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*Psychological Science* 2012 23: 69 originally published online 14 December 2011

DOI: 10.1177/0956797611418676

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# The Ideal Self at Play: The Appeal of Video Games That Let You Be All You Can Be

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Psychological Science  
 23(1) 69–76  
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 sagepub.com/journalsPermissions.nav  
 DOI: 10.1177/0956797611418676  
 http://pss.sagepub.com  


## Abstract

Video games constitute a popular form of entertainment that allows millions of people to adopt virtual identities. In our research, we explored the idea that the appeal of games is due in part to their ability to provide players with novel experiences that let them “try on” ideal aspects of their selves that might not find expression in everyday life. We found that video games were most intrinsically motivating and had the greatest influence on emotions when players’ experiences of themselves during play were congruent with players’ conceptions of their ideal selves. Additionally, we found that high levels of immersion in gaming environments, as well as large discrepancies between players’ actual-self and ideal-self characteristics, magnified the link between intrinsic motivation and the experience of ideal-self characteristics during play.

## Keywords

motivation, self, video games, self-determination theory, Big Five, virtual reality, motivation, personality

Received 2/3/11; Revision accepted 6/29/11

Every day, millions of people adopt novel identities and explore interactive narratives in video-gaming environments. However, little is known about the motivational appeal of these experiences because most research on human interaction with video games has focused on the potential of these games to promote aggression or addiction (Barnett & Coulson, 2010; Ferguson, 2010). In the research reported here, we diverged from this theme to investigate the notion that video games are intrinsically motivating in part because they provide a context (albeit a virtual one) in which players can explore different aspects of their selves and “try on” ideal characteristics.

## Convergence and Discrepancy Between Ideal and Actual Selves

The idea that individuals can discriminate between who they are and who they would like to be predates the advent of video games by more than half a century (James, 1910). Researchers within empirical psychology have extensively studied these two views of the self: the characteristics a person has (*actual self*) and the characteristics a person wants to have (*ideal self*). Early research in this area demonstrated that congruence between a person’s ideal and actual self-concepts is positively linked to psychological well-being, specifically, self-esteem (Rogers & Dymond, 1954). Likewise, discrepancies between actual-self characteristics and ideal-self characteristics have been linked to feelings of dejection and disappointment (Higgins, 1989),

whereas reduced discrepancies between actual-self and ideal-self characteristics have been associated with feelings of elation and joy (Carver & Scheier, 1998).

More recently, researchers have examined the conditions that facilitate the experience of ideal-self characteristics. Research on close relationships has shown that romantic couples, parent-child dyads, and friends can help bring out each other’s ideal self. According to *self-determination theory* (Ryan & Deci, 2000), interpersonal contexts that support the satisfaction of psychological needs, such as experiences of autonomy and competence, can reduce the perceived discrepancy between one’s actual and ideal characteristics and thereby enhance subjective well-being. In turn, the convergence of actual-self and ideal-self characteristics is associated with relational commitment. In two studies, we investigated whether the ability of games to foster such convergence was a factor in players’ attachment to gaming environments.

## Convergence of Ideal and In-Game Self-Concepts

A number of theorists have identified virtual environments, such as video-gaming contexts, as rich environments for the

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development of the self. Turkle (1994) proposed that contexts like the Internet and interactive games promote the creation and adoption of new self-representations. Kirsch (2006) extended this logic to argue that the popularity of violent video and computer games among adolescent males could be explained by the fact that such games provide players with opportunities to try on masculine identities. Research by Bargh and his colleagues has lent support to this line of thought by suggesting that virtual environments can provide wide-ranging forms of interaction through which alternative aspects of the self can find expression (Bargh, McKenna, & Fitzsimons, 2002). Similarly, Olson (2010) highlighted the fact that games provide children with opportunities to experiment with different identities: Children can choose whether to play as males or as females and can take on alternative social roles, including leadership and teaching roles. Video games provide a gamut of idealized attributes embodied by ready-made, idealized roles (e.g., a protector of kingdoms in *World of Warcraft*, a caring parent in *The Sims*, or a tough gangster in *Grand Theft Auto*) in highly immersive narratives. The appeal of video games may stem in part from the opportunities they provide to players: Video-game players can act in ways that are congruent with idealized views of the self and can experience abilities and satisfactions that are difficult to access in everyday life (Rigby & Ryan, 2011).

