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Passion for Work: Determinants and Outcomes

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Abstract and Keywords

Passion can be uplifting and energizing; it can also be destructive and obsessive. The work realm represents a fertile ground to observe this duality of passion. This chapter provides a 10-year overview of the research on passion for work. The initial work on passion and its conceptualization is followed by a more focused presentation of the studies conducted in the workplace. First, various studies are presented that validate the concept of passion for work, distinguishing between harmonious passion and obsessive passion. Second, research that has examined the convergent and divergent validity of these two types of passion for work and their consequences on cognitive processes, psychological well-being, interpersonal relationships, and performance is discussed. Third, we present research on the determinants of passion, specifically the individual and social factors involved in the early and on-going development of passion for work. Finally, future research directions are proposed to stimulate new and exciting research in this growing field.

Keywords: passion, work, cognitive processes, psychological well-being, interpersonal relationships, performance, harmonious passion, determinants of passion

“Nothing is as important as passion. No matter

what you do with your life, be passionate”

(Jon Bon Jovi)

The above quote from famous rock star Jon Bon Jovi underscores one major point: If you want to succeed in your field of endeavor, be passionate! And Bon Jovi is not the only one to believe so. For instance, the late Steve Jobs, founder and former CEO of Apple, underscored the role of passion in persisting and reaching one’s business goals, and

business mogul Donald Trump believes in the energy that passion provides while working toward one's goals. Even the famous philosopher Hegel (1770–1831) suggested that “Nothing great in this world has ever been accomplished without passion.” But is it the case? Does passion matter with respect to performance? What about other outcomes, such as the quality of relationships that one develops and maintains at work and one's psychological well-being? Does passion for one's work matter as well?

Until recently, it was difficult to answer these questions because little to no psychological research was conducted on passion, let alone passion for work. However, roughly 10 years ago, psychologists started to empirically study passion, largely using the dualistic model of passion (DMP; Vallerand et al., 2003) as a basic structure. Since then, an increasing amount of research has been conducted in a variety of areas including the workplace (e.g., Vallerand & Houliort, 2003). This chapter reviews such research. The first section describes the concept of passion, the DMP (Vallerand, 2008, 2010), and initial research on elements of the model. The (p. 86) second section reviews research dealing with the role of passion in different outcomes relevant for the workplace. The third section reviews research on the determinants of passion, again with an emphasis on research conducted in the workplace. Finally, the last section offers suggestions for future research as well as some conclusions.

On the Psychology of Passion

The Concept of Passion

Passion has generated a lot of attention from philosophers, especially from an emotional perspective. Two positions have emerged (see Rony, 1990). The first posits that passion entails a loss of reason and control (see Plato, 429–347 BC and Spinoza, 1632–1677). In line with the etymology of the word passion (from the Latin “passio” for suffering) people afflicted with passion are seen as experiencing a kind of suffering, as if they were slaves to their passion, because it comes to control them. The second perspective portrays passion in a more positive light. For instance, Descartes (1596–1650) sees passions as strong emotions with inherent behavioral tendencies that can be positive as long as reason underlies the behavior. Similarly, as seen previously, Hegel (1770–1831) argues that passions are necessary to reach the highest levels of achievement. Thus, this second view of passion portrays passion in a more positive light because some adaptive outcomes may be experienced when individuals are in control of their passion. Taken together,

these two positions highlight the duality of passion, where “good” and “bad” outcomes can result from passion.

Very little has been written on the psychology of passion up until recently. The few psychologists who have looked at the concept have underscored its motivational aspect. For instance, some authors have proposed that people spend large amounts of time and effort in order to reach their passionate goals (see Frijda, Mesquita, Sonemans, & Van Goozen, 1991) or working on the activity that they love (Baum & Locke, 2004). Nearly all empirical work on passion has been conducted in the area of passionate love (e.g., Hatfield & Walster, 1978). Although such research is important, it does not deal with the main topic at hand, namely passion toward activities.

There has been some research on passion in the workplace. Such research has basically focused on passion as love for one’s work. For instance, Baum and colleagues (Baum & Locke, 2004; Baum, Locke, & Smith, 2001), Cardon (2008; Cardon et al., 2005, 2009), and Lam and Pertulla (2008) define passion as simply love for one’s work. Although we agree that one’s love for the activity (and in the present case, work) is an important feature of passion, it is not the only one. As seen below, other features are important to consider as pertains to passion. Also of importance is the fact that it is crucial to distinguish between different types of passion so as to account for the duality inherent in passion underscored by philosophers.

A Dualistic Model of Passion

In line with self-determination theory (SDT; Deci & Ryan, 2000), we propose that people engage in various activities throughout life in order to grow as individuals. After a period of trial and error that seems to start in early adolescence (Erikson, 1968), most people eventually start to show preference for some activities, especially those that are perceived as particularly enjoyable and important, and that have some resonance with how they see themselves. They engage on a regular basis in some of these activities and only a few turn into passionate activities. In line with the above, Vallerand et al. (2003) define passion as a strong inclination toward a self-defining activity that one loves, finds important and meaningful, and in which one invests a significant amount of time and energy. These activities come to be so self-defining that they represent central features of one’s identity. Clearly, work is central to our lives. We spend more than half our waking life at work (Vallerand & Houliort, 2003). We come to value it deeply and at some point, work becomes part of our identity. Thus, when asked what they do, people may typically say “I am a teacher,” “I am a nurse,” or “I am a salesperson.” To the extent that we love

what we do, that we value it and find it meaningful, our work is part of our identity and we are likely to develop a passion for it.

