

“The Thrill of Victory . . . and the Agony of Defeat”: Passion and Emotional Reactions to Success and Failure Among Recreational Golfers

Jérémie Verner-Filion,¹ Benjamin J. I. Schellenberg,² Maylys Rapaport,³ Jocelyn J. Bélanger,⁴
and Robert J. Vallerand³

¹McGill University; ²University of Manitoba; ³Université du Québec à Montréal; ⁴New York University, Abu Dhabi

The dualistic model of passion proposes two distinct forms of passion: obsessive (OP) and harmonious (HP). The purpose of this research was to test if emotional reactivity following athletic successes and failures was related to one's levels of HP and OP for sport. The authors recruited recreational golfers ($N = 115$) to report how they typically felt after they experienced successes and failures on the golf course. Results of multilevel modeling analyses supported the hypotheses and revealed that OP moderated the effects of success and failure on both positive and negative affect: OP was associated with higher levels of positive affect following success, as well as higher levels of negative affect following failure. These results suggest that OP, but not HP, is associated with greater emotional reactivity to the experience of success and failure in sport.

Keywords: athletes, emotion, emotion regulation, motivation, multilevel modeling

“The thrill of victory . . . and the agony of defeat . . . the human drama of athletic competition.”

– Jim McKay, *Wide World of Sports* (ABC Sports)

Athletes who strongly identify with their sport, enjoy it, find it important, and engage in it on a regular basis are oftentimes defined as being passionate. Extensive research in sports and physical activity (Vallerand & Verner-Filion, in press), as well as in other domains (Curran, Hill, Appleton, Vallerand, & Standage, 2015; Vallerand, 2015), has revealed that passion plays a key role in the emotions experienced by individuals while engaging in their favorite activities. However, as proposed by the dualistic model of passion (Vallerand, 2015; Vallerand et al., 2003), it is critical to distinguish between two forms of passion. Harmonious passion (HP) emerges when an activity that one loves has been autonomously internalized into a person's identity and is integrated with the rest of one's life. By contrast, obsessive passion (OP) involves a controlled internalization of a passion and a sense of conflict between the activity that one loves and other life pursuits (Vallerand, 2015). Past research has shown that HP was positively related to positive emotional experiences, whereas OP has been repeatedly associated with the experience of negative emotions when engaged in a passionate activity (Curran et al., 2015; Vallerand, 2015).

Emotional and affective experiences are situation-specific and can thus be influenced by a host of events occurring in daily life (Larsen, Diener, & Emmons, 1986). The theatrical introduction of *Wide World of Sports* highlights the role that successes and failures

can play in athletes' emotional experiences. However, is the “human drama of athletic competition” equally dramatic for all athletes, or are there psychological dispositions that make athletes more prone to experiencing the highs and lows of sport? One would assume that the emotional highs of successes and the lows of failures would be mostly experienced by athletes who have a *passion* for sport. However, in line with the dualistic model of passion, it would be expected that the emotional experience of athletes following success and failure depends on the extent to which their passion is harmonious or obsessive in nature. On the one hand, with OP, ego-invested self-structures toward the passionate activity are at play (Vallerand, 2015), leading the beloved activity to occupy an overpowering space in one's identity. This is because OP stems from a partial internalization of the activity. In addition to the love of the activity, the underlying purposes of sport engagement deriving from OP also include satisfying contingencies, such as maintaining one's sense of self-worth (Mageau, Carpentier, & Vallerand, 2011) or obtaining acceptance from others (Verner-Filion & Vallerand, 2016). With OP, those contingencies are both closely tied to achievements within the confines of the activity they love and are passionate about. With OP, successes and failures in the activity are likely to be perceived as successes and failures of the self, respectively. Consequently, emotional regulation following such events is likely to be hampered by OP, leading to an increased emotional response when recalling those events. However, such should not be the case with HP, as the activity occupies an important but not an overpowering place in a person's identity. The activity is thus pursued with balance, flexibility, and a secure sense of self-esteem (Lafrenière, Bélanger, Sedikides, & Vallerand, 2011; Vallerand, 2015). Thus, HP should not influence emotional reactivity following the recall of successes and failures. In support of these propositions, previous research has found that with OP, but not HP, state self-esteem and life satisfaction covary with performance (Lafrenière, St-Louis, Vallerand, & Donahue, 2012; Mageau et al., 2011). However, research has yet to determine if OP has a similar effect on the emotional

Verner-Filion is with the Dept. of Psychology, McGill University, Montréal, QC, Canada. Schellenberg is with the University of Manitoba, Winnipeg, MB, Canada. Rapaport and Vallerand are with the Université du Québec à Montréal, Montréal, QC, Canada. Bélanger is with New York University, Abu Dhabi, Abu Dhabi, United Arab Emirates. Verner-Filion (jerie.verner-filion@mail.mcgill.ca) is corresponding author.

reactions of athletes when reflecting on their own successes and failures in sport.

