game players might have disordered patterns of play.⁵

Despite widening public and empirical interest in disordered video game play, little is known about protective factors that lead to experiences of choice around play, the vulnerabilities that dispose some to feel compelled to play, and the unique contributions that more volitional or compulsive ways of playing video games might make to well-being. The present study applies the motivational approach of self-determination theory¹ and the dualistic model of

passion² to understand the motivational antecedents and well-being consequences of having and wanting to play video games.

Motivational approach

Self-determination theory is a macro-theory of human motivation is well suited to study the distinction between enhancing and disordered motives for video game play. It posits that psychological well-being and effective self-regulation are rooted in basic psychological need satisfaction.^{6,7} Studies conducted in a wide range of contexts robustly demonstrate that individuals who have the basic psychological needs for competence (capacity to effectively act on the world), autonomy (self-authorship or personal initiative), and relatedness (closeness or connectedness with others) met in day-to-day life experience high levels of personal well-being, have low levels of psychopathology, integrate important activities into their lives in healthy ways, and are less vulnerable to self-esteem pressures than are those who have

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these need satisfactions thwarted or undermined.^{9,10} Self-determination theory has been applied to the study of video games in a number of recent studies and has demonstrated that video games can provide players need satisfactions, thereby fostering positive short-term shifts in well-being and enhancing game enjoyment.^{11,12}

In line with self-determination theory, the dualistic model of passion is expressly concerned with the nature of passionate engagement in activities. Passion, as defined by Valerand et al., is thought of as a strong inclination toward an interesting and important activity.¹ The dualistic model of passion proposes that two kinds of motivational contingencies shape the overall quality of passion: full, autonomous internalization translates into *harmonious passion* for activities, while incomplete, controlled internalization produces *obsessive passion*. According to this model, harmonious passion for an activity means that the activity is personally important, freely chosen, and in harmony with the other aspects of a person's life. In contrast, obsessive passion for an activity is experienced as compelled or driven and leads activities into conflict with other facets of one's life. Research demonstrates that harmonious passion is frequently, but not always, associated with positive outcomes and that activities shaped by obsessive passion undermine well-being in a number of domains.^{13,14}

Recently, a small number of studies have examined the role of passion types in virtual contexts. Levesque et al.¹⁵ conducted the first empirical analysis of obsessive and harmonious passion in a study of the effects of passion for Internet use. The authors found that harmonious passion for the Internet related to healthier and more self-determined relationships compared to use driven by obsessive passion. Later research by Wang et al.¹⁶ examined general tendencies toward obsessive and harmonious passion for video game play and found that between-persons variability in obsessive passion for games related to incompletely internalized motivation for video game play and that the general tendency toward harmonious passion for games related to fuller motivational internalization (i.e., greater relative autonomy). Further, Wang et al. reported that obsessive passion related to reports of increased amounts of play and negative affect during play and that harmonious passion related to more positive affect during play. More recent research by Lafrenière et al.¹⁷ studying World of Warcraft players conceptually replicated Wang et al.'s findings. They demonstrated that this single gaming context had different effects on players as a function of the extent to which they were passionate about the game in an obsessive versus harmonious way. These preliminary applications of the dualistic model suggest that the quality of passion for a virtual context can have implications for the psychological well-being of individuals.

The present research

The central goal of the present study was to investigate the causes and consequences of different motivations for video game play, adopting an approach based on the theoretical framework of self-determination theory to address four novel research questions. First, we wanted to investigate the background conditions associated with the extent to which individuals engage video games as a harmonious or an obsessive passion. Second, we sought to examine the links between

type of passion for games and game enjoyment and postplay mood across an array of different gaming contexts. Third, we wanted to isolate the unique contributions that passion for play has on player well-being over and above other factors. And finally, we wanted to explore how passion for video game play influences the frequently studied links between quantity of play and player well-being.

Our first question was concerned with the source of passion for video game play. According to self-determination theory, basic psychological need satisfaction provides the resources required for complete internalization of motivation for activities. In line with this proposition, our first hypothesis was that high levels of trait need satisfaction would dispose one to fuller internalization of play and thus relate to increased harmonious passion for video game play. Similarly, we expected that low levels of need satisfaction would undermine complete internalization of play and present a vulnerability to higher levels of obsessive passion for video game play.

