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Short Communication

Self-esteem and passion for activities

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ABSTRACT

The Dualistic Model of Passion (Vallerand, 2010) regards passion as a strong inclination toward a self-defining activity that one loves, values, and in which one invests a substantial amount of time and energy. The model proposes two distinct types of passion, harmonious and obsessive, that predict adaptive and less adaptive outcomes, respectively. We hypothesized that individuals relatively high on explicit self-esteem would experience higher levels of harmonious passion, given their implementation of relatively adaptive self-regulatory strategies. Individuals relatively low on implicit self-esteem, on the other hand, would experience higher levels of obsessive passion, given their ego fragility and defensiveness. Participants completed the Passion Scale, the Rosenberg Self-esteem Scale, and the self-esteem Implicit Association Task. Path analyses revealed that, consistently with hypotheses, explicit self-esteem positively predicted harmonious passion, whereas implicit self-esteem negatively predicted obsessive passion.

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High self-esteem is associated with stronger initiative and more adaptive self-regulation strategies (Alicke & Sedikides, 2009; Di Paula & Campbell, 2002; Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005). In view of that, we propose that self-esteem is related to passion toward important life activities (Vallerand et al., 2003). However, self-esteem may be related not just to passion, but more precisely to type of passion that is prevalent in an individual. The present research thus represents a foray into the interplay between self-esteem and passion for activities, and in particular into the interplay between different kinds of self-esteem (explicit vs. implicit) and different types of passion (harmonious vs. obsessive).

1. The Dualistic Model of Passion

The Dualistic Model of Passion (Vallerand, 2010; Vallerand et al., 2003) regards passion as a strong inclination toward a selfdefining activity that one loves and finds important, and in which one invests a substantial amount of time and energy. This model further proposes the existence of two distinct types of passion, harmonious and obsessive. Harmonious passion refers to a strong desire to engage freely in the activity that one loves. With harmo-

* Corresponding author. Address: Laboratoire de Recherche sur le Comportement Social, Département de Psychologie, Université du Québec à Montréal, Box 8888, Succursale Centre-Ville, Montréal, Québec, Canada. nious passion, the activity is part of an integrated self-structure (Hodgins & Knee, 2002) and aligns well with other aspects of the person's life. Thus, harmonious passion is expected to be associated with adaptive outcomes not only during, but also after activity engagement. Obsessive passion for an activity, on the other hand, represents an uncontrollable urge to engage in the activity. Although, with this type of passion, the activity is still part of the person's identity, obsessively passionate individuals routinely fall back on the activity for self-protective purposes (Hodgins & Knee, 2002). Consequently, obsessive passion is expected to be associated with less adaptive outcomes.

Empirical findings have been consistent with this conceptualization of passion. Harmonious and obsessive passion are positively related (Vallerand, 2010), and are each positively related to activity valuation, perception of the activity as a passion, and inclusion of the activity in the person's identity (Vallerand et al., 2003, study 1). Both types of passion, then, reflect adequately the definition of the passion construct. However, the two types of passion are differentially associated with outcomes. Harmonious passion is positively related, whereas obsessive passion is either unrelated or negatively related, with psychological adjustment indices and also with positive emotions and flow during activity engagement (Vallerand et al., 2003). Moreover, harmonious passion is negatively related, whereas obsessive passion is positively related, with the experience of conflict between one's passion and other life activities (Vallerand, Paquet, Philippe, & Charest, 2010). In addition, only obsessive passion is positively related to self-protective behavioral displays such as aggression, especially when such

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displays occur under conditions of identity threat (Donahue, Rip, & Vallerand, 2009).

2. The present research

Self-esteem is defined as an evaluation of, or an attitude toward, oneself (Sedikides & Gregg, 2003, 2008; Sedikides & Strube, 1997). Individuals possess self-esteem not only in an explicit (i.e., conscious and reflective) mode but also in an implicit (i.e., unconscious and impulsive) mode (Greenwald & Banaji, 1995). The two modes represent rather distinct conceptualizations and functional properties of self-esteem (Greenwald & Banaji, 1995; Greenwald & Farnham, 2000). Indeed, explicit and implicit measurement of self-esteem are weakly and positively correlated (Bosson, Swann, & Pennebaker, 2000; Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005; Rudolph, Schröder-Abé, Schütz, Gregg, & Sedikides, 2008).