## The Present Research

In the present research, we tested the hypothesis that engagement in video games can allow players to experience their ideal-self characteristics. We focused on the relations among three complementary constructs: *ideal-self characteristics*, or how people would like to experience themselves; *game-self characteristics*, or how individuals experience themselves when playing video games; and *actual-self characteristics*, or how people are in their everyday lives. We refer to congruence between ideal-self characteristics and either of the other two dimensions as *convergence* and to incongruity between ideal-self characteristics and either of the other two dimensions as *discrepancy*. In a laboratory-based, within-subjects study and an observational, between-subjects study, we investigated three hypotheses concerned with *game-self-ideal-self convergence*: the overlap between a player's ideal-self characteristics and those that he or she experiences while playing video games.

First, we hypothesized that game-self-ideal-self convergence would be linked to high levels of intrinsic motivation, the core motivation thought to underlie engagement in leisure activities such as video games (Bartle, 2004; Frederick & Ryan, 1995; Malone & Lepper, 1987). Humans are naturally inclined to develop their potentials and to seek out opportunities to reduce discrepancies among their self-concepts (Deci & Ryan, 1985; Higgins, 1989; Rogers & Dymond, 1954), as well as to experience discomfort when such discrepancies are present. We expected that players would find games inherently

enjoyable to the extent that the games fostered the convergence of players' ideal-self and game-self characteristics, and that games that fostered such convergence would increase positive affect and reduce negative affect following play.

Second, we hypothesized that individual differences in discrepancies between ideal-self and actual-self characteristics in everyday life would moderate the relation between game-self-ideal-self convergence and intrinsic motivation. Research has suggested that individuals who have widely discrepant ideal and actual selves are prone to experience high levels of negative affect and low levels of well-being (Higgins, 1989; Lynch, La Guardia, & Ryan, 2009). Video games may ease the discomfort of such individuals by minimizing the discrepancies in their views of themselves (Moskalenko & Heine, 2003). We expected that game-self-ideal-self convergence would be especially appealing to players who experienced wide discrepancies between ideal-self and actual-self characteristics in their everyday lives.

Finally, we hypothesized that immersion in video-gaming contexts would influence the connection between game-self-ideal-self convergence and intrinsic motivation. Research indicates that immersion—the illusion of nonmediation between the experience of video-game players and the virtual environment—is an elemental aspect of game play (Lombard & Ditton, 1997; Rigby, 2004) and magnifies the effects of experiences in virtual contexts on behavior in the real world (Weinstein, Przybylski, & Ryan, 2009). We expected that greater immersion would make video games more intrinsically motivating for players who experienced game-self-ideal-self convergence.

## Study 1

In Study 1, we used a within-subjects design to investigate whether games allow players to experience themselves in accord with ideal-self characteristics and whether such experiences influence motivation to play video games and emotion. We hypothesized that greater game-self-ideal-self convergence would be linked to higher levels of motivation to play video games, as well as to higher positive affect and lower negative affect following play.

## Method

**Participants and procedure.** One hundred forty-four undergraduates (48 male, 96 female; mean age = 19.83 years,  $SD = 1.19$ ) reported to a media laboratory to take part in Study 1. The study utilized a within-subjects design in which participants responded to introductory questionnaires, played three different video games, and completed questionnaires after each game.

**Target games.** Three popular computer games were selected for this experiment because they could be played using simple controls yet provided diverse challenges embedded in

accessible narratives. In *Bookworm*, players must use their lexical abilities; in *Peggle*, they must use their visual and spatial skills; and in *Bejeweled*, they must match patterns. In a pilot study, experienced computer-game players ( $N = 205$ ) rated the level of imagination, self-confidence, and open-mindedness they experienced while playing a selection of computer games; the three games used in Study 1 received above-average ratings on these three factors, and participants in the pilot study indicated that these games enabled players to explore their talents and personal choices. The order in which the games were played was randomized, and each game was played for 10 min.

**Measures.** Ideal-self characteristics were assessed at the start of the study with items embedded in a demographic questionnaire. After playing each game, participants responded to measures of game-self characteristics, motivation to play video games, and affect.

