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# Les Passions de l'Âme: On Obsessive and Harmonious Passion

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Passion is defined as a strong inclination toward an activity that people like, that they find important, and in which they invest time and energy. Two types of passion are proposed: obsessive and harmonious. Obsessive passion (OP) refers to a controlled internalization of an activity in one's identity that creates an internal pressure to engage in the activity that the person likes. Harmonious passion (HP) refers to an autonomous internalization that leads individuals to choose to engage in the activity that they like. HP promotes healthy adaptation whereas OP thwarts it by causing negative affect and rigid persistence. Results from four studies involving more than 900 participants from different populations supported the proposed conceptualization.

I could only ever write out of passion.

—Jean-Jacques Rousseau

An important change is taking place in psychology. Whereas past efforts focused predominantly on understanding mental illness, psychology is recently focusing more on understanding what makes the life of people more fulfilling. This new "positive psychology" explores "how people's lives can be most worth living" (Seligman & Csikszentmihalyi, 2000). We believe that the concept of passion represents one answer to the above question. Indeed, individuals who wake up in the morning with a smile on their face "because today is basketball day," musicians who practice several hours per day in the hope of achieving excellence, and scientists who spend years researching a phenomenon all have a passion activity that makes their lives worth living. Passion can fuel motivation, enhance well-being, and provide meaning in everyday life. However, as will be described below, passion can also arouse negative emotions, lead to inflexible persistence, and interfere with achieving a balanced, successful life.

## The Concept of Passion

Philosophers have long been interested in the concept of passion with two distinct positions emerging (see Rony, 1990). The first posits that passion entails a loss of reason and control. For instance, Spinoza (1632–1677) proposed that acceptable thoughts originated from reason whereas unacceptable thoughts derived from passion. People afflicted with passion experienced a kind of suffering, in line with the etymology of the word *passion* (from the Latin *passio* for suffering). According to this perspective, individuals with a passion are seen as passive, as slaves to their passion. Their passion controls them. The second, more positive, perspective portrays people as more active in relation to their passion. For instance, in "The passions of the soul" (1649/1972), René Descartes (1596–1650) defined passions as strong emotions with inherent behavioral tendencies that can be positive as long as reason underlies the behavior. Hegel (1770–1831) further argued

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that passion was necessary to reach the highest levels of achievement. Thus, this second view of passion suggests that adaptive benefits will accrue when individuals are in control of their passion (to this effect, see Paturet, 2001).

The concept of passion has received little attention in psychology. Psychologists who have looked at the concept have emphasized its motivational aspect. For instance, Frijda, Mesquita, Sonnemans, and Van Goozen (1991) posited that "Passions are defined as high-priority goals with emotionally important outcomes" (p. 218). According to Frijda et al., individuals will spend large amounts of time and effort to reach their passionate goals. Other psychologists have focused on similar concepts such as positive and negative dependence (Glasser, 1976) and addiction (e.g., Sachs, 1981) to activities people like. However, it is not clear from such work how psychological dependence or addiction can be adaptive. Finally, some psychologists briefly mentioned the concept of passion in various contexts such as creativity (Goldberg, 1986) and driving (Marsh & Collet, 1987). However, this work has been largely atheoretical and has led to little empirical research. Nearly all empirical work on passion has been conducted in the area of close relationships where the concept of passionate love has been researched (e.g., Hatfield & Walster, 1978). Although such research is important, it does not deal with the topic at hand, namely passion toward activities. We now turn to this issue.

## On Passion Toward Activities

We propose a new dualistic approach on passion toward activities. Passion is defined as a strong inclination toward an activity that people like, that they find important, and in which they invest time and energy. Thus, for an activity to represent a passion for people, it has to be significant in their lives, something that they like, and something at which they spend time on a regular basis. Past research has indeed shown that activity valuation (e.g., Deci, Eghrari, Patrick, & Leone, 1994), time and energy expenditure (Emmons, 1999), and liking for the task (Csikszentmihalyi, Rathunde, & Whalen, 1993) are all associated with engagement in activities people are invested in.

We further propose that there are two types of passion, obsessive and harmonious, that can be distinguished in terms of how the passionate activity is internalized into one's core self or identity. Identity refers to an individual's relevant features, characteristics, and experiences, how these are interrelated, as well as the social and self-regulation functions that such features serve (Schlenker, 1985). We posit that certain activities are so self-defining that they represent central features of one's identity. Furthermore, in line with self-determination theory (Deci & Ryan, 2000), we propose that this is because there is a basic human tendency toward higher order organization. Such organization takes place through the organismic integration process, which entails that the self becomes more complex over time through the interrelations of self constituents, as well as the internalization of elements from the environment. People engage in various activities in the hope of satisfying basic psychological needs of autonomy (a desire to feel a sense of personal initiative), competence (a desire to interact effectively with the environment), and relatedness (a desire to feel connected to significant others; Deci & Ryan, 2000). Past research has shown that values and regulations concerning noninteresting activities can be internalized in the person in either a controlled or an autonomous fashion (see Sheldon, 2002). We propose that representations of activities that people like and engage in on a regular basis will be incorporated in the person's identity to the extent that they are highly valued (Aron, Aron, & Smolan, 1992; Csikszentmihalyi et al., 1993), thereby leading to passions toward these activities. Such passions become central features of one's identity and serve to define the person. Those who have a passion for playing the guitar, for reading, or for jogging do not merely play the guitar, read, or jog. They are "guitar players," "readers," or "joggers." Passionate activities are part of who they are.

However, there is an important distinction in exactly how the activity is internalized in one's identity. Two distinct types of passion arise as a result of an internalization process that varies in how fully it is developed. Harmonious passion (HP) results from an autonomous internalization of the activity into the person's identity. An autonomous internalization occurs when individuals have freely accepted the activity as important for them without any contingencies attached to it. This type of internalization produces a motivational force to engage in the activity willingly and engenders a sense of volition and personal endorsement about pursuing the activity. Individuals are not compelled to do the activity but rather they freely choose to do so. With this type of passion, the activity occupies a significant but not overpowering space in the person's identity and is in harmony with other aspects of the person's life.

Obsessive passion (OP), by contrast, results from a controlled internalization of the activity into one's identity. Such an internalization originates from intrapersonal and/or interpersonal pressure either because certain contingencies are attached to the activity such as feelings of social acceptance or self-esteem, or because the sense of excitement derived from activity engagement becomes uncontrollable. Thus, although individuals like the activity, they feel compelled to engage in it because of these internal contingencies that come to control them. They cannot help but to engage in the passionate activity. The passion must run its course as it controls the person. Because activity engagement is out of the person's control, it eventually takes disproportionate space in the person's identity and causes conflict with other activities in the person's life.