Past research has shown that values and regulations can be internalized in either a controlled or an autonomous fashion (see Deci et al., 1994; Sheldon, 2002; Vallerand, Fortier, & Guay, 1997). Similarly, the DMP posits that activities that people like (or love) will also be internalized in the person's identity and self to the extent that these are highly valued and meaningful for the person (Aron, Aron, & Smolan, 1992; Csikszentmihalyi, Rathunde, & Whalen, 1993). Furthermore, it is proposed that there are two types of passion, obsessive and harmonious, that can be distinguished in terms of how the passionate activity has been internalized.

Obsessive passion results from a controlled internalization of the activity into one's identity and (p. 87) self. A controlled internalization originates from intrapersonal and/or interpersonal pressure typically because certain contingencies are attached to the activity, such as feelings of social acceptance or self-esteem (Lafrenière, Bélanger, Vallerand, & Sedikides, 2011; Mageau, Carpentier, & Vallerand, 2011), or because the sense of excitement derived from activity engagement is uncontrollable. Such an internalization process leads the activity representation to be part of the person's identity. Furthermore, it also leads to values and regulations associated with the activity to be at best partially internalized in the self, and at worse to be internalized in the person's identity but completely outside the integrating self (Deci & Ryan, 2000). People with an obsessive passion can thus find themselves in the position of experiencing an uncontrollable urge to partake in the activity they view as important and enjoyable. They cannot help but to engage in the passionate activity. The passion must run its course as it controls the person. Consequently, the person risks experiencing conflicts and other negative affective, cognitive, and behavioral consequences during and after activity engagement. For instance, if a university professor has an obsessive passion for his academic work, he might not be able to stop working on an important paper knowing that he will come late at home for dinner and family activities. But it is as if he cannot resist the urge to pursue the writing. While writing, however, he might feel upset with himself for writing instead of being home. He might therefore have difficulties concentrating on the task at hand (writing) and he may not experience as much positive affect and flow as he could while writing. It is thus proposed that with obsessive passion individuals come to display a rigid persistence toward the activity, as oftentimes they cannot help but to engage in the passionate activity. This is so because ego-invested rather than integrative self processes (Hodgins & Knee, 2002) are at play with obsessive passion leading the person to eventually become dependent on the activity. Although such persistence may lead to some benefits (e.g., high levels of performance, such as more papers published for the professor in the preceding example), it may also come at a cost for the individual,

potentially leading to lower levels of functioning both within the confines of the passionate activity (e.g., being less happy at work) and in other aspects of life because of the conflict it can create (e.g., work-family problems). Obsessive passion can also lead to frustration and rumination about work when prevented from engaging in it. Thus, if the professor somehow manages to leave on time for dinner with the family, he still may end up suffering because he may have difficulties forgetting about the lost opportunity to write the ever-important scientific paper.

Conversely, harmonious passion results from an autonomous internalization of the activity into the person's identity and self. Such internalization occurs when individuals have freely accepted the activity as important for them without any contingencies attached to it. This type of internalization emanates from the intrinsic and integrative tendencies of the self (Deci & Ryan, 2000; Ryan & Deci, 2003) and produces a motivational force to engage in the activity willingly and engenders a sense of volition and personal endorsement about pursuing the activity. When harmonious passion is at play, individuals freely choose to engage in the beloved activity. 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. In other words, with harmonious passion the authentic integrating self (Deci & Ryan, 2000) is at play allowing the person to fully partake in the passionate activity with a flexible and mindful (Brown, Ryan, & Creswell, 2007), open manner that is conducive to positive experiences (Hodgins & Knee, 2002). Consequently, people with a harmonious passion should be able to fully focus on the task at hand and experience positive outcomes both during task engagement (e.g., positive affect, concentration, flow, and so forth) and after task engagement (general positive affect, satisfaction, and so forth). Thus, there should be little or no conflict between the person's passionate activity and his or her other life activities. Furthermore, when prevented from engaging in their passionate activity, people with a harmonious passion should be able to adapt well to the situation and focus their attention and energy on other tasks that need to be done. Finally, with harmonious passion, the person is in control of the activity and can decide when and when not to engage in the activity. Thus, when confronted with the possibility of writing the scientific paper or going home for dinner and family activities, the professor with a harmonious passion can readily go home without thinking about the missed opportunity to write some more. Thus, behavioral engagement in the passionate activity can be seen as flexible.

It is important to underscore that both types of passionate involvement reflect an equal level of passion. Thus, people with a predominant harmonious (p. 88) passion toward work are no less passionate for work than people with a predominant obsessive passion. The difference between the two types of passion does not lie in the level of one's passion but rather in its quality. The two types of passion are qualitatively different with

harmonious passion leading one to experience a more autonomous form and obsessive passion a more controlled form of passionate involvement. In fact, research by Bélanger, Lafrenière, Vallerand, and Kruglanski (2013a) has indeed shown that statistically controlling for the passion criteria (or the passion level) does not change the effects of harmonious and obsessive passion on outcomes.