The Present Research

In line with the above, it was expected that the recall of success and failure in the purview of a passionate activity would be associated positively with the experiences of positive and negative affect, respectively (*Hypothesis 1*). Second, and in line with past research, it was also expected that HP would be related to higher mean levels of positive affect, whereas OP would be associated with higher mean levels of negative affect (*Hypothesis 2*). Finally, in regard to our focal research question, it was expected that athletes with higher levels of OP, but not HP, would experience greater emotional reactivity following the recall of successes and failures (*Hypothesis 3*).

To test our hypotheses, we recruited athletes who played a popular recreational sport—golf—and asked them to complete a survey about their passion for golf and their emotional experiences when reflecting on holes they considered as successful and unsuccessful. Participants were recruited on a university golf course prior to the start of their round of golf. This allowed for the recruitment of a diverse sample of golfers while ensuring that they answered the survey in an activity-specific context. Ethics approval was obtained from the University of Maryland, College Park, ethics board prior to data collection.

Method

A total of 115 golfers participated in this research (7.8% women, 88.7% men, and 3.5% not specified). On average, they were 45.24 years old (*SD* = 14.20 years), had been playing golf for 17.04 years (*SD* = 11.25 years), and completed 8.49 rounds per month (*SD* = 16.83 rounds).

After providing informed consent, participants completed the Passion Scale (Marsh et al., 2013; Vallerand et al., 2003) as an assessment of HP (6 items; $\alpha = .82$) and OP (6 items; $\alpha = .82$) for golf.¹ The golfers reported their agreement with statements related to their passion for golf (e.g., OP item: “If I could, I would only golf”) on a scale from 1 (*do not agree at all*) to 7 (*very strongly agree*). Next, the golfers reported what they considered a “good hole” (i.e., a success) by choosing from five options: albatross, eagle, birdie, par, or bogey. Golfers also reported what they considered a “bad hole” (i.e., a failure) by choosing from six options: five (or more) over par, quadruple bogey, triple bogey, double bogey, bogey, or par. Either a par or a birdie was identified as a success by 69% of participants, and either a quadruple bogey or triple bogey was identified as a failure by 79% of participants. After making each selection, they answered 10 items

from the positive and negative affect schedule (Watson, Clark, & Tellegen, 1988) to assess the extent to which they experienced positive (e.g., enthusiastic, determined; $\alpha = .87$) and negative (e.g., hostile, angry; $\alpha = .74$) emotions after one typically good hole and one typically bad hole. Emotion ratings were made on a 7-point scale ranging from 1 (*never*) to 7 (*always*). The positive and negative affect schedule has been repeatedly used as a valid measure to assess self-reported emotional reactivity (e.g., Bylsma, Morris, & Rottenberg, 2008).

Results

The data were analyzed using multilevel modeling with HLM 6.0 (Raudenbush, Bryk, & Congdon, 2004) given that the repeated assessments of emotions (i.e., emotions after both successes and failures) were nested under participants’ dispositional passion measures (i.e., HP and OP). This allowed us to examine within- and between-person sources of variances in positive and negative affect. All dispositional variables were centered at the sample mean. Parameters were estimated using restricted maximum likelihood. Ten participants and two observations (one in the success scenario and one in the failure scenario) were identified as either univariate (i.e., *Z* scores under ± 3 *SDs* for the variables) or multivariate (i.e., Mahalanobis distance values exceeding the critical chi-square value at the $p = .001$) outliers and were removed from the analyses, resulting in a final sample of 105 golfers, for a total of 208 observations. The removal of outliers improves the accuracy of statistical estimates while reducing error rates and substantial distortions of the parameters for the vast majority of analyses (Osborne & Overbay, 2008). There were no missing values. Descriptive statistics and correlations are presented in Table 1. The following equations were used to assess the relations among golfers’ HP, OP, performance recollections (success or failure), and positive and negative affect:

$$\begin{aligned} \text{Level 1: Affect (positive or negative)}_{ij} \\ = \beta_{0j} + \beta_{1j}(\text{success or failure}) + r_{ij} \end{aligned}$$

$$\begin{aligned} \text{Level 2: } \beta_{0j} &= \gamma_{00} + \gamma_{01}(\text{HP}) + \gamma_{02}(\text{OP}) + u_{0j} \\ \beta_{1j} &= \gamma_{10} + \gamma_{11}(\text{HP}) + \gamma_{12}(\text{OP}) + u_{1j} \end{aligned}$$