We believe that whether passions "make life worth living" depends on the type of passion one has developed. That is, whether a passion will foster positive affect and healthy persistence depends on whether it is harmonious or obsessive. With respect to affective outcomes, HP should lead to greater positive affect and less negative affect than OP *during* task engagement. This is because the autonomous internalization of the activity leads the person to engage in the task in a more flexible manner and thus to experience task engagement more fully. Such a flexible form of activity engagement should facilitate better concentration and the experience of positive affect, absorption, and flow. Such is not the case for OP, because a controlled internalization breeds an internal compulsion to engage in the activity, leading to a more rigid and conflicted form of task engagement. Such pressured engagement should prevent the person from fully focusing on the task at hand and take away the positive affective outcomes that would be normally experienced.

Furthermore, HP should also contribute to the experience of positive affect and minimize the experience of negative affect *after*

task engagement. This is because with HP, people are in control of the activity. They can decide to engage or not in the activity and when. Consequently, very little conflict should exist between the passionate activity and other activities in the person's life. However, with OP, an internal compulsion leads the person to engage in the activity even when he or she should not, thus causing conflict between the passionate activity and participation in other tasks. The person may therefore experience negative emotional experience once engagement in the passionate activity is terminated. For instance, the person could feel guilty for having played golf in the morning when he was supposed to take care of the lawn and garden.

Finally, because with OP the activity controls the person, an individual is likely to experience negative affect *when prevented* from engaging in the activity. Indeed, because of the internal pressure to engage in the passionate activity, it is impossible to fully disengage from thoughts about the activity. Thus, the person will be distracted when working on other activities because they were prevented from doing their passion. The person will feel frustrated and upset about not being able to engage in the passionate activity as well as from not being able to experience pleasure in the competing activities. With HP, however, the person has control over the activity and can decide when to and when not to engage in the activity. This felt autonomy mitigates the experience of negative feelings when prevented from engaging in the activity. In fact, such an autonomous perspective should allow the person to engage in other activities more fully as well, transferring the positive affect and the concentration from the passionate activities to others.

Behavioral persistence is a second outcome that differentiates HP and OP. Because the passionate activity is dear to those who engage in it (in fact it is part of their identity), people are likely to devote considerable time and energy to these activities and to persist in them for long periods of time. In fact, it is not uncommon for people to persist in the passionate activity for a lifetime. However, there would seem to be a difference in the flexibility of the persistence associated with the two types of passion. With HP, the person is in control of the activity and can decide when to and when not to engage in the activity. People with an HP are able to decide to terminate the relationship with the activity if they decide it has become a negative factor in their life. Thus, behavioral engagement can be seen as flexible. As long as the person derives positive benefits from the activity, he or she will persist. However, if negative outcomes are experienced on a regular basis, the person may decide to reduce or cease activity engagement. This flexible, rational form of persistence will not be seen with OP. Typically, OP is expected to lead to minimal positive affect relative to negative affect. Yet, because the activity has taken control over the person, OP would be expected to lead to persistence. Such persistence is rigid because it occurs not only in the absence of positive emotions, but even in the face of important personal costs such as damaged relationships and failed work commitments.

## The Present Research

The present research tested hypotheses derived from our dualistic approach to passion. In Study 1 we validated a scale of HP and OP. We then correlated the two subscales with the defining elements of passion, as well as with outcomes that are typically associated with the practice of one's favorite activity. In Study 2 we examined if the two types of passion predict changes in affective outcomes over time. In Studies 3 and 4 we tested whether OP (but not HP) is associated with rigid persistence.

## Study 1

The major purpose of Study 1 was to validate a scale of HP and OP. We assessed how the two types of passion related to the activity being highly valued, engaged in regularly, included in one's identity, and in conflict or not with other activities. It was hypothesized that both types of passion would be positively related to these elements of the passion concept, except for conflict, where only OP would be related. Study 1 also assessed relations between the two types of passion and outcomes experienced while engaged in the passionate activity (e.g., flow, positive emotions, and concentration), as well as after having engaged in the activity (e.g., positive emotions), and when prevented from engaging in the activity (e.g., cognition and affect). It was hypothesized that HP would be positively related to the adaptive outcomes mentioned above both during and after task engagement, whereas OP would be either unrelated or negatively related to such outcomes. OP was expected to relate to maladaptive outcomes especially after task engagement and when prevented from engaging in the passionate activity.

### *Method*

#### *Participants*

Participants were 539 college students (203 men, 332 women, and 4 unspecified) with a mean age of 18.9 years.

#### *Measures*

The questionnaire contained scales assessing passion, definitional elements of passion, and outcomes.

*The Passion Scale.* Participants were asked to think about an activity "that was very dear to their heart." They were then asked to list this activity and to complete the items while referring to this activity. The Passion Scale consisted of 34 items prepared by the authors to reflect the definition of the two types of passion. The OP items emphasized a passive perspective where the person feels compelled to engage in the activity, the activity takes a lot of space in the person's self, and conflict is experienced. HP items emphasized an active perspective where the person has control over the activity, personal volition allows him or her to fully engage in the activity, and the activity is in harmony with the person's other activities. Items were rated on a 7-point scale ranging from 1 = *do not agree at all* to 7 = *completely agree.*

*Elements related to the definition of passion.* To assess various elements related to the definition of passion, a number of items were prepared. One item was used to assess the extent to which the activity was a "passion." Valuation of the activity was measured with three items (e.g., "This activity is very important for me"; $\alpha = .84$). Time and energy invested in the activity was assessed with one item. Level of conflict between the passionate activity and other activities in the person's life was assessed with five items (e.g., "My activity sometimes conflicts with other aspects of my life such as my studies, family, and friends"; $\alpha = .84$). To assess the extent to which the activity was part of one's core self (or identity), Aron et al.'s (1992) Inclusion of the Other in the Self (IOS) scale was used. The IOS scale is a single item pictorial instrument intended to measure the extent to which another person has been internalized in one's

self. In this study, participants were asked to select the diagram that best described the extent to which the activity was part of their self from a set of Venn-like diagrams each representing a series of increasing degrees (7) of overlap between themselves ("myself" in one circle) and the activity ("the activity" in the other circle).