Our second question focused on how passion for video game play influenced game enjoyment and player mood. Although past research on virtual contexts showed that passion can influence these factors, prior passion research has shown that harmonious passion can be unrelated to positive outcomes.¹⁴ As such, it is not clear that the pattern of relations observed in previous research are consistent across a representative range of games types. Our hypothesis was that harmonious passion for video games would be linked with higher game enjoyment and high postplay energy, whereas obsessive passion would be related to a disordered pattern of play typified by high levels of play and high postplay tension. We further expected these results to hold across a broad spectrum of games.

Our third question concerned the unique contributions that motivation for video game play might make to player well-being. Based on self-determination theory, we posited that both harmonious video game play and overall psychological well-being are largely a function of basic need satisfaction in life. Our third hypothesis was thus that harmonious and obsessive passion for video game play would be correlated with, but not account for, a large share of incremental variance in overall well-being over and above need satisfaction.

Our fourth question focused on how the quality of play influenced the frequently studied links between quantity of play and negative player outcomes. Preliminary passion findings focused on virtual contexts suggest that the quality of motivation can shape interpersonal functioning and well-being. Our fourth hypothesis was that the amount of time players spent engaged with video gaming contexts would bear on postplay mood and overall player well-being as a function of individuals feeling as if they *have* to play. We specifically predicted that obsessive passion for video game play would moderate relations between quantity of play and outcomes such that high levels of video game play would relate to negative outcomes most prominently for players high in obsessive passion.

Method

Participants and procedure

For this study, we recruited 1,324 (1,168 male) video game players ranging in age from 18 to 43 years ($M = 24.01$,

$SD = 4.01$). This sample was drawn from members of a popular online community that provides a forum for discussions about video games and Internet culture. To participate, individuals must have been playing a favored video game for at least 1 month prior to the study. The survey was available for a 2-week period in April 2007, and a raffle prize worth \$100 was offered as an incentive for those who completed the study questionnaire. Only completed questionnaires were included for analysis, and cookie and IP filtering were used to protect against duplicate participation (no duplicates were found).

Measures

All assessments except for open-ended response variables were presented with Likert scales and response anchors as prescribed by their authors. To minimize reactivity, scales and items in the questionnaire were presented in a randomized order for each participant. In cases where the participant responded to items referencing their favored game, the instructions guided them to reflect on their experiences in the past 4 weeks of play.

Game type. Two raters, unaware of the study hypotheses, were trained to code the titles of games favored by participants into one of five distinct game genres. A diverse range of game types were represented: 192 participants reported playing action-adventure games (ADV), 309 massively multiplayer online games (MMOG), 284 role-playing games (RPG), 316 first-person shooters (FPS), and 223 played strategy games (STG).

Trait level need satisfaction. We assessed individual differences in basic psychological need satisfaction using the nine-item trait Need Satisfaction Scale.¹⁸ Items assessed autonomy (e.g., "I feel free to be who I am"), competence (e.g., "I feel very capable and effective"), and relatedness (e.g., "I feel a lot of closeness and intimacy with others") need satisfactions. We computed need satisfaction scores for each participant by reverse scoring items as prescribed in previous research and averaging across all nine responses ($\alpha = 0.85$).

Harmonious passion and obsessive passion. We measured passion for video game play using an adaptation of the 10-item English version of the Harmonious and Obsessive Passion for Gambling Scale.¹⁹ Using data piping, the name of the participant's favored game replaced the word "gambling" as it appeared in the original items. Five items assessed harmonious passion (e.g., "My playing [game title] reflects the qualities I like about myself"); and five assessed obsessive passion (e.g., "I have a tough time controlling my need to play [game title]"). We created harmonious passion ($\alpha = 0.85$) and obsessive passion ($\alpha = .85$) scores for each participant by averaging across items in each subscale.