In addition to the removal of outliers, the nonnormality of the data was handled by reporting the estimates with robust standard errors. Maas and Hox (2004) have shown that robust standard error estimates are more reliable to handle nonnormality with a large number of Level 2 observations (over 100, as is the case in the current study). Results of the multilevel analyses are reported in

Table 1 Mean, *SD*, and Correlations Involving all Variables (*N* = 105)

	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1. Harmonious passion	4.38	1.14	.82					
2. Obsessive passion	2.60	1.25	.37**	.82				
3. Positive affect (success)	5.20	1.08	.39*	.29**	.88			
4. Positive affect (failure)	3.91	1.19	.45*	.13	.54	.81		
5. Negative affect (success)	1.03	0.15	.08	.07	-.10	.07	.67	
6. Negative affect (failure)	2.48	1.37	.04	.18	.26**	-.10	.02	.82

Note. Cronbach’s alphas are reported in the diagonal and italics.
* $p < .05$, ** $p < .01$.

Downloaded by UNIV QUEBEC MONTREAL UQAM on 04/08/19

Table 2. With regard to positive affect, results revealed that whether participants reported experiencing a success or a failure predicted a difference in positive affect ($\gamma_{10} = 1.29, p < .001$), thus supporting *Hypothesis 1*. More precisely, participants experienced higher levels of positive affect when reporting a success than a failure. In addition, the results from the prediction of means (β_{0j}) offered support for *Hypothesis 2* by showing that HP was associated with a higher mean level of positive affect ($\gamma_{01} = .40, p < .001$), whereas OP was not ($\gamma_{02} = .05, p = .50$). Thus, the more people reported an HP for golf, the more they experienced positive affect at the mean level. Finally, in support of *Hypothesis 3*, results from the prediction of slopes involving success and failure (β_{1j}) revealed that OP ($\gamma_{12} = .19, p = .04$) moderated the relation of success and failure with positive affect. Specifically, the more people reported having an OP, the more they experienced positive affect when reporting a success.

With regard to negative affect, results supported *Hypothesis 1* by revealing that whether participants reported experiencing a success or a failure predicted a difference in negative affect ($\gamma_{10} = -1.37, p < .001$). Specifically, participants experienced negative affect to a greater extent when reporting a failure than a success. Moreover, the results from the prediction of means (β_{0j}) showed that OP predicted negative affect at the mean level ($\gamma_{02} = .13, p = .02$), whereas HP did not ($\gamma_{01} = -.06, p = .24$), supporting *Hypothesis 2*. Thus, the more people reported an OP for golf, the more they experienced negative affect at the mean level. Finally, the results from the prediction of slopes involving success

and failure (β_{1j}) revealed that OP ($\gamma_{12} = -.27, p = .01$) moderated the relation of success and failure with negative affect. This result once again supports *Hypothesis 3* by finding that the more people reported having an OP, the more they experienced negative affect when recalling a failure. HP did not moderate the relation of success and failure with either positive or negative affect. The moderating effect of OP in emotional reactions to successes and failures is displayed in Figure 1.

Discussion

Overall, the results supported our three hypotheses. First, golfers experienced higher levels of positive affect following the recall of successes and higher levels of negative affect when recalling failures. Second, HP was related to higher mean levels of positive affect, whereas OP was associated with higher mean levels of negative affect. Finally, our third and main hypothesis was also supported by showing that the emotional effect of successes and failures was dependent on one's passion for sport. Specifically, athletes with high levels of OP reacted more positively when recalling a success, but also reacted more negatively when recalling a failure. These results suggest that the thrill of victory and the agony of defeat are more thrilling and agonizing for athletes with strong levels of OP for sport. This emotional-amplification effect was not present with HP.