Ideal-self characteristics and game-self characteristics were assessed with the Ten-Item Personality Inventory (Muck, Hell, & Gosling, 2007), in which participants indicate the degree to which each of 10 pairs of adjectives representing Big Five personality dimensions applies to their personality. At the start of the study, participants completed the inventory after receiving the following instructions: "Think of the attributes or characteristics you would ideally like to have—the type of person you wish, desire, or hope to be. . . ." Later in the study, game-self characteristics were assessed three times, once after each game had been played. At these times, participants completed the inventory after being instructed to "reflect on the characteristics you had when playing [game name]—when you were playing [game name], you saw yourself as someone who was . . . ." Items for neuroticism were reverse-scored. Each participant's average scores for neuroticism, extraversion, conscientiousness, openness to experience, and agreeableness were calculated ( $\alpha = .78$ ;  $M = 3.28$ ,  $SD = 0.53$ ).

Motivation to play video games was measured with four items adapted from the Intrinsic Motivation Inventory (McAuley, Duncan, & Tammen, 1989; Ryan, 1982), which has been used in previous research on video games (Przybylski, Ryan, & Rigby, 2009; Ryan, Rigby, & Przybylski, 2006). Example items are "I thought [game name] was boring" (reverse-scored) and "I enjoyed playing [game name] very much." The response scale ranged from 1 (*not at all*) to 5 (*quite a bit*). Scores for the four items were averaged to create a composite score for each player ( $\alpha = .88$ ;  $M = 3.32$ ,  $SD = 1.13$ ).

Positive and negative postplay affect were assessed with the Positive and Negative Affect Schedule—Expanded Form (PANAS-X; Watson & Clark, 1994). After playing each game, participants were instructed to consider their experiences and to rate the extent to which each of 20 adjectives reflected how they felt after play, using scales from 1 (*not at all*) to 5 (*extremely*). Ten adjectives indicated positive affect (e.g., "excited"), and 10 adjectives indicated negative affect (e.g., "upset"). The Positive Affect ( $\alpha = .93$ ;  $M = 2.54$ ,  $SD = 0.87$ )

and Negative Affect ( $\alpha = .92$ ;  $M = 1.32$ ,  $SD = 0.46$ ) subscales demonstrated good reliability, and an average score for each subscale was calculated for each participant.

Game-self–ideal-self convergence was computed separately for each game. Correlations between game-self and ideal-self characteristics were computed using items as the unit of analysis. We reverse-scored socially undesirable personality items (viz. neuroticism) before calculating the correlations. This procedure produced three coefficients (ranging from  $-1$  to  $+1$ ) for each participant; these coefficients represented the extent to which ideal-self characteristics were experienced in the context of each game.

## Results

**Analytic strategy.** Because of the nested nature of the data, we used hierarchical linear modeling (Bryk & Raudenbush, 1992) in our analysis. We tested full models that included predictor variables selected by theoretical considerations. We used a two-level model to examine game-self–ideal-self convergence at the within-subjects level, with the mean levels of game-self characteristics entered as control variables (Level 1). At the between-subjects level, we controlled for gender and age (Level 2). The general Level 1 equation was as follows:

$$Y = P_0 + B_1(\text{convergence}) + B_2(\text{mean}) + E,$$

where  $Y$  is the outcome variable,  $P_0$  is the intercept value of the outcome,  $B_1$  is the slope for concordance,  $B_2$  is the slope for mean-level characteristics, and  $E$  represents Level 1 error. At Level 2, we controlled for gender and age with the following equation:

$$P_0 = B_0 + B_{01}(\text{AGE}) + B_{02}(\text{MALE}) + R_0$$

where  $B_{00}$  is the average within-subjects intercept,  $B_{01}$  and  $B_{02}$  refer to the control variables, and  $R_0$  is error at Level 2. Level 1 variables were standardized before analysis and centered on individual means. Level 2 variables were centered at the sample mean. The upper portion of Table 1 presents zero-order bivariate correlations between the variables of interest.

It is important to note that our hypotheses focused on the covariation between ideal-self and game-self characteristics, not on the positivity in these self-concepts. This distinction is critical because variance linked to personality characteristics can confound results if such characteristics vary in their social desirability (Baird, Le, & Lucas, 2006; Lynch et al., 2009). With this fact in mind, we held such variation constant in our evaluation of the models.