*Outcomes.* First, outcomes typically experienced during activity engagement were assessed. Elements of the flow concept, or the extent to which people feel that they are immersed in the activity while being engaged in it (Csikszentmihalyi et al., 1993), were assessed with the Flow Scale of Jackson and Marsh (1996). Subscales of three items each assessing challenge (e.g., "My ability allows me to face up to the challenge of the task"; $\alpha = .73$), absence of self-consciousness (e.g., "I am not bothered by what other people think of me"; $\alpha = .77$), and control (e.g., "I have a feeling of total control"; $\alpha = .81$) were used. We also adapted scales used by Vallerand, Blais, Brière, and Pelletier (1989) and Vallerand et al. (1993) to assess positive emotions (three items; e.g., "When I engage in my activity, I feel ashamed of myself"; $\alpha = .89$), anxiety (three items; e.g., "When I engage in my activity, I feel tense"; $\alpha = .75$), shame (two items; e.g., "When I engage in my activity, I feel ashamed"; $\alpha = .42$), and concentration (two items; "When I engage in my activity, I feel completely concentrated on what I do"; $\alpha = .84$). All scales had previously demonstrated adequate reliability and validity.

Second, we also assessed how participants typically feel after having engaged in their passionate activity. We assessed positive emotions (seven items, e.g., "After having engaged in my activity, I am happy"; $\alpha = .93$) and negative emotions (three items, e.g., "After having engaged in my activity, I generally feel ashamed"; $\alpha = .74$). Finally, we measured participants' negative cognition and affect experienced when they are prevented from engaging in their passionate activity. These outcomes deal with consequences associated with dependence on the activity. Three items assessed negative cognition (e.g., " When I am prevented from engaging in my activity, I can't concentrate on what I do"; $\alpha = .83$), and five items measured negative affect (e.g., " When I am prevented from engaging in my activity, I feel tense"; $\alpha = .83$).

### *Procedure*

Questionnaires were completed in classrooms. Students were told that the purpose of the study was to find out more about students' favorite activities. Because the questionnaire would have been very long if participants completed all items, different versions of the questionnaire were prepared. All participants completed the Passion Scale as well as items dealing with the definition of passion and outcomes experienced when engaged in the activity. In addition, some participants also completed items dealing with outcomes experienced after activity engagement, whereas other participants completed those items dealing with outcomes experienced when prevented from engaging in the activity. Finally, all participants were asked to indicate the nature of their activity as well as the number of months they had engaged in the activity.

## *Results*

### *On Passionate Activities*

All participants indicated that they engaged in an activity that was "dear to their heart." A total of 16% of the sample reported that their activity was not a passion for them (a score lower than 4 on the 7-point scale to the question dealing with the activity being a passion). When these participants were removed, the results from all statistical analyses remained the same. So, we report the analyses with all participants. Over 150 different activities were mentioned by participants. The 10 most popular activities in descending order were dance, hockey, skiing, reading, swimming, strength training, volleyball, soccer, playing the guitar, and basketball. Activities were coded into eight categories, ranging from individual sport/physical activity (e.g., jogging; 34.85%) to engaging in intimate relationships (e.g., talking with friends; 1.98%). Table 1 presents examples of activities and the number of participants for each category. It should be noted that the activities selected were clearly important in participants' lives: They had been doing the activity for a mean of 68.66 months and were devoting a mean of 8.39 hr to it per week.

### *On the Factorial Validity and Reliability of the Passion Scale*

To test the factorial validity of the Passion Scale, participants were randomly divided in two groups. A first group was used to derive a preliminary version of the scale by means of exploratory factor analysis, and the second group was used to confirm this version of the Passion Scale using a confirmatory factor analysis with EQS (Bentler, 1995). A first exploratory factor analysis was thus conducted with the 34 items using a random sample of 284 participants. Because we were interested in developing two related subscales assessing our dualistic conceptualization of passion, a two-factor solution was selected using the maximum likelihood solution with an oblimin solution. On the basis of the analyses, we eliminated items that loaded on both factors as well as those with weak loadings. We then selected the 14 items (7 for each factor) with the strongest loadings on the hypothesized factor. A second exploratory factor analysis (using the maximum likelihood solution) was then conducted with those 14 items. Results revealed a two-factor solution with eigenvalues of 5.62 and 2.05 explaining 54.7% of the variance. An oblimin factor rotation revealed the presence of the 7 theoretically relevant items on the OP factor

Table 1
*Types of Passionate Activities and the Percentage of People Engaging in Each One*

| Activities | Types of activities | % of participants |
|---|---|---|
| Individual sports/physical activity | Cycling, jogging, swimming | 34.85 |
| Team sports | Playing basketball, hockey, football | 25.54 |
| Passive leisure | Listening to music, watching movies | 15.05 |
| Active music | Playing the guitar, playing the piano | 10.01 |
| Reading | Reading a novel, reading poetry | 4.95 |
| Active arts | Painting, photography | 3.96 |
| Work/education | Part-time work, reading in one's area of studies | 3.56 |
| Interpersonal relationships | Being with friends or family | 1.98 |

Table 2
*Results From the Confirmatory Factor Analysis of the Passion Scale: Study 1*

| Scale items | Factor 1 (harmonious passion) | Factor 2 (obsessive passion) |
|---|---|---|
| 1. This activity allows me to live a variety of experiences. | .75 | |
| 2. The new things that I discover with this activity allow me to appreciate it even more. | .69 | |
| 3. This activity allows me to live memorable experiences. | .68 | |
| 4. This activity reflects the qualities I like about myself. | .54 | |
| 5. This activity is in harmony with the other activities in my life. | .49 | |
| 6. For me it is a passion, that I still manage to control. | .46 | |
| 7. I am completely taken with this activity. | .44 | |
| 8. I cannot live without it. | | .87 |
| 9. The urge is so strong. I can't help myself from doing this activity. | | .84 |
| 10. I have difficulty imagining my life without this activity. | | .79 |
| 11. I am emotionally dependent on this activity. | | .70 |
| 12. I have a tough time controlling my need to do this activity. | | .67 |
| 13. I have almost an obsessive feeling for this activity. | | .66 |
| 14. My mood depends on me being able to do this activity. | | .60 |

(e.g., " I cannot live without my activity"), as well as the 7 theoretically pertinent items on the HP factor (e.g., "My activity is in harmony with the other activities in my life").