Table 2 Results of the Hierarchical Linear Modeling Analyses Predicting Positive and Negative Affect From Amateur Golfers' Recollections of Successes or Failures, Harmonious Passion (HP), and Obsessive Passion (OP)

Fixed Effect	Positive Affect			Negative Affect		
	Coefficient	<i>t</i>	<i>p</i>	Coefficient	<i>t</i>	<i>p</i>
Means as outcomes, β_{0j}						
Intercept (γ_{00})	4.56	53.40	.00	1.71	28.47	.00
HP (γ_{01})	0.40	4.31	.00	-0.06	-1.17	.24
OP (γ_{02})	0.05	0.68	.50	0.13	2.46	.02
Slopes as outcomes, β_{1j} (success or failure)						
Intercept (γ_{10})	1.29	12.26	.00	-1.37	-11.52	.00
HP (γ_{11})	-0.18	-1.42	.16	0.12	1.17	.24
OP (γ_{12})	0.19	2.07	.04	-0.27	-2.56	.01

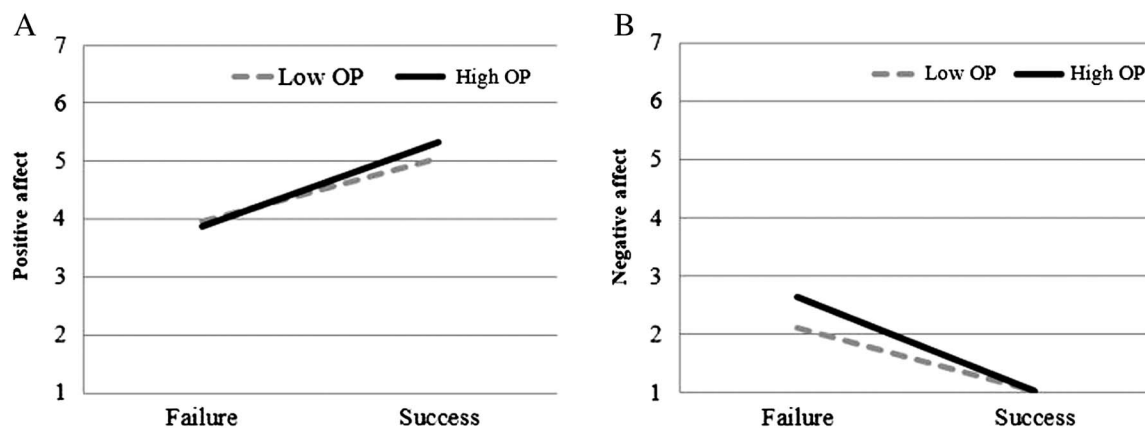


Figure 1 — Amateur golfers' experience of positive (A) and negative (B) affect following the recollection of a failure or success as a function of low (-1 SD) and high ($+1$ SD) levels of obsessive passion (OP).

These results have implications for the dualistic model of passion (Vallerand, 2015) and for our understanding of the emotional experiences of athletes. The ego-invested self-structures that are involved with an OP should lead people to be highly sensitive and responsive to outcomes related to the passionate activity (Bélanger, Lafrenière, Vallerand, & Kruglanski, 2013). This is because OP is associated with a fragile, contingent sense of self-worth. Previous research has supported this idea and found that, with OP, the way people feel about themselves (e.g., state self-esteem; Mageau et al., 2011) and about life in general (e.g., life satisfaction; Lafrenière et al., 2012) depends on how they are performing in the activity that they are passionate about. The present findings contribute to the literature by revealing that athletes with high levels of OP also experience greater fluctuations in their emotions following successes and failures. Athletes with strong levels of OP are, therefore, more prone to experiencing the emotional ups and downs of athletic competitions more severely compared with other athletes. OP is thus likely to require athletes to expend greater effort regulating their emotions to maintain an optimal level of performance (e.g., Hanin, 2007; Lazarus, 2000). The need for athletes with high levels of OP to regulate their emotions could be especially true for those who compete in sports that, like golf, provide ongoing, concrete feedback about how they are performing and how they rank in relation to other competitors.

We should note that this research is limited by its reliance on self-report questionnaires, its cross-sectional design, and the fact that participants did not actually experience a success or failure as part of the study but instead recalled how they generally react to both outcomes. In addition, although participants were recruited on a golf course to ensure a diverse sample, most golfers who participated were males. Research is needed to replicate these effects using other assessments of emotions (e.g., informant or observer reports), adopting experimental manipulations of successes and failures (e.g., Nummenmaa & Niemi, 2004) on the golf course, or using a golf and/or putting simulator with more inclusive samples. Even though more work is needed on this topic, this research provides initial support for our hypotheses concerning the relationship between passion and emotional reactions to athletic outcomes. To come back to Jim McKay's quote, the results of this study suggest that the human drama of competition is more dramatic for obsessively passionate athletes, as they experience both the thrill of victory and the agony of defeat in a heightened fashion.

Note

1. Golfers who took part in this study were passionate toward golf, reporting an average of 5.06 out of 7 on the passion criterion scale, thereby reflecting a fairly high level of passion for golf.