Passion is often discussed in relation to intrinsic and extrinsic motivation. Intrinsic motivation shares some conceptual similarity with passion, because both involve interest and liking (or loving) for the activity. However, intrinsically motivated activities are typically not seen as being internalized in the person's identity and are best seen as emerging at the short-term level (Koestner & Losier, 2002). Furthermore, intrinsic motivation does not address the duality of passion where both adaptive and maladaptive outcomes can result from one's love for an activity. Intrinsic motivation is hypothesized to lead to only adaptive outcomes (Deci & Ryan, 2000). On the other hand, extrinsic motivation does not entail performing the activity out of enjoyment, but for reasons other than for the activity itself, such as external or internal pressure. Therefore, although some forms of extrinsic motivation, such as identified and integrated regulation, entail some internalization of an activity that one does not like in the self, a fundamental difference between extrinsic motivation and passion is the relative lack of liking (or loving) for the activity that is present with extrinsic motivation.

The difference between integrated regulation and harmonious passion deserves additional attention. The two concepts are very different because of the fundamental teleological distinction between them. The goal that is sought with the two constructs is completely different. With passion one engages in the activity out of love. With integrated regulation, one does not engage in the activity out of love but rather out of extrinsic motivation even if there is a high level of autonomy involved. Thus, although there is internalization in both constructs the basis of such internalization differs. In one case, it is based solely in a profound love for the activity; in the other in an autonomous valuing of an activity that one does not intrinsically love.

Research empirically supports these distinctions between passion and intrinsic and the different types of extrinsic motivation (external, introjected, and identified regulation) and even shows that controlling for intrinsic and extrinsic motivation does not change the role of harmonious and obsessive passion in the prediction of positive and negative affect (Gousse-Lessard, Vallerand, Carbonneau, & Lafrenière, 2013; Houliort, Philippe, Vallerand, & Ménard, 2014; Vallerand et al., 2003, Study 2).

Initial Research on the Concept of Passion

There were several purposes to the initial work on passion (Vallerand et al., 2003), including three mentioned here: (1) to determine the prevalence of passion for an activity in one's life, (2) to develop the Passion Scale, and (3) to test the validity of some of the elements of the passion constructs. In the initial study, we (Vallerand et al., 2003, Study 1) had over 500 university students complete the Passion Scale with respect to an activity that they loved, that they valued, and in which they invested time and energy (i.e., the passion definition criteria), as well as other scales allowing us to test predictions derived from the DMP. A large variety of passionate activities were reported ranging from physical activity and sports to watching movies, playing a musical instrument, and reading. Participants reported engaging in one specific passionate activity for an average of 8.5 hours per week and had been engaging in that activity for almost 6 years. Thus, clearly passionate activities are meaningful to people and are long-lasting in nature. Of importance regarding the first purpose of this research, 84% of participants indicated that they had at least a moderate level of passion for a given activity in their lives (they scored at least 4 out of 7 on a question asking them if their favorite activity was a "passion" for them). In a similar vein, a subsequent study (Philippe, Vallerand, & Lavigne, 2009) with over 750 participants ranging in age from 18 to 100 years using a more stringent criterion of having a mean of 5 out of 7 on the criteria of passion seen previously revealed that 75% of participants had a high level of passion for an activity in their life. It would thus appear that the prevalence of passion is rather high and not the exclusivity of the happy few, at least in the Province of Québec, Canada (see also Liu, Chen, & Yao, 2011; Stenseng, 2008 for similar results in other countries).

Second, as pertains to the development of the Passion Scale, Vallerand et al. (2003, Study 1) conducted exploratory and confirmatory factor analyses (p. 89) that supported the presence of two factors corresponding to the two types of passion. These findings on the factor validity of the Passion Scale have been replicated in a number of studies with respect to a variety of activities (e.g., Carbonneau, Vallerand, Fernet, & Guay, 2008; Castelda et al., 2007; Rousseau, Vallerand, Ratelle, Mageau, & Provencher, 2002; Vallerand & Houliort, 2003; Vallerand, Rousseau, Grouzet, Dumais, & Grenier, 2006, Studies 1, 2, and 3). The Passion Scale consists of two subscales of six items each reflecting obsessive (e.g., "I almost have an obsessive feeling toward this activity") and harmonious passion (e.g., "This activity is in harmony with other activities in my life"). Furthermore, internal consistency analyses have shown that both subscales are reliable (typically 0.75 and above). Finally, test-retest correlations over periods ranging from 4 to 6 weeks revealed moderately high stability values (in the range of 0.80; Rousseau et al.,

2002). More recently, using archival data of more than 3,500 participants, Marsh et al. (2013) have shown that the Passion Scale is invariant over gender, language (English and French), and five types of activities (leisure, sport, social, work, and education). Thus, overall, the factorial validity and reliability of the scale is well established.