A confirmatory factor analysis with EQS was then conducted on these 14 items using the second random group of 235 participants. The covariance matrix with the 14 observed variables was used as a database for the measurement model. The specified model was tested with standardized coefficients obtained from the maximum likelihood method of estimation. It was hypothesized that two factors each with their respective 7 items obtained in the previous exploratory factor analysis would yield a meaningful and coherent fit to the data. In addition, a covariance was freed between the two factors. Results from the confirmatory factor analysis yielded a good fit to the data, $\chi^2(76, N = 235) = 171.70$, $p < .001$ (non-normed fit index [NNFI] = .912, comparative fit index [CFI] = .926, root-mean-square error of approximation [RMSEA] = .073), the factor solution was proper, and the factors were well defined (e.g., all factor loadings were significant). Loadings of the items and the wordings appear in Table 2. The reliability (Cronbach alpha) of the two factors was assessed using the overall sample ($n = 520$). Results revealed acceptable levels of reliability for both the OP ($\alpha = .89$) and HP ($\alpha = .79$) subscales. The correlation between the two subscales was .46 and the means for the two subscales across activities were 5.01 ($SD = 1.15$) and 3.20 ($SD = 1.47$) for HP and OP, respectively.[1]

### *Relationships With Elements of the Definition of Passion*

Because the two subscales were significantly correlated, partial correlations were conducted. In light of the high number of correlations (20), we used the Bonferroni correction method (i.e., significance levels were moved from $p < .05$ to $p < .0025$ [.05/20]). Partial correlations involving OP and HP with age and gender proved to be nonsignificant. Second, partial correlations with the items assessing elements related to the definition of passion revealed a pattern in line with expectations (see Table 3). Thus, both HP and OP were significantly and similarly related to the extent to which "the activity was a passion" (HP = .43; OP = .46), "the activity was valued" (HP = .37; OP = .57), and participants "invested time and energy in the activity" (HP = .35; OP = .20). Level of inclusion in the self was significantly correlated to both types of passion (HP = .16; OP = .49), but the relation involving OP was significantly stronger, $t(502) = 5.21$, $p < .01$. Level of conflict between the passionate activity and other activities in the person's life was unrelated to HP but significantly and positively related with OP (HP = .11; OP = .50).

### *Psychological Outcomes During and After Activity Engagement, and When Prevented From Engaging in the Activity*

Results for flow experienced during activity engagement yielded the predicted pattern (see Table 4). Specifically, HP was significantly related to all three elements, whereas OP was not (challenge: HP = .38; OP = −.01; absence of self-consciousness: HP = .16; OP = −.04; and control: HP = .24; OP = −.01). A similar pattern was obtained with positive emotions (HP = .46; OP = −.02) and concentration (HP = .33; OP = −.01). However, the opposite trend emerged with the negative emotions of shame (HP = −.24; OP = .25) and anxiety (HP = −.01; OP = .12), although in the latter case (anxiety), the relation for OP failed to reach the corrected level of significance ($p < .0025$).

The positive emotions experienced by participants after having engaged in their passionate activity yielded a similar pattern to that found with positive emotions experienced during activity engage-

[1] Additional analyses revealed that there were no differences on the two types of passion as a function of types of activities, except for team sports where higher levels of HP ($M = 5.43$) were experienced than in individual sports (4.96). In addition, partial correlations of the two types of passion with the number of months involved in the activity revealed no significant relations (HP = .10; OP = .08). Thus, passion did not vary substantially as a function of activities and length of involvement.

ment (HP = .43; OP = −.09). Results for negative emotions revealed opposite results for the two kinds of passion (HP = −.23; OP = .21), although these relations failed to reach the corrected level of significance ($p < .0025$). Finally, a similar pattern of results was obtained with negative cognition (HP = .06; OP = .54) and negative affect (HP = −.04; OP = .55) experienced when prevented from engaging in their passionate activity.[2, 3]

### *Discussion*

Results of Study 1 supported the distinction between the two forms of passion. Although both HP and OP were significantly positively related to perceiving the activity as important and dedicating time and resources to the activity, the two forms of passion were associated with different affects and cognition. HP was associated with positive emotions, concentration, and flow, whereas OP was associated with experiencing negative emotions and conflict with other aspects of one's life. These findings support our reasoning on passion and outcomes.

## Study 2

Study 1 showed that the two forms of passion were differentially related to affect toward the activity. But how generalizable and long-lasting are these affective differences? Study 2 sought to explore this question by using a longitudinal design and measuring global levels of affect rather than simply focusing on affect in relation to the passionate activity. Study 2 also sought to assess whether the impact of the two forms of passion would be independent of intrinsic and extrinsic motivation (Deci & Ryan, 1985, 2000). Research has revealed that these two types of motivation influence affective and behavioral outcomes (see Deci & Ryan, 2000; Vallerand, 1997; Vallerand & Ratelle, 2002). Intrinsic motivation entails engaging in an activity out of pleasure and enjoyment. Thus, it shares this aspect of liking the activity with the concept of passion. However, intrinsically motivated activities are typically not seen as being internalized in the person's identity (Deci & Ryan, 1985) and are best seen as naturally emerging from the person-task interaction at the short-term level (Koestner & Losier, 2002). However, extrinsic motivation entails engaging in the activity not out of pleasure, but to obtain something outside the activity. Thus, a fundamental difference between extrinsic motivation and passion is the lack of liking for the activity. Overall, it appears that although both passion and intrinsic and extrinsic motivation are motivational concepts, they represent different constructs.

Thus, Study 2 assessed the role of passion in predicting changes in general positive and negative affect experienced over the course of a football season (from August to November), over and beyond changes related to intrinsic and extrinsic motivation. The study also assessed intentions to play football the following season. HP was expected to be associated with increased positive affect as well as with behavioral intentions to engage in the activity in the future, while being unrelated to general negative affect. OP was

Table 3
*Partial Correlations Between Elements of the Definition and One Type of Passion While Controlling for the Other: Study 1*

| Elements of the definition of passion | Harmonious passion | Obsessive passion |
|---|---|---|
| Activity as a passion[a] | .43* | .46* |
| Activity valuation[b] | .37* | .57* |
| Time and energy investment[b] | .35* | .20* |
| Inclusion in the self[b] | .16* | .49* |
| Conflict with other activities[b] | .11 | .50* |

[a] $n = 459$. [b] $n$ varies from 512 to 516.
* $p < .001$.