Game enjoyment. Four items were adapted from the Intrinsic Motivation Inventory²⁰ to assess game enjoyment. Participants rated their level of agreement to four items, including "I think [game title] is boring" (reversed) and "I enjoy playing [game title] very much." Items were averaged to create a total game enjoyment score for each participant ($\alpha = 0.79$).

Weekly play time. Amount of play was recorded with a single free-response item. Participants were asked to reflect on their past month of video game play and estimate how many hours on average they spent weekly playing their favored game. Participants reported an average of 13.39 ($SD = 9.54$) hours of favored game play per week.

Postplay energy and tension. To measure participant mood postplay, participants completed the energy and tension subscales of the Activation-Deactivation Adjective Checklist.²¹ Participants rated 10 mood adjectives in terms of how they feel after playing their favored game. Five of these terms reflected energy and vitality (e.g., active, energetic, vigorous), and five tapped tension and anxiety (e.g., jittery, clutched up, fearful). We created individual postplay energy ($\alpha = 0.89$) and postplay tension ($\alpha = 0.87$) scores for each participant by summing scores on each subscale as prescribed.

Life satisfaction. We assessed participants' broad sense of satisfaction with their lives using the five-item version Satisfaction with Life Scale.²² Items included "In most ways my life is close to ideal" and "If I could live my life over I would change almost nothing." Individual scores were computed for each participant by averaging across responses ($\alpha = 0.87$).

Psychological and physical health. We assessed the overall psychological and physical health of participants using all eight subscales of the widely used short form of the Medical Outcomes Study Inventory (MOS-36).²³ Four subscales assessed psychological health, tapping social functioning, emotional well-being, emotional limitations, and fatigue; and four subscales assessed physical health through general health, physical functioning, physical limitations, and pain. We followed MOS-36 scoring guidelines and created standardized psychological health ($\alpha = 0.84$) and physical health ($\alpha = 0.75$) scores for each participant.

Results

Preliminary analyses

We observed a number of small but statistically significant relations among participant age, gender, and variables of interest (Table 1). Although these variables accounted for 3% or less of variation in our variables of interest, we conducted all analyses with and without controlling for participant gender and age. In all cases, the direction, magnitude, and significance of these analyses were unchanged.

RQ1: *How does need satisfaction shape the internalization of motivation for video game play?*

We hypothesized that high levels of need satisfaction would support harmonious passion, whereas low levels of need satisfaction would relate to higher obsessive passion. Zero-order analyses presented in Table 1 supported our expectations, revealing that trait need satisfaction positively correlated with harmonious passion, $r = 0.11$, and negatively correlated with obsessive passion, $r = -0.17$.

We examined the unique relations between need satisfaction and type of passion for video game play by regressing basic need satisfaction onto harmonious and obsessive passion scores. Results showed that individual differences in

TABLE 1. CORRELATIONS BETWEEN VARIABLES OF INTEREST

	<i>M (SD)</i>	1	2	3	4	5	6	7	8	9	10	11
1. Age	24.01 (4.01)											
2. Sex	—	-0.07**	—									
3. Trait-need satisfaction	5.05 (1.04)	0.07***	0.01	—								
4. Obsessive passion	1.60 (0.89)	-0.10***	-0.04	-0.15***	—							
5. Harmonious passion	3.86 (1.18)	0.02	-0.08**	0.11***	0.27***	—						
6. Game enjoyment	6.03 (0.87)	-0.03	-0.07**	0.17***	-0.06*	0.30***	—					
7. Weekly hours of play	13.39 (9.54)	-0.03	-0.01	-0.04	0.38***	0.14***	-0.07*	—				
8. Postplay energy	11.71 (3.85)	-0.07*	-0.03	0.13***	0.09**	0.24***	0.22***	0.03	—			
9. Postplay tension	9.25 (3.39)	-0.10***	0.06*	-0.07*	0.18***	0.07*	0.01	0.07*	0.53***	—		
10. Life satisfaction	4.10 (1.41)	-0.08**	0.01	0.61***	-0.07*	0.17***	0.14***	-0.08***	0.16***	-0.02	—	
11. Mental health	0.00 (1.00)	0.02	0.08***	0.63***	-0.19***	0.07*	0.18***	-0.07*	0.15***	-0.10***	0.55***	—
12. Physical health	0.00 (1.00)	-0.08***	0.15***	0.29***	-0.18***	-0.01	0.08***	-0.10***	0.05	-0.07*	0.29***	0.45***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

basic need satisfaction were positively related to harmonious passion, $\beta = 0.17$, $p < 0.001$, and negatively related to obsessive passion, $\beta = -0.19$, $p < 0.001$, supporting our first hypothesis.