With respect to the third purpose, a series of critical findings with partial correlations (controlling for the correlation between the two types of passion) revealed that both harmonious and obsessive passions were positively associated with the passion criteria thereby providing support for the definition of passion. These findings were replicated in the Marsh et al. (2013) study. These findings support the view that both harmonious and obsessive passions are indeed a “passion” because each one reflects the definition of the passion construct. In addition, both types of passion were found to relate to one’s identity and obsessive passion was found to more strongly relate to a measure of conflict with other life activities than harmonious passion. Furthermore, research provided support for the hypotheses dealing with affect, where harmonious passion positively predicted positive affect during and after engagement in the passionate activity, whereas obsessive passion was unrelated to positive affect but positively related to negative affect especially after task engagement and while prevented from engaging in the activity. Finally, other studies in this initial research (Vallerand et al., 2003) have also shown that obsessive (but not harmonious) passion correlated to rigid persistence in ill-advised activities (Vallerand et al., 2003, Studies 3 and 4).

Initial Research in the Workplace

Interestingly, initial research in the workplace has yielded findings highly similar to the initial research reported previously. First, with samples of workers as diverse as teachers, managers, and technicians, Vallerand and Houliort (2003) found that 77% displayed at least a moderate level of passion. Subsequent research found percentages that varied from over 90% with teachers (Carbonneau et al., 2008) to 78% with managers, professionals, and white collar workers (Houliort & Vallerand, 2013). Thus, although there seems to be some variation in the level of passion displayed by workers, presumably as a function of the type of work, the percentages of passionate workers are typically quite high. Thus, passion for work (at least at the moderate level) is not a feature of the happy few but rather seems to be firmly anchored in the workplace. Second, the Passion Scale has been fully validated as pertains to work. For instance, Vallerand and Houliort (2003) reported results that replicated those of Vallerand et al. (2003) with respect to the two-factor solution of the scale, as well as to the internal consistency of the scale. These findings have been replicated in several studies involving

workers in different areas including teaching (Carbonneau et al., 2008) and public service (Lavigne, Forest, & Crevier-Braud [2012], Study 1). Finally, Vallerand and Houliort (2003) showed that both harmonious and obsessive passion positively correlated with the definitional elements of passion (liking one's work, valuing it, and spending time and energy in it), thereby providing support for the construct validity of the passion construct.

In sum, initial research provided support for the concept of harmonious and obsessive passion as well as for the validation of the Passion Scale. Furthermore, passion seems to be prevalent in most realms of activities, including work. Since the initial research (Vallerand et al., 2003; Vallerand & Houliort, 2003), more than 100 studies have been conducted on the role of passion in a host of cognitive, affective, behavioral, relational, and performance outcomes experienced within the realms of hundreds of passionate activities conducted in both our own as well as other laboratories (see Vallerand, 2010). In the present chapter, we focus on passion research conducted in the workplace, and now turn to this issue.

Passion and Outcomes

In this section, we review research on the role of passion in outcomes that would appear to matter (p. 90) for the work domain. Specifically, we address the role of passion for work in cognitive processes, psychological well-being, interpersonal relationships, and performance.

Passion and Cognitive Processes

Based on the DMP, harmonious passion should facilitate adaptive cognitive processes while obsessive passion should not, or at least less so. This is so because with harmonious passion, integrative self-processes are at play leading the person to fully partake in the passion activity with an openness that is conducive to mindful attention, concentration, and flow in the process. The situation is different when obsessive passion is at play because ego-invested processes are involved (Hodgins & Knee, 2002). Such processes lead individuals to have an eye on the task, but another on external elements, such as the outcomes and other participants, with a defensive orientation that only permits a partial investment in the activity. Thus, less than full attention, concentration, and flow should be experienced in the process.

Research provides support for the above hypothesis. For instance, in the Vallerand et al. (2003, Study 1) study, participants were asked to complete the Passion Scale as well as indicate to what extent they typically experience high levels of concentration while they engage in the passionate activity. The results revealed that harmonious passion predicted significantly higher levels of concentration in the passionate activity than obsessive passion. The results from Vallerand et al. (2003, Study 1) were replicated in several studies outside the workplace (e.g., Mageau, Vallerand, Rousseau, Ratelle, & Provencher, 2005; Philippe et al., 2009) as well as in the workplace. For instance, with workers from a large service company (Forest, Mageau, Sarrazin, & Morin, 2011) and an insurance company (Ho, Wong, & Lee, 2011) in two different countries (Canada and China), it was found that harmonious passion facilitated the experience of concentration and attention, whereas obsessive passion was either unrelated or negatively related to it.

Another cognitive concept that deserves attention is flow (Csikszentmihalyi, 1978; Csikszentmihalyi et al., 1993). Flow refers to a desirable state that people experience when they feel completely immersed in the activity (e.g., “I have a feeling of total control”). Because harmonious passion allows the person to fully partake in the passionate activity with a secure sense of self-esteem, flexibility, and an openness to experience the world in a nondefensive, mindful manner, it should be conducive to focusing on the task at hand and consequently to experiencing flow. Conversely, with obsessive passion, internally controlling rather than integrative self-processes are at play leading the person to engage in the activity with a fragile and contingent sense of self-esteem (e.g., Crocker, 2002; Kernis, 2003; Lafrenière et al., 2011), and eventually becoming defensive rather than open to experience. Such a state should not be conducive to the experience of flow.