Table 4
*Partial Correlations Between Psychological Outcomes During, After, and When Prevented From Engaging in the Activity of Passion and One Type of Passion While Controlling for the Other: Study 1*

| Psychological outcome | Harmonious passion | Obsessive passion |
|---|---|---|
| During activity engagement[a] | | |
| Flow | | |
| Challenge | .38* | −.01 |
| Absence of self-consciousness | .16* | −.04 |
| Control | .24* | −.01 |
| Positive emotions | .46* | −.02 |
| Concentration | .33* | −.01 |
| Shame | −.24* | .25* |
| Anxiety | −.01 | .12 |
| After activity engagement[b] | | |
| Positive emotions | .43* | −.09 |
| Negative emotions | −.23 | .21 |
| When prevented from engaging in the activity[c] | | |
| Negative cognition | .06 | .54* |
| Negative affect | −.04 | .55* |

[a] $n$ varies from 509 to 516. [b] $n = 162$. [c] $n = 356$.
* $p < .001$.

[2] Some of the items in the Passion Scale seem to include an outcome component. For instance, Item 14 reads "My mood depends on me being able to do this activity." Items 1, 3, and 11 also show a similar trend. To rule out the possibility that the results of the present set of studies are due to this aspect of our measure, we redid all analyses while removing these items from the Passion Scale. Results from all four studies remained the same, thereby eliminating this potential confound.

[3] The scale used to assess negative emotions experienced after having engaged in the activity also contained one item dealing with anxiety and one item assessing shame. For comparison purposes across situations, we performed partial correlations on these items as well. The results of the partial correlations with these individual items paralleled those obtained with the overall scale (anxiety: HP = −.17; OP = .19; shame: HP = −.15; OP = .24). None of these correlations were significant at $p < .002$. Similarly, the scale assessing negative affect experienced when prevented from engaging in the activity also contained two items dealing with anxiety. Results with these items once again paralleled those obtained with the overall scale (HP = −.03; OP = .49). The correlation involving OP was significant ($p < .001$). There were no items assessing shame in the "prevented" condition.

expected to be unrelated to general positive affect, but to be related to increased negative affect and behavioral intentions. All of these relations were expected to hold after controlling for the influence of intrinsic and extrinsic motivation.

## Method

### Participants

Participants were 205 male football players in the intercollegiate football league in the Province of Québec, Canada (mean age = 18.4 years). Participants had been playing organized football for an average of 6.7 years at the time of the study.

### Measures

*The Passion Scale.* The Passion Scale developed in Study 1 was used in this study. Cronbach alphas of .73 and .85 were obtained for HP and OP, respectively.

*Intrinsic and extrinsic motivation.* The Sport Motivation Scale (Brière, Vallerand, Blais, & Pelletier, 1995) was used to measure intrinsic and extrinsic motivation toward playing football. This version of the Sport Motivation Scale assesses seven types of motivation toward sport—three types of intrinsic motivation (i.e., intrinsic motivation toward accomplishment, toward knowledge, and toward experience stimulation), three types of extrinsic motivation (i.e., identified, introjected, and external regulation), and amotivation. Four items are used to measure each of the seven motivational orientations. Each item represents an answer to the question "Why do you play football?" and is assessed on a 7-point Likert scale with 1 (*does not correspond at all to me*) and 7 (*corresponds exactly to me*) as extreme points. The Sport Motivation Scale has high levels of validity and reliability (see Vallerand, 1997; Vallerand & Fortier, 1998). An abridged version of the scale was used with only the intrinsic motivation (a mixture of the three types), identified, introjected, and external regulation subscales included. Cronbach alphas ranged from .66 to .77.

*Positive and negative affect.* Participants indicated the extent to which they had experienced 10 emotions from the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) in their life in general over the past week. Five positive (e.g., *proud*, *active*) and five negative (e.g., *nervous*, *hostile*) items were assessed on a 7-point scale ranging from 1 = *do not agree at all* to 7 = *very strongly agree*. Cronbach alphas ranged from .63 to .86.

*Behavioral intentions.* A five-item scale assessed participants' intentions of pursuing football in the next season (Vallerand, Fortier, & Guay, 1997). Cronbach alphas were .80 and .87 at Time 1 and Time 2, respectively.

### Procedure

Participants completed a questionnaire in their locker room prior to a practice at the beginning of the football season in August (Time 1) and at the end of the season in November (Time 2). Players were told that we were interested in knowing more about athletes' personal attitudes concerning their sport. It was also mentioned that participation was voluntary and anonymous, and that their responses would remain confidential.

## Results

A hierarchical multiple regression analysis was conducted for each of the three dependent variables at Time 2. In the analysis, the dependent variable at Time 1 was entered first, followed by the four types of motivation (intrinsic motivation and identified, introjected, and external regulation), and finally the two types of passion. This strategy allowed us to determine the extent to which passion contributed significant and unique variance to changes in the dependent variables over and beyond intrinsic and extrinsic motivation. Results of all regression analyses are presented in Table 5.

Results of the analysis with positive affect at Time 2 revealed that entering the four types of motivation contributed 2.9% of additional variance over positive affect at Time 1. However, this addition was not significant ($p > .20$). The two types of passion contributed 8.9% of additional variance and this contribution was significant ($p < .0001$) over and beyond that of positive affect and intrinsic and extrinsic motivation at Time 1. Inspection of the beta weights revealed that only one predictor was significant, namely HP ($\beta = .36$).

Results of the analysis with negative affect at Time 2 revealed that entering the four types of motivation contributed 4.5% of additional variance. This addition was significant ($p < .05$). The two types of passion also contributed 2.5% of additional variance ($p < .06$). Inspection of the beta weights revealed the presence of three significant predictors, namely negative affect at Time 1 ($\beta = .28$), external regulation ($\beta = .20$), and OP ($\beta = .19$).

Finally, results of the analysis with behavioral intentions at Time 2 showed that entering the four types of motivation contributed no additional variance over and beyond behavioral intentions at Time 1. The two types of passion contributed 2% of additional variance, and this contribution approached significance ($p < .06$). Inspection of the beta weights revealed only two significant predictors: intentions at Time 1 ($\beta = .52$) and OP ($\beta = .12$, $p < .10$).[4]

## Discussion

Study 2 showed that HP was associated with increased general positive affect over the course of a football season whereas OP was associated with increased levels of general negative affect. Surprisingly, only OP proved to be a marginally significant ($p < .10$) predictor of changes in intentions to continue to play football. All relations were obtained after controlling for the influence of intrinsic and extrinsic motivation. The results thus supported our hypothesis that the influence of the two types of passion will extend to affective states beyond the specific emotions experienced during activity engagement. The surprise finding of no relation between HP and future intentions can perhaps be explained as follows. Football players with an HP display a flexible sense of deliberation and consider a wide variety of factors before making their decision to continue playing football next season. This includes elements related to football (expected level of improvement, predicted playing time next season, the return of friends to the team, and so forth) as well as other aspects of their lives (school demands, time to be spent with girlfriend and/or friends, part-time work, and so forth). Thus, for such players, returning next season is not automatic. Players with an OP, however, may stick to their earlier decision in a rigid fashion, thereby explaining their higher levels of intentions to return.