RQ2: *How does motivation for play influence outcomes proximal to video gaming contexts?*

We hypothesized that harmonious passion for video game play would lead to a pattern of play epitomized by game enjoyment and postplay energy, whereas obsessive passion would be associated with a disordered pattern of play reflected in postplay tension and greater amounts of play. Zero-order analyses presented in Table 1 show the predicted pattern of relations: harmonious passion was positively correlated with game enjoyment, $r = 0.30$, and energy following play, $r = 0.24$; and obsessive passion positively correlated with weekly hours of play, $r = 0.38$, and tension following play, $r = 0.18$.

To examine the unique relations among passion, game enjoyment, and postplay mood, we constructed hierarchical regression models controlling for the variance shared between each of the passion subscales and variance relating to participant age, gender, and basic need satisfaction. Results presented in the upper part of Table 2 show that passion for video game play accounted for 10% of unique variance in game enjoyment: harmonious passion, $\beta = 0.32$, obsessive passion, $\beta = -0.14$; 14% of variance in weekly play hours: harmonious passion, $\beta = 0.04$, obsessive passion, $\beta = 0.37$; 5% of postplay energy: harmonious passion, $\beta = 0.22$, obsessive passion, $\beta = 0.04$; and 3% of postplay tension: harmonious passion, $\beta = 0.05$, obsessive passion, $\beta = 0.15$. Results thus largely supported our second hypothesis, except for unexpected negative relations found between obsessive passion and game enjoyment for players of multiplayer online,

strategy, and action adventure games. These relations suggested that the characterization of a disordered pattern of play in these kinds of games could also include reduced levels of game enjoyment.

RQ3: *How does motivation for play influence outcomes separable from video gaming contexts?*

We hypothesized that harmonious and obsessive passion for video game play would relate to global indicators of well-being. Zero-order analyses presented in Table 1 show the expected pattern of results; harmonious passion was positively correlated with life satisfaction, $r = 0.17$, and mental health, $r = 0.07$; and obsessive passion was negatively correlated with life satisfaction, $r = -0.07$, $p < 0.05$, mental health, $r = -0.19$, $p < 0.05$, and physical health, $r = -0.18$, $p < 0.05$.

In order to isolate only the unique relations between types of passion for video game play and overall levels of well-being, we created hierarchical regression models that controlled for the variance shared between passion subscales, as well as individual differences in participant age, gender, and trait need satisfaction. Results presented in the bottom part of Table 2 show that motivation for video game play was related to overall well-being outcomes but accounted for only 1% of unique variance in life satisfaction, 1% of variance in mental health, and 2% of variance in physical health when controlling for individual differences in basic need satisfaction. Trait need satisfaction, in contrast, accounted for almost 40% of variance in these outcomes. These results supported our third hypothesis: the influence of motivation for play on overall well-being was reducible to basic need satisfactions.

RQ4: *How does quality of motivation shape links between quantity of video game play and well-being?*

TABLE 2. SIMULTANEOUS HIERARCHICAL REGRESSION MODELS SHOWING UNIQUE RELATIONS AMONG PREDICTOR VARIABLES AND CRITERION VARIABLES