Much research supports these hypotheses in activities other than work where harmonious passion has been found to positively predict flow, whereas obsessive passion has not (e.g., Philippe et al., 2009, Study 2; Vallerand et al., 2003, Study 1). These findings have been replicated in several studies in the workplace (e.g., Forest et al., 2011; Houliort et al., 2011, Study 1; Lavigne et al. 2012, Studies 1 and 2). Of importance, Lavigne et al. (2012, Study 2) conducted a longitudinal study wherein both types of passion and flow were assessed twice over a 6-month interval. Because Lavigne et al. had assessed passion and flow at both points in time, they were in a position to conduct cross-lagged panel design analyses and determine if outcomes (e.g., flow) predict changes in passion or if the opposite takes place. Two important findings were obtained. First, passion was found to predict *changes* in flow that took place at work over the 6-month period, with harmonious passion significantly predicting increases in flow and obsessive passion being weakly related ($p < .10$) to flow. Thus, Lavigne et al. replicated past findings on the role of passion in flow. Second, Lavigne et al. also found that flow at Time

1 did not predict changes in passion from Time 1 to Time 2. Although an experimental design was not used in this study, these last results suggest that passion is involved in some ways in causing changes in outcomes, such as flow, whereas the reverse did not take place. Interestingly, using the same type of analyses, Carbonneau et al. (2008) also found that harmonious (but not obsessive) passion predicted increases in positive outcomes (work satisfaction), whereas the reverse was not true.

Passion and Psychological Well-Being

Recently, Vallerand (2012) proposed that engaging in a passionate activity on a regular basis has the potential to not only provide a boost in (p. 91) psychological well-being but also to lead to sustainable gains in well-being. In a nutshell, the rationale behind this hypothesis rests on three elements. First, passion for the activity is important because it is the motivational force that leads the person to engage in the activity on a regular basis. This is the sustainable part. Passion for a given activity leads the person to return to the activity regularly. Second, the type of effects that will be experienced during activity engagement depends on the type of passion. Much research in a variety of life domains, including work, reveals that harmonious passion leads the person to experience a number of positive affective experiences (e.g., positive emotions, task satisfaction) during task engagement and may even serve to protect against negative task experiences. Typically, obsessive passion induces little positive experiences and may even facilitate negative experiences (e.g., Mageau & Vallerand, 2007; Vallerand et al., 2003, Studies 1 and 2; Vallerand et al., 2006, Studies 2 and 3; see also Vallerand, 2008, 2010 for reviews). This is the quality part of the equation. Finally, in line with the Broaden-and-Build theory (Fredrickson, 2001), much research reveals that such positive affective experiences facilitate psychological well-being because they expand the self and broaden one's repertoire of skills. This is the function part of the equation. Thus, overall, it is proposed that the high quality of affective experiences that one derives from having a harmonious passion for an activity serves a purpose because it facilitates one's psychological well-being at the short-term level. Furthermore, because one's passion for the activity leads us to re-engage in the activity on a regular basis, these short-term gains in well-being do not disappear as they are experienced regularly and thus are sustained over time at the long-term level.

The research reviewed by Vallerand (2012) provided support for the role of passion in psychological well-being. Specifically, a harmonious passion for (nonwork) activities has been found to lead to psychological well-being (e.g., Rousseau & Vallerand, 2003; Vallerand et al., 2007, Studies 1 and 2; Vallerand, Mageau et al., 2008, Study 2), whereas obsessive passion for the same activities was either negatively related (Houliort et al.,

2011; Vallerand et al., 2007, Study 2) or unrelated (Vallerand et al., 2007, Study 1; Vallerand, Mageau et al., 2008, Study 2) to well-being. Furthermore, harmonious passion has been found to protect against psychological ill-being, such as anxiety and depression, whereas obsessive passion has been found to be positively related to it (Houlfort et al., 2011; Rousseau & Vallerand, 2003). Of additional interest, research by Philippe et al. (2009, Study 1) showed that people with a harmonious passion toward a given activity displayed higher levels of psychological well-being than those with an obsessive passion or those without passionate activities in their life. In addition, people with a harmonious passion displayed an *increase* in psychological well-being over a 1-year interval, whereas both those with an obsessive passion and those without a passionate activity experienced a *decrease* in well-being (Philippe et al., 2009, Study 2). Finally, research by Rousseau and Vallerand (2008) provided support for the hypothesized mediating processes. Specifically, using a prospective design and structural equation modeling analyses, these authors found that a harmonious passion for exercise leads to situational positive emotions experienced during exercise that, in turn, over time, lead to an *increase* in psychological well-being. Obsessive passion was found to directly and negatively affect psychological well-being but was unrelated to positive emotions.