[4] We also tested for the presence of interaction effects between intrinsic and extrinsic motivation and passion on all outcomes. No significant effects were found.

Table 5
*Results of the Hierarchical Regression Analyses: Study 2*

| Criterion and step | Predictors | $\beta$ | $t$ | $p$ | % additional variance explained | $F$ | $p$ |
|---|---|---|---|---|---|---|---|
| Positive affect (T2) | | | | | | | |
| Step 1 | Positive affect (T1) | .11 | 1.42 | *ns* | .096 | 19.93 | < .001 |
| Step 2 | External reg. | .03 | 0.38 | *ns* | .029 | 1.51 | *ns* |
| | Introjection | −.02 | −0.21 | *ns* | | | |
| | Identified reg. | −.04 | −0.45 | *ns* | | | |
| | Intrinsic motivation | .08 | 0.78 | *ns* | | | |
| Step 3 | Harmonious passion | .36 | 4.31 | < .001 | .089 | 10.35 | < .001 |
| | Obsessive passion | .02 | 0.32 | *ns* | | | |
| Negative affect (T2) | | | | | | | |
| Step 1 | Negative affect (T1) | .28 | 3.98 | < .001 | .117 | 25.00 | < .001 |
| Step 2 | External reg. | .20 | 2.48 | < .05 | .045 | 2.50 | < .05 |
| | Introjection | −.10 | −1.17 | *ns* | | | |
| | Identified reg. | .02 | 0.22 | *ns* | | | |
| | Intrinsic motivation | −.09 | −0.93 | *ns* | | | |
| Step 3 | Harmonious passion | −.08 | −0.93 | *ns* | .025 | 2.86 | < .06 |
| | Obsessive passion | .19 | 2.39 | < .05 | | | |
| Future intentions to play (T2) | | | | | | | |
| Step 1 | Future intentions to play (T1) | .52 | 7.94 | < .001 | .332 | 91.80 | < .001 |
| Step 2 | External reg. | — | — | — | .004 | 0.31 | *ns* |
| | Introjection | .05 | 0.71 | *ns* | | | |
| | Identified reg. | −.05 | 0.54 | *ns* | | | |
| | Intrinsic motivation | −.10 | −1.20 | *ns* | | | |
| Step 3 | Harmonious passion | .09 | 1.18 | *ns* | .02 | 2.91 | < .06 |
| | Obsessive passion | .12 | 1.72 | < .10 | | | |

*Note.* T1 = Time 1; T2 = Time 2; reg. = regulation.

## Study 3

Study 2 revealed a paradox for OP: It was associated with intending to continue playing football despite also being associated with increasing levels of general negative affect during the season. Why continue to pursue an activity if it brings about negative affective experiences? One answer is that OP leads to a form of rigid persistence in the activity "no matter what." Such rigidity may not be detrimental to the individual when the activity is benign, but it may cause problems when conditions become difficult or dangerous (when in fact it would be advisable to cease engagement in the activity).

Consider bicycling. In the spring, summer, and autumn it is a great activity. It is fun and, when performed on a regular basis, it can promote one's health. However, when performed in the winter, at least in the Province of Québec, it becomes risky. This is because weather conditions are drastically different from those in the summer. In Montréal, Québec, Canada, the mean maximum temperature in August is 77°F (25°C) whereas the temperature drops on average to 8.6°F (−13°C) in February. In addition, Montréal receives an average of 80 in. (200 cm) of snow during the winter (www.theweathernetwork.com). Such snow remains on the ground all winter. Clearly, snow, ice, and slippery road conditions make cycling a very hazardous affair. Cyclists during a Montréal winter risk falls, accidents, and injuries.

Yet, the results of Study 2 suggest that if people have an OP toward cycling, they may experience an internal pressure to engage in the passionate activity irrespective of the weather conditions and personal risks. Thus, because it promotes rigid persistence toward cycling, it is expected that OP should lead to cycling in the winter. However, HP toward cycling is not expected to lead to winter cycling. This is because harmonious engagement in cycling is characterized by a flexible and adaptive form of involvement in the activity that leads the person to consider changes taking place in the environment and mindfully decide whether to engage in the activity.

Study 3 tested these hypotheses. Cyclists completed the Passion Scale toward cycling in August and were recontacted 6 months later in February to determine if they were still cycling. It was hypothesized that those who continued cycling during the winter would have reported a higher level of OP in the summer but would not differ in HP.

### *Method*

#### *Participants and Procedure*

Participants were 59 recreational cyclists (21 women, 37 men, 1 unspecified) with a mean age of 42 years. Participants were cycling an average of 9.66 hr per week during the summer we contacted them. Participants were contacted in early August at two cycling events for the general population. They were asked if they would be willing to participate in a two-wave study on cycling. Those who agreed were asked to complete scales on passion toward cycling. They were contacted 6 months later through e-mail and asked to indicate if they were cycling during the winter.

#### *Measures*

*The Passion Scale.* The scale used in Studies 1 and 2 was adapted for cycling. In the present study, Cronbach alphas of .84 and .91 were obtained for the HP and OP subscales, respectively.

Participants indicated the number of hours they were cycling during the summer. They were contacted in February and asked to indicate (yes or no) if they were cycling this winter.

### *Results and Discussion*

Preliminary analyses yielded kurtosis values ranging from –2 to 2, thus indicating univariate normality for the variables. We used *t* tests to examine differences between men and women, and no significant differences were found. A multivariate analysis of variance was then conducted to compare cyclists who were cycling during the winter ($n = 17$) with those who were not ($n = 42$) on HP and OP and on the number of hours cycling in August. Results revealed a significant Wilks's $\lambda$ (3, 55) = 0.660, $p < .001$. Results of the univariate tests revealed that 6 months before, winter cyclists had reported significantly higher scores on OP ($M = 4.47$) than nonwinter cyclists ($M = 2.83$). There were no differences on HP (*M*s = 5.76 and 5.47, respectively, for the two groups) or on the number of cycling hours (*M*s = 9.71 hr and 9.64 hr, respectively, for the two groups). In addition, Pearson correlations revealed that HP was unrelated to winter cycling behavior ($r = .04$). However, OP ($r = .49$) was significantly related to behavior.