Criterion variables	Model step	Predictor variables	Game genre					
			All	RPG	MMO	FPS	STG	ADV
Game enjoyment	Step 1	TNS	0.17***	0.15*	0.18**	0.19**	0.24***	0.11
	Step 2	OP	-0.14***	0.04	-0.12**	-0.04	-0.22***	-0.16*
		HP	0.32***	0.23***	0.34***	0.36***	0.44***	0.38***
Amount of play	Step 1	TNS	-0.04	-0.12	-0.04	0.03	-0.03	-0.01
	Step 2	OP	0.37***	0.29***	0.48***	0.23***	0.19**	0.11
		HP	0.04	0.00	0.01	0.09	0.07	0.06
Postplay energy	Step 1	TNS	0.14***	0.01	0.27***	0.15**	0.14*	0.14
	Step 2	OP	0.04	0.08	-0.02	0.14*	0.01	0.18*
		HP	0.22***	0.18***	0.27***	0.27***	0.25***	0.27***
Postplay tension	Step 1	TNS	-0.07*	-0.08	-0.06	-0.01	-0.05	-0.18*
	Step 2	OP	0.15***	0.10	0.23***	0.17**	0.17*	0.17*
		HP	0.05	0.12*	0.07	-0.01	0.09	0.15*
Life satisfaction	Step 1	TNS	0.62***	0.64***	0.57***	0.57***	0.68***	0.57***
	Step 2	OP	-0.02	-0.04	-0.11*	-0.01	0.05	0.00
		HP	0.12***	0.08	0.15**	0.15**	0.09	0.09
Mental health	Step 1	TNS	0.63***	0.68***	0.57***	0.57***	0.70***	0.65***
	Step 2	OP	-0.11	-0.05	-0.20***	-0.04	-0.15**	-0.11
		HP	0.03	0.03	0.07	-0.02	0.03	0.07
Physical health	Step 1	TNS	0.30***	0.27***	0.34***	0.30***	0.35***	0.26***
	Step 2	OP	-0.15***	-0.13*	-0.15*	-0.22***	-0.13	-0.08
		HP	0.01	-0.04	-0.04	0.08	-0.05	0.13

Note: Game genre titles abbreviated; role-playing (RPG), multiplayer role-playing (MMO), first-person shooter (FPS), strategy (STG), and action-adventure (ADV), as are predictor variables; trait-need satisfaction (TNS), obsessive passion (OP), and harmonious passion (HP). * $p = 0.05$; ** $p = 0.01$; *** $p = 0.001$.

The final hypotheses was that the amount of time spent engaged with video games would be related to player well-being in part as a function of the extent to which motivation for play was harmonious or obsessive. Specifically, we tested five moderation models that evaluated player well-being in terms of postplay energy, postplay tension, life satisfaction, mental health, and physical health.

Results supported this expectation in some instances, showing that obsessive passion moderated the link between weekly hours of play and postplay energy, $t(1,320) = -4.11, p < 0.001$ (Fig. 1, top panel); life satisfaction, $t(1,320) = -2.09, p < 0.05$ (Fig. 1, center panel); and mental health, $t(1,320) = -2.06, p < 0.05$ (Fig. 1, bottom panel). Simple slope analysis of the postplay energy moderation revealed that it decreased as a function of time only for high obsessive passion players, $t(1,320) = -2.71, p < 0.001$, and that among players with low obsessive passion energy it increased after play, $t(1,320) = 3.40, p < 0.001$. Simple slope analysis of the interaction for life satisfaction showed that it decreased as a function of time spent playing only for players high in obsessive passion $t(1,320) = -2.99, p < 0.001$, and remained unchanged for those low in obsessive passion, $t(1,320) = 0.58, ns$. Simple slope analysis of the interaction for mental health revealed a positive trend for high hours of play for those low in obsessive passion, $t(1,320) = 1.72, p < 0.10$, and remained unchanged for players high in obsessive passion, $t(1,320) = 0.00, ns$. When individual differences in basic need satisfaction were entered as a control variable in these moderation models, only the simple slopes for the interaction on postplay

energy remained significant. These results lent support to our fourth hypothesis.

Discussion

The present study applied self-determination theory and the dualistic model of passion to gain a better understanding of the causes and consequences of players' feeling that they have to, instead of want to, play video games. Our aim was to empirically evaluate four novel and unaddressed questions present in the study of disordered video game play. Broadly speaking, the results obtained supported our hypotheses, lending weight to the notion that adopting a theory-based motivational approach to study disordered play can be fruitful.