The above findings were obtained with respect to passion for nonwork activities. However, there are some important differences between work and nonwork activities. Among other things, leisure (or nonwork) activities contain mostly positive task features, whereas work may contain a number of less attractive features in addition to the most enjoyable ones. Also, people typically engage in passionate nonwork activities for an average of 8.5 weekly hours (see Vallerand et al., 2003, Study 1), whereas they typically engage in work for 35 weekly hours and sometimes much more. Can the less enjoyable features and the long hours at work erode the positive effects of harmonious passion on psychological well-being? Do the positive affective experiences at work also account for the positive effects of harmonious passion for work on psychological well-being?

Research conducted in the realm of work led to results similar to those obtained with nonwork activities. First, harmonious passion for work has been found to positively predict psychological well-being and to be negatively related to ill-being, whereas obsessive passion for work has been found to be either unrelated or negatively related to psychological well-being and to be positively related to ill-being (e.g., Carbonneau et al., 2008; Forest et al., 2011; Houlfort et al., 2014; Houlfort et al., 2011, Studies 1–3; Lavigne et al., 2012, Studies 1 and 2). It thus appears that research in the workplace provides support for the major hypothesis regarding the promotion of psychological well-being and the (p. 92) prevention of ill-being of harmonious passion for work, and the less adaptive role of obsessive passion. Second, it seems that the same mediating processes come into play in the workplace, because positive work experiences mediate the positive effects of

harmonious passion on psychological well-being. For instance, in a study with workers from different public and private organizations, Houliort et al. (2011, Study 3) showed that harmonious passion for work predicted positive affect experienced at work that, in turn, predicted increases in psychological well-being that took place over a 6-month period.

Another significant contribution of the Houliort et al. (2011, Study 3) study is that it was found that the impact of obsessive passion on psychological well-being and ill-being was mediated by the experience of positive emotions at work (partial and full mediation, respectively). Hence, obsessive passion for work seems to increase ill-being and reduce well-being by preventing workers from experiencing positive emotions. These findings are intriguing because they differ from those of Rousseau and Vallerand (2008) who found that positive affect experienced during an exercise session did not mediate the negative effects of obsessive passion on psychological well-being. Clearly, future research is needed to understand why affect would play different roles when engaged in work and leisure activities.

Forest et al. (2011) studied the role of another mediating factor in the passion-psychological well-being relationship. In a study with over 400 employees from a large service company, Forest et al. (2011) found that positive experiences of competence, autonomy, and relatedness (i.e., need satisfaction in SDT) mediated the positive effects of harmonious passion on psychological well-being. These findings provide support for SDT on the role of need satisfaction in the workplace in psychological well-being as well as the role of harmonious passion in the experience of need satisfaction.

The above research provides support for the role of harmonious passion in leading to positive affective experiences and the role of the latter in promoting psychological well-being. However, such research did not address the role of the psychological mediators in the second role of harmonious passion, namely the protective role these mediating processes may play in psychological ill-being. If harmonious passion protects one from experiencing psychological ill-being, then are positive work experiences the mediating processes involved in the process? In a longitudinal study on burnout with bureaucrats from the Provincial government, Lavigne et al. (2012, Study 2) showed that harmonious passion for work predicted increases in flow over time that, in turn, predicted decreases in burnout over time. Obsessive passion was only found to directly predict increases in emotional exhaustion. It would thus appear that positive work experiences do mediate the protective effects of harmonious passion on ill-being.

It is important to note that research discussed so far has shown that obsessive passion is negatively related to psychological well-being (Lavigne et al., 2012; Rousseau & Vallerand, 2008). Furthermore, Houliort et al. (2011, Study 3) found that affective

experiences mediate the obsessive passion–psychological well-being or ill-being relationship. Vallerand, Paquet, Philippe, and Charest (2010) reasoned that another likely mediator of the contributive effect that obsessive passion should have on ill-being may be the psychological conflict experienced between the passionate activity (work) and other life activities (e.g., family activities). Past research has highlighted the role of obsessive (but not harmonious) passion in conflict between the passionate activity and other life activities (see Vallerand et al., 2003, Study 1; Vallerand, Ntoumanis, et al., 2008, Studies 1 and 3), including conflict between work and other life activities (see Caudroit, Boiché, Stephan, Le Scanff, & Trouilloud, 2011). Because with obsessive passion one experiences an uncontrollable urge to engage in the passionate activity, it becomes very difficult for the person to fully disengage from thoughts about the activity (or from disengaging in the activity altogether), leading to conflict with other activities in the person's life. Such conflict can prevent the person from replenishing himself or herself in other life pursuits. The person thus remains mentally stale, which over time may contribute to ill-being (Garland et al., 2010). In addition, because obsessive passion is typically unrelated or negatively related to positive affective experiences both during task engagement in the passionate activity (work) and in other life pursuits outside of it, obsessive passion does not trigger the protective function against ill-being like harmonious passion does. Conversely, with harmonious passion, the person can let go of the passionate activity after task engagement and fully immerse in other life pursuits without experiencing conflict between the two (see Carpentier, Mageau, & Vallerand, 2012). Thus, harmonious passion should allow the person to experience affective rewards both during task engagement in the (p. 93) passionate activity as well as in other life pursuits, thereby protecting the person against ill-being.