The objective of the present research was to examine the interplay between explicit and implicit self-esteem on the one hand, and harmonious and obsessive passion on the other. First, we hypothesized that individuals high on explicit self-esteem would experience higher levels of harmonious passion. Individuals with high explicit self-esteem make use of more adaptive selfregulatory strategies, in that they are more responsive to situational cues (i.e., degree of failure, presence of alternatives, amount of progress) and are more efficient in self-regulating multiple goals (Alicke & Sedikides, 2009; Di Paula & Campbell, 2002; Sedikides, Gregg, & Hart, 2007). It follows that these individuals will be characterized by higher levels of harmonious passion, given that they are more likely to engage in the pertinent activity thoughtfully while keeping in perspective other key life domains.

Second, we hypothesized that individuals low on implicit selfesteem would experience higher levels of obsessive passion. Implicit self-esteem is negatively related to signs of defensiveness and ego fragility such as narcissism, in-group bias, and dissonance reduction (Gregg & Sedikides, 2010; Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003; Sedikides, Cisek, & Hart, in press). Hence, individuals low on implicit self-esteem will be characterized by higher levels of obsessive passion, as they will be more likely to engage in self-protective and compensatory behavior.

Finally, we posited that explicit self-esteem would be unrelated to obsessive passion, as we hold that obsessive passion stems from deep-rooted defensiveness that is not necessarily available for conscious articulation. Thus, adaptive self-regulatory strategies associated with explicit self-esteem will not avert individuals from implementing the pertinent activity for self-protective purposes, as is the case with obsessive passion. On the other hand, we expected that implicit self-esteem would be unrelated to harmonious passion, assuming that harmonious passion requires more conscious and reflective processes in order to integrate synergistically the passionate activity in one's life. Thus, even if individuals low on implicit self-esteem engaged in more self-protective and compensatory behavior, this should not be related with their ability to selfregulate multiple goals effectively and to experience high levels of harmonious passion.

3. Method

3.1. Participants

Participants were 105 University of Maryland undergraduate students (65 females, 40 males; M_{age} = 19.32, SD_{age} = 1.49), who took part in exchange of introductory psychology course credit. Participants had been involved in their passionate activity for an average of 9.15 years (SD = 3.86), and were currently devoting to

it an average of 20.56 h (SD = 12.00) per week. Participants mentioned over 50 different activities (e.g., painting, snowboarding, yoga, reading novels). We coded activities into eight categories (Vallerand et al., 2003, study 1), ranging from individual sport (e.g., jogging; 29.4%) to playing music (e.g., playing the guitar; 2.9%).

3.2. Procedure

Participants responded to all measures in private. All of them initially completed a measure of passion. Then, they completed a measure of explicit self-esteem and a measure of implicit selfesteem in counterbalanced order.

3.3. Measures

3.3.1. Passion for the activity

Participants thought of an activity "that is very dear to your heart." Next, they listed this activity and completed the Passion Scale (1 = *not agree at all*, 7 = *very strongly agree*) while referring to the activity. This scale (Vallerand et al., 2003) consists of 6 harmonious passion items (e.g., "My activity is in harmony with the other activities in my life;" α = 0.75) and 6 obsessive passion items (e.g., "I have almost an obsessive feeling for my activity;" α = 0.72). Exploratory and confirmatory factor analyses point to a two-factor structure of the Passion Scale (Vallerand, 2010). Also, the scale has high levels of internal consistency as well as predictive, discriminant, construct, and external validity (Vallerand, 2010). Furthermore, research involving the scale indicates that both harmonious and obsessive passion are indeed a "passion," as each correlates positively with definitional features of the passion construct (Vallerand et al., 2003, study 1).

3.3.2. Explicit self-esteem

We assessed explicit self-esteem with the 10-item Rosenberg (1965) Self-esteem Scale (1 = *not agree at all*, 7 = *very strongly agree*). Sample item: "I feel that I have a number of good qualities" ($\alpha = 0.88$).