**Intrinsic motivation.** We hypothesized that participants would be drawn to games that allowed them to experience their ideal-self characteristics. Multilevel analyses predicting intrinsic motivation indicated that players were more intrinsically motivated by games that promoted greater concordance

**Table 1.** Correlations Between Variables of Interest in Studies 1 and 2

Variable	1	2	3	4
1. Game-self-ideal-self convergence	—	.37***	.35***	-.17***
2. Intrinsic motivation	.19***	—	.42***	-.06
3. Positive postplay affect	.19***	-.37***	—	-.13**
4. Negative postplay affect	-.17***	-.21***	-.23*	—

Note: Coefficients above the diagonal are for Study 1; coefficients below the diagonal are for Study 2.  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

between ideal-self and game-self characteristics,  $b = 0.37$ ,  $t(415) = 8.03$ ,  $p < .001$ ,  $d = 0.79$ . To ensure that this relation resulted from the covariation between ideal-self and game-self characteristics and not from the level of the characteristics, we entered mean level of game-self characteristics as a control variable in another model. Results from this model also showed that participants found play more inherently motivating insofar as it brought them closer to their ideal-self characteristics,  $b = 0.30$ ,  $t(414) = 5.95$ ,  $p < .001$ ,  $d = 0.58$ .

**Postplay affect.** We hypothesized that participants would experience higher levels of positive affect and lower levels of negative affect after playing games that put players more in touch with their ideal-self characteristics. Two models that tested direct relations between positive affect and convergence,  $b = 0.29$ ,  $t(415) = 6.65$ ,  $p < .001$ ,  $d = 0.65$ , and between negative affect and convergence,  $b = -0.10$ ,  $t(415) = -2.97$ ,  $p < .05$ ,  $d = 0.20$ , showed that convergence accounted for significant between-game variation in affect. Follow-up models in which the mean level of game-self characteristics was held constant demonstrated that convergence was a significant predictor of both positive postplay affect,  $b = 0.15$ ,  $t(414) = 3.46$ ,  $p < .001$ ,  $d = 0.34$ , and negative postplay affect,  $b = -0.08$ ,  $t(414) = -1.97$ ,  $p < .05$ ,  $d = 0.19$ .

## Study 2

In Study 2, we extended our investigation by studying a sample of self-selecting video-game players. Using a between-subjects design, we aimed to reevaluate the relations between game-self-ideal-self convergence and motivation and between game-self-ideal-self convergence and postplay affect, as well as to evaluate two additional hypotheses. We hypothesized that players who experienced a wider gap between their actual-self characteristics and their ideal-self characteristics would find game-self-ideal-self convergence more motivating. Similarly, we hypothesized that immersive experiences of video-game play would magnify the link between game-self-ideal-self convergence in play and intrinsic motivation.

## Method

**Participants and procedure.** For this study, 979 computer- and video-game players (829 males, 150 females; age range = 18–48

years,  $M = 23.18$  years,  $SD = 4.84$ ) were recruited from a popular online community that focuses on gaming and Internet culture. To participate, individuals had to have reported playing a video game for at least 1 month prior to the study. The study consisted of a single administration of a set of questionnaires. We used cookie and IP filtering to prevent duplicate participation and included only questionnaires that were filled out completely in our analysis.

**Target games.** The majority of games participants reported playing were socially oriented, and they provided a diverse array of narratives and ready-made roles. The most popular games were team-based competition games (24%), such as *Team Fortress 2*, and online role-playing games (19%), such as *World of Warcraft*. Action and adventure games (14%), such as *Legend of Zelda*; strategy games (12%), such as *StarCraft 2*; and off-line role-playing games (12%), such as *Final Fantasy*, were also popular. The remaining selections (19%) belonged to an assortment of genres and included *The Sims* and *Guitar Hero*.

**Measures.** Participants were asked to reflect on their experience of themselves during their past 4 weeks of play before completing measures of motivation to play the video game they had reported playing ( $\alpha = .83$ ;  $M = 4.43$ ,  $SD = 0.64$ ), positive postplay affect ( $\alpha = .91$ ;  $M = 2.94$ ,  $SD = 0.91$ ), and negative postplay affect ( $\alpha = .87$ ;  $M = 1.31$ ,  $SD = 0.53$ ). As in Study 1, we used four items adapted from the Intrinsic Motivation Inventory to assess motivation to play video games and the Positive and Negative Affect subscales of the PANAS-X (Watson & Clark, 1994) to assess positive and negative postplay affect.