The above reasoning was tested with respect to psychological burnout in two studies with professional nurses from two cultures (France and Canada; Vallerand et al., 2010, Studies 1 and 2). In Study 1, 100 nurses from France completed scales assessing passion, psychological conflict, work satisfaction, and burnout. The results from structural equation modeling analyses supported the model, even when controlling for the weekly number of hours worked. Specifically, obsessive passion facilitated the experience of burnout through the psychological conflict it induced between work and other life activities. There was also an absence of relationship between obsessive passion and work satisfaction. However, harmonious passion prevented the experience of conflict and contributed to the experience of work satisfaction that, in turn, negatively predicted burnout. Through its effects on work satisfaction and conflict, harmonious passion was able to protect the person from experiencing burnout. These findings were replicated in a second study using a prospective design with nurses from the Province of Québec (Vallerand et al., 2010, Study 2), allowing researchers to predict changes in burnout over a 6-month period.

In sum, it seems that harmonious passion promotes psychological well-being and prevents ill-being, largely because it leads the person to experience some affective rewards during task engagement and allows the person to fully disengage from the passionate activity when not engaging in it (see Carpentier et al., 2012). Conversely, it seems that obsessive passion may not promote psychological well-being because it is unrelated or negatively related to positive work experiences during task engagement. In addition, obsessive passion may facilitate negative states of ill-being, such as burnout, because of the rigid persistence it entails and the conflict it creates with other aspects of one's life.

Passion and Interpersonal Relationships

Passionate individuals are typically seen as highly engaging and full of energy. As such they should be highly popular and able to make friends easily. Is it the case? And if it is the case, what is the process through which they make friends? In line with the reasoning presented thus far, the DMP posits that the passion that one holds toward work should have an impact on the quality of relationships that one develops and maintains at work. As has been shown previously, harmonious passion is conducive to positive affect much more than obsessive passion, whereas the latter has been found to lead to negative affect (see Vallerand, 2010). Of importance, the work of Waugh and Fredrickson (2006) has shown that positive affect is important for relationships. Specifically, positive affect opens up people's thought-action repertoires and self, leading one to experience the environment and surroundings more fully, thereby facilitating smiles, positive sharing of the activity, and connection and openness toward others that are conducive to positive relationships. The reverse is true for negative emotions. It thus follows that harmonious passion for work should lead to better relationships at work than obsessive passion through their differential effects on positive and negative emotions.

A series of studies conducted in a variety of settings, including the sport and work domains (Lafrenière, Jowett, Vallerand, Donahue, & Lorimer, 2008, Studies 1 and 2; Philippe, Vallerand, Houliort, Lavigne, & Donahue, 2010, Studies 1 to 4), provides support for the previous hypotheses. In all six studies, harmonious passion was positively correlated with the quality of relationships experienced within the purview of the passionate activity, whereas obsessive passion was not. Of particular interest are two studies conducted in work-related settings (Philippe et al., 2010, Studies 1 and 4). In the first study (Philippe et al., 2010, Study 1), close to 200 teachers and managers completed the Passion Scale for work, positive emotions experienced at work, as well as a scale assessing the quality of relationships with one's workmates. As expected, results revealed that harmonious passion predicted positive emotions that, in turn, positively predicted

better relationships. Obsessive passion was unrelated to relationships or positive affect. In a subsequent study, Philippe et al. (2010, Study 4), sought to replicate the findings of the first study while incorporating negative emotions in the model. Furthermore, this study was conducted with management students working in teams on various projects over an entire semester and only students who had never met before participated in the study. Thus, the present study focused on the *development* of new friendships. Results from structural equation modeling analyses revealed that harmonious passion positively predicted positive affect, but negatively predicted negative affect, whereas obsessive passion only positively predicted negative affect. In turn, positive and negative affect experienced over the semester positively and negatively (p. 94) predicted relationship quality, respectively. Of additional interest, Philippe et al. (2010) also had workmates assess the relationship quality that they had with each other. The same results were obtained for both self and other assessments of relationship quality. Overall, these two studies underscore the role of harmonious passion in the development of new relationships (Philippe et al., 2010, Study 4) and the maintenance of existing relationships (Philippe et al., 2010, Study 1) in work-related settings.

Finally, other research has revealed that the positive effects of harmonious passion on the quality relationships also applies to relationships where one is a supervisor and the other a subordinate, as assessed by people in both positions (Lafrenière et al., 2008, Studies 1 and 2). Specifically, it was found that both coaches and players with a harmonious passion for their sport enjoyed a better relationship with each other than those with an obsessive passion. Similarly, it appears that positive emotions also mediate the quality of such relationships (Lafrenière et al., 2008, Study 2). However, these latter findings were obtained in the sport domain (with coaches and athletes) with already existing relationships. Future research is needed to replicate these findings in the workplace with both new and existing one-up relationships.