3.3.3. Implicit self-esteem

We assessed implicit self-esteem with a generic form of the self-esteem Implicit Associations Test (IAT; Greenwald & Farnham, 2000). The procedure followed the standard IAT paradigm. We labeled the evaluative dimension "pleasant" and "unpleasant," and the self-dimension "self" and "other." Target words were identical to Greenwald and Farnham's (study 3). No participant error rate exceeded 20%. We recoded response times smaller than 300 to be 300 ms, and we recoded responses larger than 3000 to be 3000 ms. We log transformed response times and averaged all responses within each block. We obtained an adjusted IAT score by subtracting the compatible block (i.e., Me-Pleasant vs. Other-Unpleasant) from the incompatible block (i.e., Me-Unpleasant vs. Other-pleasant) and then dividing this difference by the standard deviation of all the latencies from the two blocks (Greenwald, Nosek, & Banaji, 2003). Positive scores indicated greater positive associations with self. The split-half correlation, adjusted with the Spearman-Brown prophecy formula, was 0.63.

4. Results

4.1. Preliminary analyses

There were no missing values. Skewness indices for all variables were normal (values ranged from -1.14 to 0.51). Data screening revealed no value higher than three standard deviations from the

 Table 1

 Means, standard deviations, and correlations involving all variables (N = 102).

	М	SD	2	3	4
Harmonious passion (1) Obsessive passion (2) Explicit self-esteem (3) Implicit self-esteem (4) ^a	5.08 2.37 5.53 651.91	0.98 1.01 0.97 268.70	0.19 [†]	0.21 [*] -0.18 [†]	0.10 -0.20* 0.19 [†]

^{*} p < 0.05.

 † *p* = 0.06.

^a For illustrative purposes, the mean reflects the raw difference score between the incompatible and compatible blocks in ms.

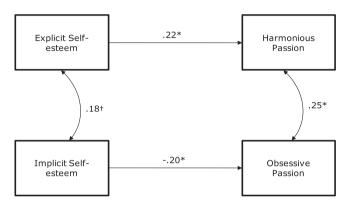


Fig. 1. Path Analytic Model **p* < 0.05; †*p* = 0.06.

mean. Additionally, in order to screen for multivariate outliers, we computed Mahalanobis distance values for all participants. Three participants, out of the 105, exceeded the critical χ^2 value at the p < 0.001 level. We thus removed these participants from all subsequent analyses. We excluded gender and activity category from the results below, because preliminary analyses produced no effects involving these variables. Finally, the results were unaffected by counterbalancing order. We display means, standard deviations, and correlations for all measures in Table 1.

4.2. Main analyses

We tested the model with path analyses (EQS 6.1; Bentler, 1993) using maximum likelihood estimation procedure (Fig. 1) and reporting robust statistics. We specified two paths: one between explicit self-esteem and harmonious passion, and one between implicit self-esteem and obsessive passion. Furthermore, we estimated two covariance paths: between explicit and implicit self-esteem, and between harmonious and obsessive passion. The model had an acceptable fit to the data, $\chi^2(df = 2, N = 102) = 2.57$, p = 0.28, while the other fit indices were also acceptable, CFI = 0.96, IFI = 0.97, RMSEA = 0.05.

We display all statistics in Fig. 1. The estimated covariance path between explicit and implicit self-esteem was marginal and positive, a pattern consistent with past research (Bosson et al., 2000; Greenwald & Banaji, 1995; Hofmann et al., 2005; Rudolph et al., 2008). Moreover, the estimated covariance path between harmonious and obsessive passion was significant and positive, a pattern also consistent with past research (Vallerand, 2010). Importantly, explicit self-esteem positively predicted harmonious passion. Equally importantly, implicit self-esteem negatively predicted obsessive passion. Results from Wald and Lagrange Multiplier tests suggested that no addition or deletion of any parameters could significantly improve model fit. Accordingly, the potential paths between explicit self-esteem and obsessive passion ($\beta = -0.08$, p = 0.35), and between implicit self-esteem and harmonious passion ($\beta = 0.06$, p = 0.53), were not significant. For exploratory purposes, we conducted additional path analyses to examine the interaction effect of explicit and implicit self-esteem on harmonious and obsessive passion. The explicit self-esteem × implicit self-esteem interaction was related neither to harmonious passion ($\beta = -0.14$, p = 0.16) nor to obsessive passion ($\beta = -0.02$, p = 0.84).