References

- Bélanger, J.J., Lafrenière, M.-A.K., Vallerand, R.J., & Kruglanski, A.W. (2013). Driven by fear: The effect of success and failure information on passionate individuals' performance. *Journal of Personality and Social Psychology, 104*, 180–195. doi:10.1037/a0029585
- Bylsma, L.M., Morris, B.H., & Rottenberg, J. (2008). A meta-analysis of emotional reactivity in major depressive disorder. *Clinical Psychology Review, 28*(4), 676–691. PubMed ID: 18006196 doi:10.1016/j.cpr.2007.10.001
- Curran, T., Hill, A.P., Appleton, P.R., Vallerand, R.J., & Standage, M. (2015). The psychology of passion: A meta-analytical review of a decade of research on intrapersonal outcomes. *Motivation and Emotion, 39*, 631–655. doi:10.1007/s11031-015-9503-0
- Hanin, Y.L. (2007). Emotions in sport: Current issues and perspectives. In G. Tenenbaum & R.C. Eklund (Eds.), *Handbook of sport psychology* (3rd ed., pp. 31–58). Hoboken, NJ: Wiley.
- Lafrenière, M.-A.K., Bélanger, J.J., Sedikides, C., & Vallerand, R.J. (2011). Self-esteem and passion for activities. *Personality and Individual Differences, 51*, 541–544. doi:10.1016/j.paid.2011.04.017
- Lafrenière, M.-A.K., St-Louis, A.C., Vallerand, R.J., & Donahue, E.G. (2012). On the relation between performance and life satisfaction: The moderating role of passion. *Self and Identity, 11*, 516–530. doi:10.1080/15298868.2011.616000
- Larsen, R.J., Diener, E., & Emmons, R.A. (1986). Affect Intensity and Reactions to Daily Life Events. *Journal of Personality and Social Psychology, 51*(4), 803–814. doi:10.1037/0022-3514.51.4.803
- Lazarus, R.S. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist, 14*(3), 229–252. doi:10.1123/tsp.14.3.229
- Maas, C.J.M., & Hox, J.J. (2004). The influence of violations of assumptions on multilevel parameter estimates and their standard errors. *Computational Statistics and Data Analysis, 46*(3), 427–440. doi:10.1016/j.csda.2003.08.006
- Mageau, G.A., Carpentier, J., & Vallerand, R.J. (2011). The role of self-esteem contingencies in the distinction between obsessive and harmonious passion. *European Journal of Social Psychology, 41*, 720–729. doi:10.1002/ejsp.798
- Marsh, H.W., Vallerand, R.J., Lafrenière, M.-A.K., Parker, P., Morin, A.J.S., Carbonneau, N., ... Paquet, Y. (2013). Passion: Does one scale fit all? Construct validity of two-factor passion scale and psychometric invariance over different activities and languages. *Psychological Assessment, 25*, 796–809. PubMed ID: 23647035 doi:10.1037/a0032573
- Nummenmaa, L., & Niemi, P. (2004). Inducing affective states with success-failure manipulations: A meta-analysis. *Emotion, 4*(2), 207–214. PubMed ID: 15222857 doi:10.1037/1528-3542.4.2.207
- Osborne, J.W., & Overbay, A. (2008). Best practices in data cleaning: How outliers and “fringeliens” can increase error rates and decrease the quality and precision of your results. In J. Osborne (Ed.), *Best practices in quantitative methods* (pp. 205–214). Thousand Oaks, CA: Sage. doi:10.4135/9781412995627
- Raudenbush, S.W., Bryk, A.S., & Congdon, R. (2004). *HLM 6 for windows* [computer software]. Lincolnwood, IL: Scientific Software International.
- Vallerand, R.J. (2015). *The psychology of passion: A dualistic model*. New York, NY: Oxford University Press.
- Vallerand, R.J., Blanchard, C.M., Mageau, G.A., Koestner, R., Ratelle, C.F., Leonard, M., ... Marsolais, J. (2003). Les passions de l'Âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology, 85*, 756–767. PubMed ID: 14561128 doi:10.1037/0022-3514.85.4.756
- Vallerand, R.J., & Verner-Filion, J. (in press). Theory and research in passion for sport and exercise. In G. Tenenbaum & R.C. Eklund (Eds.), *Handbook of sport psychology* (4th ed.). New York, NY: Wiley.
- Verner-Filion, J., & Vallerand, R.J. (2016). On the differential relationships involving perfectionism and academic adjustment: The mediating role of passion and affect. *Learning and Individual Differences, 50*, 103–113. doi:10.1016/j.lindif.2016.07.018
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070. PubMed ID: 3397865 doi:10.1037/0022-3514.54.6.1063