Our first question focused on how ongoing or trait satisfaction of the basic psychological needs specified within self-determination theory is associated with the type of passion an individual adopts for video game play. Past self-determination theory-based research has demonstrated that basic psychological need satisfaction promotes effective integration of motivation in the relationship, sport, and exercise domains. Results obtained in the present study are consistent with this in showing that high levels of basic psychological need satisfaction were positively related to harmonious passion for video game play, whereas low levels of need satisfaction related to obsessive passion for video game play. Basic need satisfaction led to play pursued with a sense of volition and choice, whereas low levels of basic need satisfaction led to feelings of compulsion surrounding play.

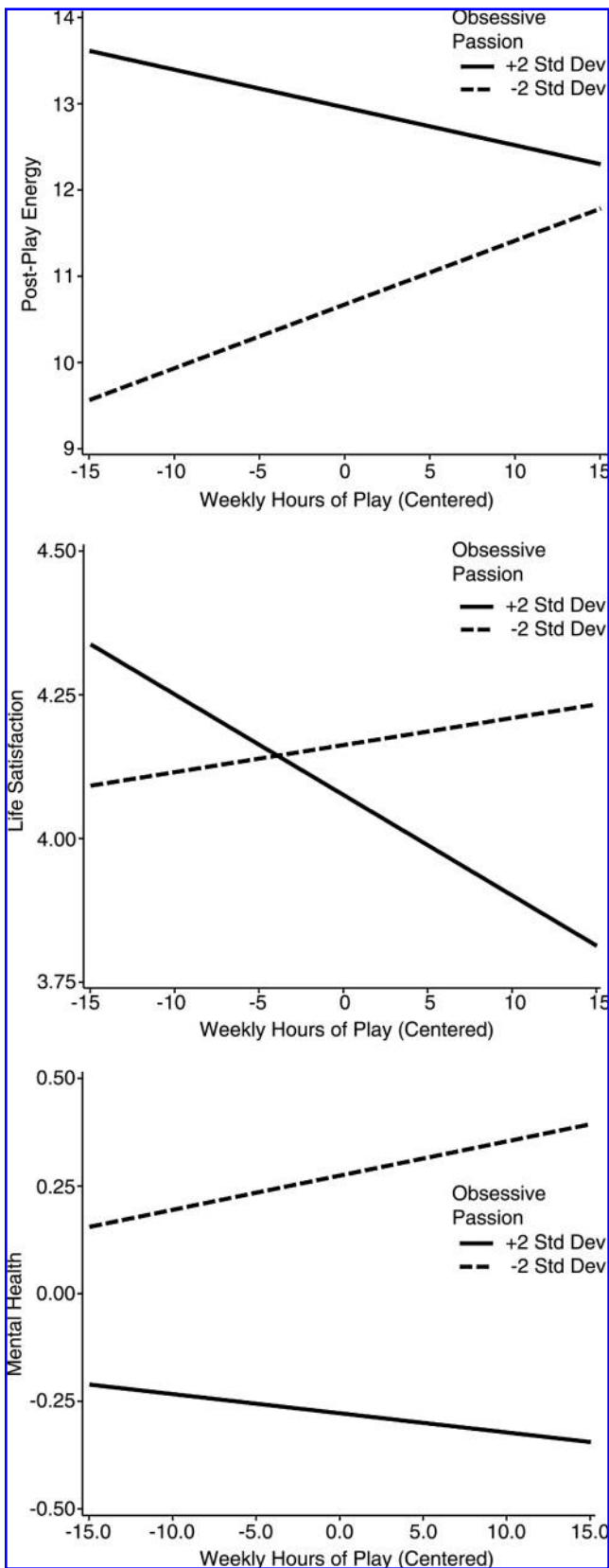


FIG. 1. The effects of the amount of play on player outcomes as moderated by obsessive passion.