Ideal-self, actual-self, and game-self characteristics were assessed with three repetitions of a 30-item personality inventory (Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). The instructions for completing the inventory with regard to ideal-self and game-self characteristics were the same as in Study 1. To assess actual-self characteristics, we instructed participants to complete the inventory while reflecting on “the characteristics you see yourself having generally—the type of person you are.” We reverse-coded socially undesirable items and then averaged scores across items to create ideal-self, game-self, and actual-self scores.

Immersion was assessed with the nine-item Presence subscale of the Player Experience of Need Satisfaction Scale



(Przybylski et al., 2009; Ryan et al., 2006; Weinstein et al., 2009). Responses to items on this scale (e.g., “When moving through [game name], I feel as if I am actually there”) were made using scales from 1 (*not at all*) to 5 (*quite a bit*) and were averaged to create an immersion score for each player ( $\alpha = .76$ ;  $M = 3.06$ ,  $SD = 0.99$ ).

Using the method outlined in Study 1, we computed two convergence scores for each participant to quantify his or her game-self–ideal-self convergence and actual-self–ideal-self convergence (the covariation between ideal-self and actual-self characteristics).

## Results

**Data analysis.** Primary analyses were conducted using ordinary least squares regression analyses. Zero-order bivariate correlation coefficients between variables of interest are presented in the lower portion of Table 1.

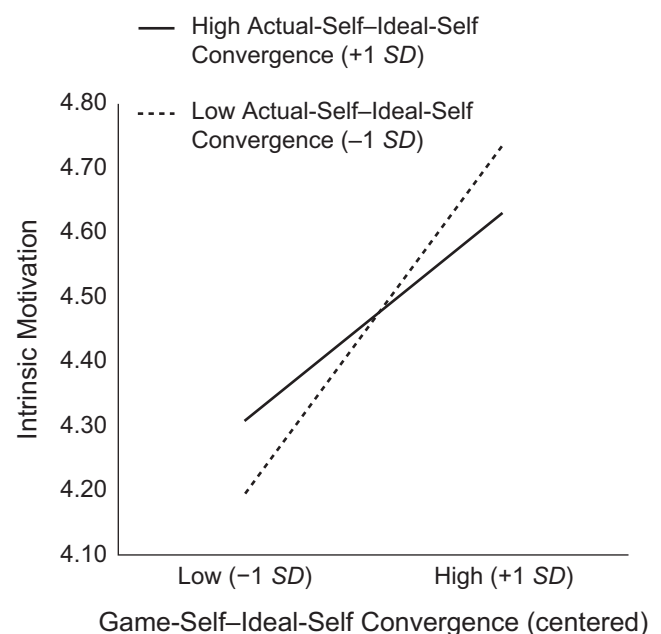
**Intrinsic motivation.** To test the hypothesis that players would be intrinsically motivated to play games that allowed them to experience aspects of their ideal selves, we regressed intrinsic motivation on game-self–ideal-self convergence; results showed that game-self–ideal-self convergence indeed predicted intrinsic motivation,  $\beta = 0.19$ ,  $t(977) = 5.96$ ,  $p < .001$ ,  $d = 0.38$ . To ensure that this link was not an artifact of positivity in game-self characteristics, we tested a follow-up model that controlled for mean levels of positive game-self characteristics; this analysis also indicated that game-self–ideal-self convergence was a significant predictor of intrinsic motivation,  $\beta = 0.11$ ,  $t(975) = 2.73$ ,  $p < .01$ ,  $d = 0.18$ . These results supported our hypothesis that players would evidence greater intrinsic motivation for games that brought them closer to their ideal-self characteristics.

**Postplay affect.** Our second prediction concerned the effects of game-self–ideal-self convergence on the emotions of players. Preliminary models indicated that game-self–ideal-self convergence was a significant predictor of both positive affect,  $\beta = 0.21$ ,  $t(977) = 6.64$ ,  $p < .001$ ,  $d = 0.43$ , and negative affect,  $\beta = -0.22$ ,  $t(977) = -7.01$ ,  $p < .001$ ,  $d = 0.45$ . Follow-up models controlling for mean levels of ideal and in-game characteristics showed that a high level of game-self–ideal-self convergence was linked to reduced negative postplay affect,  $\beta = -0.18$ ,  $t(975) = -4.47$ ,  $p < .001$ ,  $d = 0.28$ , but was not linked to changes in positive affect,  $\beta = 0.02$ ,  $t(975) = 0.56$ ,  $p > .50$ ,  $d = 0.03$ .