A discriminant function analysis was also conducted to determine the role of OP and HP in predicting group membership. Results revealed the presence of one significant function, $\chi^2(2, N = 59) = 22.51$, Wilks's $\lambda = .669$, $p < .001$, with standardized coefficients of .796 and .050 for OP and HP, respectively. In addition, results revealed that 82.4% of the winter cyclists and 76.2% of the nonwinter cyclists were correctly placed in their respective group.

The present results revealed that only 30% of participants continued cycling in the winter. As predicted, these individuals had a higher level of OP than the nonwinter cyclists. Winter cyclists did not differ from others in HP, or in how committed they had been to cycling during the summer (as indexed by the number of hours they cycled). The results suggest that OP leads to rigid persistence, as reflected in persisting even when objective environmental conditions make such persistence ill-advised.

## Study 4

Study 3 suggested that OP is implicated in rigid persistence but that HP is not. Will OP also lead to rigid persistence in extreme forms of self-defeating behavior, such as gambling, that qualify as self-destructive? Each year, millions of people gamble (Shaffer, Hall, & Vander Bilt, 1997). For most people, gambling will be satisfying and harmless. However, a small percentage of the population (less than 3%; Ladouceur, 1996) will develop pathological gambling. Pathological gamblers can lose their family, jobs, and possessions. We believe that OP is involved in pathological gambling. Because OP entails a controlled internalization of the activity in one's identity, passion eventually takes control over the person and leads to rigid persistence in the passionate activity. Rigid persistence without consideration of the impact of gambling losses can then put people at risk of experiencing severe material and life problems.

Study 4 used an extreme group research design to assess whether OP is involved in self-destructive gambling behavior. The Montréal Casino (like many casinos around the world) has a self-exclusion policy by which individuals who are having serious gambling problems can ask the Casino to bar them from entry for at least 1 year. We compared self-excluded gamblers' levels of passion with a group of regular casino players, controlling for demographic variables. It was hypothesized that the self-excluded group would display higher levels of OP than regular gamblers. No difference was expected between the two groups on HP.

### *Method*

#### *Participants and Procedure*

Participants were 146 regular gamblers at the Montréal Casino (50 women and 96 men). Their mean age was 43.3 years. Participants had been gambling for 3 years, on average, and were going to the casino an average of 2.6 times per week. Approximately half of the participants ($n = 75$) had just signed the papers allowing them to be part of the Montréal Casino self-exclusion program. The other half ($n = 71$) were individuals who visited the Montréal Casino on a regular basis (at least once per week). Participants completed a short questionnaire. For the self-excluded group, the questionnaire was completed at home and sent back through a prestamped envelope, whereas for the regular casino players, it was completed on the premises of the casino in a secluded area.

#### *Measures*

*The Passion Scale.* The scale from Studies 1–3 was adapted to gambling and shortened to 10 items (Items 6, 7, 10, and 14 were deleted). This short scale has been shown to be reliable, valid, and free of social desirability concerns (Rousseau, Vallerand, Ratelle, Mageau, & Provencher, 2002). The self-excluded gamblers were asked to complete the scale while keeping in mind how they felt toward gambling before making the decision to quit playing at the casino. In the present study, Cronbach alphas of .71 and .92 were obtained for the HP and OP subscales, respectively.

*Pathological gambling.* Participants completed the revised South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1993), which is the most widely used instrument to detect pathological gambling in research and clinical settings. It has high levels of reliability and validity. The scale contains 20 items and uses different formats (e.g., yes/no; frequency; amount). A sample item is "When you gamble, how often do you go back another day to win back the money you lost." One point is given for each answer that indicates "problem gambling." A Cronbach alpha of .91 was obtained. Finally, participants were asked to report gambling frequency, years of involvement, and demographics (age, gender, schooling, income, and so forth).

### *Results and Discussion*

A *t* test revealed that the two groups were significantly different on the SOGS, $t(142) = 11.61$, $p < .001$. As expected, the self-excluded group ($M = 11.48$) scored significantly higher than the regular group ($M = 3.97$). In addition, we compared the number of gamblers who showed signs of pathological gambling in each group. Lesieur and Blume (1993) proposed that individuals scoring higher than 5 on the SOGS should be considered pathological gamblers. Ninety-four percent met this criteria in the self-excluded group whereas only 37% did in the regular gambler group. This difference was highly significant, $\chi^2(1, N = 146) = 58.99$, $p < .001$. It can thus be safely assumed that the self-excluded group displayed severe signs of pathological gambling and that their decision to self-exclude from the casino was based on accurate concerns.

Results revealed that age, number of years of gambling involvement, and gambling frequency were significantly ($p < .05$) related to passion. Thus, a 2 (self-excluded and regular gamblers) × 2 (OP and HP) analysis of covariance with a repeated measure on the last

factor was conducted on OP and HP, with age and gambling frequency as covariates (the same results were obtained in a second analysis this time controlling for age and years of gambling involvement). Results revealed the presence of a significant group main effect (with self-excluded gamblers having overall higher scores than regular casino players), $F(1, 141) = 22.34$, $p < .001$, and a main effect for passion (with scores on HP being greater than those with OP), $F(1, 141) = 7.52$, $p < .007$. More important, as predicted, results revealed a significant Group × Passion interaction, $F(1, 109) = 82.42$, $p < .001$. Simple effects showed that self-excluded gamblers had significantly higher scores on OP ($M = 5.12$) than regular gamblers ($M = 2.93$), $F(1, 140) = 71.43$, $p < .001$. There were no differences on HP for the two groups, $F(1, 140) = 3.35$, $p > .10$. In addition, for the self-excluded gamblers, their score on OP ($M = 5.12$) was significantly higher than their score on HP ($M = 2.78$), $F(1, 53) = 39.08$, $p < .001$. The reverse was true for regular casino gamblers (*M*s = 2.93 vs. 3.20), $F(1, 57) = 10.21$, $p < .002$.

A discriminant function analysis was conducted to determine the role of OP and HP in predicting group membership (self-excluded vs. regular gamblers). Results revealed the presence of one significant function, $\chi^2(2, N = 146) = 70.98$, $p < .001$, Wilks's $\lambda = .61$, with standardized coefficients of 1.02 and −0.47 for OP and HP, respectively. In addition, results revealed that 79% of the self-excluded participants and 81% of the regular casino players were correctly placed in their respective group.