Our second question concerned the effects of passion for video game play on player outcomes. Past research has shown that types of passion for activities can impact affective and relational outcomes. The results we obtained show that harmonious passion contributed to enhancing experiences of play relating to game enjoyment energy postplay but did not uniquely relate to amount of play. In contrast, obsessive passion contributed to a disordered pattern of play indicated by greater amounts of play, higher tension postplay, and less game enjoyment for players of some game types. These results extend past research in part by demonstrating this pattern across a broad range of games and player characteristics.

Our third question focused on the unique effects that motivation for video game play has on overall levels of player well-being. Self-determination theory research suggests that the internalization motivation for life pursuits (including passion for video game play) and well-being are both direct consequences of the psychological need supports. As such, we hypothesized and found that passion for video game play was correlated to well-being but accounted for only a small share of incremental variance in well-being when basic need satisfactions were considered. We interpreted this pattern of results as confirmation of our expectation that passion for play exerted far more influence on outcomes proximal to gaming contexts than that to overall levels of well-being.

Our fourth question concerned how motivation for video game play related to the frequently studied links between amount of play and well-being. The main predictor of player well-being in most past research of disordered patterns of play is the amount of time spent playing. We hypothesized that incompletely internalized motivation for play, a factor that represents the quality of play experience, would moderate relations between quantity of play and well-being. Results obtained show that quality influenced the effect of quantity for postplay energy, life satisfaction, and mental health. These interactions, and accompanying simple slope analyses, revealed that high amounts of play related only to lower levels of well-being for players high in obsessive passion. In the case of postplay energy, high levels of play paired with low levels of obsessive passion actually resulted in higher levels of postplay energy. The utility of identifying the contributors to motivation for play was highlighted by analyses that showed that the moderation models examining overall well-being levels were no longer significant once accounting for variability in basic need satisfactions.

Limitations

It is important to note a number of limitations to the present study. First, the population sampled was not selected on the basis of criteria of disordered play by clinicians. Surveying populations identified as disordered would be important for the generalizability of these findings. Second, our data was collected on a single occasion and therefore captures a single snapshot in time. Behavioral, longitudinal, experience sampling methods, as well as third-party data sources (e.g., parents or friends) would supplement the correlational nature of the present findings. Third, the present study was a between-persons, not a within-persons design. Understanding how more fully internalized, autonomous versus incompletely internalized, controlled regulatory styles of video game play constellate and vary within persons and be-

tween games would help us disambiguate disordered play rooted in individual differences from disordered play having to do with the characteristics of games proper. These limitations highlight areas for future investigations that may extend or qualify the present preliminary research.

Implications

This study presents a number of potential implications for the general public, researchers, and clinicians. Many in popular culture assume that unhealthy relationships with games are rooted primarily in the experiences games provide.²⁴ An important takeaway from this research is that these intuitions may be inaccurate, or at least incomplete. The current findings suggest that the ways in which players approach games, either as a volitional, enhancing pursuit or as a compulsive, deleterious one, can be considered a consequence of the psychological need supports players experience in their day-to-day lives. Players whose lives are more need satisfying are more likely to pursue games with a harmonious passion, accompanied by experiences of choice, energy, and enjoyment. Need thwarting, on the other hand, presents a risk factor for a disordered pattern characterized by long hours of compulsive, tense, and unenjoyable play.

A second important takeaway from this research is that a research approach focused on the quality of motivation for video game play can extend our understanding of the long- and short-term consequences of disordered patterns of play and inform self-determination theory-based interventions for behavior change.²⁵ The results showed that the unique positive and negative influences of game play were largely confined to outcomes related to the gaming context and that the motivational dynamics of disordered play run deeper than links between player well-being and quantity of play.

The good news of this research is that supporting the basic needs for competence, autonomy, and relatedness can improve the well-being of players outside of video gaming contexts and presumably also help protect against the disordered or unsatisfying game engagement associated with obsessive passion. As such, parents, teachers, therapists, peers, and others with whom an individual interacts can help to "protect" the individual from developing or maintaining obsessive play behavior. Future research is needed to further clarify how need support might inoculate against obsessive game engagement. The present work suggests it is a promising area of study in considering the interplay between real-life and game-life experiences.

Disclosure Statement

No competing financial interests exist.

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