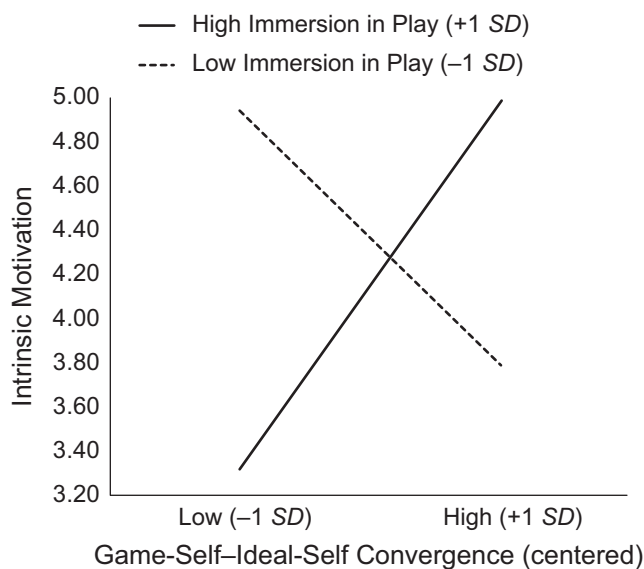
**Moderation by discrepancy.** To test the hypothesis that game-self–ideal-self convergence would be most motivating for players who experienced little overlap between their actual-self and ideal-self characteristics, we tested for moderation using a hierarchical regression model. In Step 1, we entered the mean level scores for ideal-self, actual-self, and game-self characteristics. In Step 2, we entered convergence

between ideal-self and actual-self scores and convergence between ideal-self and game-self scores. In Step 3, we entered the product of the two convergence scores from Step 2. This analysis revealed a significant moderation effect,  $t(973) = -3.45$ ,  $p < .001$ ,  $d = 0.22$  (see Fig. 1). Simple-slopes analyses showed a positive effect of game-self–ideal-self convergence on motivation to play video games among participants with low convergence between actual-self and ideal-self characteristics (1 *SD* below the mean),  $b = 0.25$ ,  $t(973) = 2.21$ ,  $p < .05$ ,  $d = 0.14$ , but we found no such effect among participants who had high convergence between actual-self and ideal-self characteristics (1 *SD* above the mean),  $b = 0.17$ ,  $t(973) = 1.30$ ,  $p > .10$ . These results indicate that players who experienced a wide discrepancy between their ideal self and actual self in their day-to-day lives were the players most motivated by games that provided them with opportunities to embody their ideal characteristics.

**Moderation by immersion.** To test our prediction that immersion in games would amplify the connection between game-self–ideal-self convergence and intrinsic motivation, we evaluated an interaction model. Results indicated that immersion moderated the link between game-self–ideal-self convergence and intrinsic motivation,  $t(973) = -3.55$ ,  $p < .001$  (see Fig. 2). Simple-slopes analyses indicated that games that promoted game-self–ideal-self convergence were most intrinsically motivating for players who were highly immersed (1 *SD* above the mean),  $b = 1.18$ ,  $t(973) = 4.58$ ,  $p < .001$ ,  $d = 0.29$ , and that low immersion (1 *SD* below the mean) in such games detracted from motivation,  $b = -0.58$ ,  $t(973) = -3.31$ ,  $p < .001$ ,  $d = 0.04$ .



**Fig. 1.** Predicted motivation to play video games as a function of game-self–ideal-self convergence and actual-self–ideal-self convergence. For both types of convergence, the “high” level is 1 standard deviation above the mean, and the “low” level is 1 standard deviation below the mean.



**Fig. 2.** Predicted motivation to play video games as a function of game-self-ideal-self convergence and immersion. For both game-self-ideal-self convergence and immersion, the “high” level is 1 standard deviation above the mean, and the “low” level is 1 standard deviation below the mean.

**Supplementary analyses.** To test the robustness of our general model of the effect of convergence between self-characteristics on emotion and motivation to play video games, we reanalyzed the data from both studies in terms of discrepancies between characteristics by computing the inverse of the root mean square of the difference (i.e., the euclidean distance) between actual-self and ideal-self scores and between game-self and ideal-self scores. This method augments our correlation-based approach because such indices account for the absolute differences between the ratings of different kinds of self-characteristics.