5. Discussion

This research aimed to examine the interplay between explicit and implicit self-esteem on the one hand, and harmonious and obsessive passion on the other. We hypothesized that individuals high on explicit self-esteem would experience higher levels of harmonious passion. This is so because such individuals implement more adaptive self-regulatory strategies (Alicke & Sedikides, 2009: Di Paula & Campbell, 2002: Donnellan et al., 2005), which render them more likely to be harmoniously passionate. We also hypothesized that individuals low on implicit self-esteem would experience higher levels of obsessive passion. This is so because such individuals are more defensive and have more fragile ego (Gregg & Sedikides, 2010; Jordan et al., 2003; Sedikides et al., in press), rendering them more likely to be obsessively passionate. Finally, we posited that explicit self-esteem would be unrelated to obsessive passion, and that implicit self-esteem would be unrelated to harmonious passion. The results were consistent with the hypotheses. Explicit self-esteem positively predicted harmonious passion, whereas implicit self-esteem negatively predicted obsessive passion. Further, explicit self-esteem was unrelated to harmonious passion, whereas implicit self-esteem was unrelated to harmonious passion.

The results have several implications. The positive link between explicit self-esteem and harmonious passion, and the negative link between implicit self-esteem and obsessive passion, not only build on the notion that the two types of self-esteem function differently (Greenwald & Banaji, 1995; Greenwald & Farnham, 2000; Rudolph et al., 2008), but they also uniquely establish passion as a correlate of self-esteem. Future research would do well to explore mediators or moderators (e.g., depression, neuroticism, subjective wellbeing) of the relation between passion and self-esteem. Moreover, these findings suggest a novel outcome linked to low implicit selfesteem, namely addictive behavior. Past research (Vallerand, 2010; Vallerand et al., 2003, study 3) has shown that obsessive, but not harmonious, passion is associated with addictive behavior such as pathological gambling, excessive online gaming, and online shopping dependency. Implicit self-esteem, then, given its association with obsessive passion, may also be linked with addictive behavior, perhaps initiated for self-protective or compensatory reasons (Gregg & Sedikides, 2010; Jordan et al., 2003; Sedikides et al., in press). In fact, implicit self-esteem and obsessive passion may interact to augment addictive behavior. These issues, alongside, the development of implicit (as well as explicit) self-esteem and obsessive (as well as harmonious) passion (Mageau et al., 2009) are worthy of a place in future research agendas.

The findings also provide insight into the temporal fluctuation of harmonious and obsessive passion. Temporal stability of harmonious and obsessive passion is moderately high (Vallerand, 2010), suggesting that, although passion is relatively stable, there is room for change and fluctuation. Yet, obsessive passion is more stable than harmonious passion. With harmonious passion, then, the person can decide when to and when not to engage in the activity, and is able to regulate activity engagement in light of external cues. Such is not the case with obsessive passion. Typically, because the activity has taken control of the person, obsessive passion is related to rigid persistence (Vallerand et al., 2003, study 3). Moreover, implicit (compared to explicit) attitudes are less sensitive to modification once formed (Gregg, Seibt, & Banaji, 2006). The current findings thus provide an explanation as to why obsessive passion, once formed, is less likely to change over time, given its connection with more stable self-beliefs (i.e., implicit self-esteem). The findings also provide an account of why harmonious passion, once formed, is more changeable, given its connection with more malleable self-beliefs (i.e., explicit self-esteem).

Our findings can be enriched in several ways. It should be noted that the direction of paths are theoretically grounded but correlational in nature. Consequently, given that the correlation design does not permit causal inferences, future research might consider employing either longitudinal or experimental designs to clarify the causal flow between self-esteem and passion. Also, explicit self-esteem and passion could be assessed through measures that do not rely exclusively on verbal reports, and explicit as well as implicit self-esteem could be assessed with multiple measures. Regardless, our foray into the link between self-esteem and passion has yielded some provocative findings. Not just self-esteem, but type of self-esteem matters with respect to passion for activities: explicit self-esteem is positively related to harmonious passion, whereas implicit self-esteem is negatively related to obsessive passion.

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