Thus, the results supported our hypotheses, showing that individuals who experienced severe gambling problems displayed significantly higher levels of OP than regular casino gamblers, whereas no difference was found for HP. Of particular interest is the fact that for the self-excluded group, OP was significantly higher than HP, whereas the reverse was true for the regular casino players. These findings suggest that OP is implicated in self-destructive behavior.

## General Discussion

Results from the present research provided support for a dualistic conception of passion. First, results from the exploratory and confirmatory factor analyses revealed the presence of two factors corresponding to OP and HP. Second, both HP and OP were found to be positively related to perceiving the activity as highly valued, as representing a passion for them, and as leading one to invest time and energy in the activity. Third, both types of passion were positively related to participants' perceptions of their activity as being included in their self, although the relation was significantly stronger for OP, suggesting that the OP for an activity takes greater space in the person's identity than HP. Finally, the correlations with level of conflict between the activity and other aspects of the person's life also provided support for our position in that the correlation was only significant for OP.

Thus, overall, these findings provide strong support for the concept of passion as proposed herein. It does appear that there are two types of passion that characterize the way the activity has been internalized into one's identity: one where the activity controls the person (OP) and the other where the person controls the activity (HP). Furthermore, these two types of passion are associated differently with affective and behavioral outcomes. We now turn to this issue.

### *On Passion and Affect*

It was predicted that HP should lead to the experience of positive affect and the absence of negative affect whereas the opposite was expected for OP. These predictions were upheld in the first two studies. Thus, in Study 1, HP was positively related to positive affective and cognitive (concentration and flow) experiences and to the absence of negative affect during and after activity engagement. In addition, HP was unrelated to negative affect and cognition when people were prevented from participating in the passionate activity. Conversely, OP was unrelated to positive affect and cognition during task engagement but positively associated with negative affect during and after activity engagement, as well as when prevented from engaging in the passionate activity. Thus, it would appear that HP facilitates the experience of positive affect both during and after task engagement, whereas OP is mainly associated with negative states bordering on psychological dependence when one is prevented from engaging in the activity.

Of particular interest were the results of Study 2, which showed that the positive affect experienced during task engagement seems to spill over onto how the person feels in general in his or her life. More specifically, it appears that HP for the activity leads to increases in general positive affect over time even when the person is not directly engaged in the activity. Conversely, OP leads to increases in general negative affect over time experienced outside the purview of the activity. Research by Watson (1988) showed that engaging in various pleasant activities leads to the experience of positive affect and the absence of negative affect. The present results suggest that it may not be the activity, as such, that provides such positive benefits but the fact that one engages in the activity with an HP. Because positive and negative affect represent major components of subjective well-being (Diener, 2000), these findings would appear to have implications for psychological adjustment. Indeed, they suggest that engaging in an activity out of HP will have positive effects on psychological adjustment, through the repeated experience of positive affect. The opposite effect may be derived from OP.

### *On Passion and Persistence*

The second type of outcome that should relate to passion is persistence. HP and OP are expected to lead equally strongly to persistence when activity engagement leads to some positive benefits. However, a major difference is expected when persistence in the passionate activity leads to negative outcomes. HP is hypothesized to lead to disengagement, whereas OP is expected to lead to continued engagement. Thus, because HP refers to an autonomous inclusion of the activity in the person's identity, the person can choicefully decide to cease participation in the activity when positive returns are no longer possible. However, because OP refers to a controlled form of internalization of the activity, rigid persistence takes place. It is as if the person said: "I know it's not good for me, but I can't help myself, I just have to continue doing this activity." Results of Study 3 with winter cycling and Study 4 with pathological gambling provided support for this hypothesis. Both studies showed that OP was associated with behaviors that are no longer positive for the individual. In fact, the above results highlight a paradox for OP, where people cannot help but to continue activity engagement even when positive returns are no

longer forthcoming and the activity has become detrimental to them. Such is not the case for HP, however. It would appear that people who display HP can take into consideration the nature of the situation (has the activity become hazardous for me?) and can decide whether to continue or cease participation in the passionate activity.

One explanation for this nonproductive persistence may have to do with the meaning of the activity for the person's self-esteem. Past research has shown that people with high self-esteem persist more on tasks after failure even when such persistence is nonproductive (e.g., McFarlin, Baumeister, & Blascovich, 1984). Thus, it might be that OP entails a contingency between the self and the activity such that the person's self-worth depends on engaging in and doing well on the passionate activity (Crocker & Wolfe, 2001). Because the activity means so much to the person's self-worth, he or she has to continue engaging in the activity even in the presence of negative returns. However, because with HP the activity is internalized in an autonomous fashion in one's identity, no contingency is expected between the person's self-esteem and the activity. The person is not overly invested in the activity and can decide to cease participation in the activity when he or she feels that it is appropriate to do so. Future research is needed to test this hypothesis.

A related question concerns performance. Common sense has it that continued persistence in the activity at the expense of other life activities may be necessary to reach high achievement over time. The image of athletes who dedicate their whole life to their sport in order to make it to the Olympics or into professional sports would tend to reinforce this perception. Research by Ericsson and colleagues (see Ericsson & Charness, 1994) has indeed shown that at least 10 years of continuous deliberate practice involving several hours each day is needed to achieve international levels of performance in a given field. Because such persistence would appear to be rigid in nature, it would seem that OP may be required for high-level performance. However, such rigid persistence may also lead to mental staleness and even physical injuries that are not conducive to optimal performance. Although HP may not lead individuals to persist at all costs in the activity, it might nevertheless lead to higher levels of performance. This is because HP is characterized by a more flexible psychological state that should lead the person to focus better (see Study 1), to experience less pressure and anxiety, as well as to prevent mental staleness and physical injuries from occurring. Thus, HP may also be conducive to high levels of performance, especially under pressure. Future research on this issue is warranted.

## Conclusions

In sum, results from four studies involving a host of different activities and more than 900 participants from diverse populations supported the position that HP and OP represent two forms of internalization of an activity in one's identity. Furthermore, depending on the type of passion involved, people may experience positive or negative affect and may even persist in activities that are self-destructive such as pathological gambling. In a nutshell, passion matters greatly for people. So, returning to the fundamental question of positive psychology, "How people's lives can be most worth living?," we submit that one answer is: "By having a harmonious passion toward an activity."

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