Results derived from this discrepancy-based method indicated that game-self-ideal-self discrepancy was negatively related to intrinsic motivation,  $b = -0.29$ ,  $t(415) = -6.08$ ,  $p < .001$ ,  $d = -0.60$  (Study 1), and  $\beta = -0.15$ ,  $t(977) = -4.42$ ,  $p < .001$ ,  $d = -0.28$  (Study 2). Greater game-self-ideal-self discrepancy was also related to lower levels of positive postplay affect,  $b = -0.37$ ,  $t(415) = -7.96$ ,  $p < .001$ ,  $d = -0.78$  (Study 1), and  $\beta = -0.25$ ,  $t(977) = -7.60$ ,  $p < .001$ ,  $d = -0.49$  (Study 2), and to higher levels of negative postplay affect,  $\beta = 0.21$ ,  $t(977) = 6.23$ ,  $p < .001$ ,  $d = 0.40$  (Study 2). (The relation between game-self-ideal-self characteristics and negative postplay affect was non-significant in Study 1.) Further, analyses from Study 2 indicated that discrepancies between ideal-self and actual-self characteristics,  $t(973) = -5.81$ ,  $p < .001$ ,  $d = -0.37$ , and immersion,  $t(973) = -3.48$ ,  $p < .001$ , served as moderators linking game-self-ideal-self discrepancy to intrinsic motivation. Simple-slopes analyses showed that players with a high degree of discrepancy between their ideal-self and actual-self characteristics (1 *SD* above the mean) found games most motivating if discrepancies between their ideal-self and game-self characteristics were small,  $b = -0.36$ ,  $t(856) = -6.59$ ,  $p < .001$ ,  $d = -0.45$ .

Similarly, the motivation of players with low immersion (1 *SD* below the mean) decreased when game-self-ideal-self discrepancy was wide,  $b = 0.26$ ,  $t(872) = -5.03$ ,  $p < .001$ ,  $d = -0.34$ . Taken together, our findings from this discrepancy-based approach constitute additional evidence for our model.

## Discussion

Video games are an increasingly popular medium for entertainment (McGonigal, 2011), yet the features that make these games so alluring have been understudied. In the research reported here, we investigated how the potential of video games to put players in touch with ideal aspects of themselves is associated with the games’ motivational appeal and emotional impact.

Findings at both within-subjects and between-subjects levels of analysis indicated that the experience of ideal-self characteristics during play was associated with increased motivation to play video games and accounted for variability in postgame emotion. These results were obtained using two different methods for quantifying covariation between self-characteristics: a convergence approach (correlations that use individual characteristics as the unit of analysis) and a discrepancy approach (inverse of the root mean square of the differences between self-characteristics). Using both laboratory and observational designs, we found evidence that convergence between people’s experience of themselves during play and their concept of their ideal selves was related to enjoyment of play and positive shifts in affect. Note that these relations held even when the mean levels in these self-concepts were held constant.

Further, in Study 2, we found evidence for two moderators linking game-self-ideal-self convergence to intrinsic motivation. Results indicated that the games most intrinsically motivating to players who felt a wide distance between who they were and who they would like to be were games that fostered game-self-ideal-self convergence. This finding extends previous research suggesting that the use of media can be motivated by the desire to avoid awareness of discrepant self-concepts (Henning & Vorderer, 2001; Moskalenko & Heine, 2003).

The similar pattern of moderation that we found for immersion is also noteworthy. This finding lends support to a position held by many interactive-media researchers: that immersion in virtual environments is a key to identification (Gee, 2003), self-exploration (Frasca, 2003; Klimmt, Hefner, & Vorderer, 2009), and goal adoption (Weinstein et al., 2009). Future research can extend our work by examining the mechanisms and features through which games provide opportunities for immersion and for the expression of ideal-self characteristics.

Humans spend a great deal of time, energy, and money in video-gaming contexts, yet little empirical research has investigated the fundamental factors that motivate engagement in this leisure activity. Our findings indicate that virtual environments, like close relationships (e.g., Drigotas, Rusbult, Wieselquist, &

Whitton, 1999; Lynch et al., 2009), may be motivating to the degree that they allow individuals to experience ideal aspects of themselves. The results of our work make clear that humans are drawn to video and computer games at least in part because such games provide players with access to ideal aspects of themselves; such access, in turn, can have short-term effects on emotion. Whether and to what degree such enactments are compensatory or constructive, and what lasting effects they might have, remains to be studied.

### Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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