There is a second process through which passion for work can affect relationships. Specifically, passion for work can negatively influence relationships in other areas of our lives through the conflict it might create. This negative effect should result from obsessive passion as people typically have difficulties disengaging physically and mentally from work and thus may experience conflict between work and relationships in other spheres of one's life, especially family and love relationships. Such should not be the case for harmonious passion. No research to date has tested these hypotheses directly with respect to passion for work. However, research in other fields lends credence to these hypotheses. For instance, Vallerand et al. (2003, Study 1) have shown that obsessive (but not harmonious) passion for a nonwork activity was positively associated with experiencing conflict between activity engagement and other aspects of one's life. Caudroit et al. (2011) have shown that nurses with an obsessive passion

experienced conflict between their work and engaging in leisure physical activity. Finally, other research has shown that having a passion for the Internet (Séguin-Lévesque, Laliberté, Pelletier, Blanchard, & Vallerand, 2003) and for being a soccer fan (in Europe; Vallerand, Ntoumanis et al., 2008, Study 3), conflicted with the quality of the relationship with one's spouse. Because these findings were obtained with respect to an obsessive passion for nonwork activities, future research should attempt to replicate them with respect to passion for work.

Passion and Performance

So far, we have seen that passion, and especially harmonious passion, can contribute to several positive work outcomes. But what about performance at work? Does passion matter? Over the years, several authors have suggested that it does. Years ago, the philosopher Hegel (1770–1831) suggested that passion was essential for high levels of achievement to take place. Thus, according to Hegel and others (as discussed in the Introduction section), passion is essential to high levels of performance. Is it the case?

One approach we took (Vallerand, 2014, Study 1) in order to test the above question was to compare individuals who had been selected by a provincial committee as “Personalities of the Week” for their major contributions to Québec society in a variety of areas (business, music and arts, sports, and so forth) over the past 10 years with regular workers. Results revealed that the Personalities of the Week were significantly more passionate than regular workers. Indeed, using a stringent average score of 5 out of 7 on the passion criteria, 96% of the Personalities indicated being highly passionate for their activity, whereas only 33% of the regular workers did so. Furthermore, the Personalities of the Week displayed higher levels of both harmonious and obsessive passion than the regular workers. Finally, the Personalities of the Week reported working 9 hours more per week than regular workers (47 vs. 38 hours). Interestingly, when statistically controlling for the number hours worked, the differences in passion remained. Thus, passion seems to be involved in high-level performance at work.

So, if passion is involved in high-level performance, what is the process through which it affects performance? There seems to be two key dimensions of performance that need to be distinguished: short-term and long-term performance. With respect to short-term performance, it would appear that one needs to take into account the factors involved in facilitating high performance at a given moment. It seems that the positive situational factors (e.g., positive affect, flow) that harmonious passion allows one to experience at work may be conducive to high performance. Results from two studies by Liu et al. (2011) provide some support for (p. 95) this hypothesis. Using a total of over 1,000 employees from a manufacturing firm (Study 1) and a large commercial bank (Study 2) in China, the

authors found in the two studies that harmonious passion positively predicted individual performance (in this case creativity) as assessed by the supervisor. These findings held up even after controlling for a number of variables, such as participants' age, gender, level of education, tenure, technical positions, and work unit.

Obsessive passion and the potential mediating role of experiential factors were not assessed in the Liu et al. (2011) studies. However, the role of these variables was tested in a study by Ho et al. (2011). These authors measured both types of passion, levels of absorption in their work (a construct similar to flow), and performance as assessed by supervisors in over 500 employees from an insurance company. Results from a path analysis revealed that harmonious passion positively predicted levels of absorption that, in turn, positively predicted objective performance. Obsessive passion was unrelated to absorption or performance. These findings thus provide some support for the positive role of harmonious (but not obsessive) passion in short-term performance.

With respect to long-term performance, research reveals that to reach high-level performance in any given field one needs to spend several years (specifically 10 years and 10,000 hours; Ericsson & Charness, 1994) of considerable engagement in one specific type of task engagement called deliberate practice. Deliberate practice entails engaging in the activity with clear goals of improving on certain task components. For instance, an economist has to go through formal university training and several years of internship and coaching before being in a position to make educated decisions regarding the economy. We believe that passion represents the underlying motivational force that leads individuals to remain engaged in the activity and to spend so much time in perfecting their skills in the long-term. Indeed, if one is to engage in the activity for long hours over several years and sometimes a lifetime, one must love the activity dearly and have the desire to persist in the activity especially when times are rough. Thus, the two types of passion (harmonious and obsessive) should lead to engagement in deliberate practice that, in turn, should lead to improved performance.

The above model was tested in research with elite basketball players (Vallerand, Mageau et al., 2008, Study 1) and among the best dramatic arts students in the Province of Québec (Vallerand et al., 2007, Study 1). The results of these two studies were essentially the same. The dramatic arts study is particularly relevant, as the participants will become professionals working in a variety of areas in dramatic arts in the Province of Québec. In this study, a prospective design was used where students completed scales assessing their passion for dramatic arts as well as deliberate practice (based on Ericsson & Charness, 1994) early in the term. Teachers independently rated the students' performance at the end of the term. Results from a path analysis revealed that both types of passion led to engagement in deliberate practice that, in turn, led to high levels of objective performance.

Initial research by Baum and Locke (2004; see also Baum et al., 2001), had shown that the CEO's passion for entrepreneurship predicted the company's growth (or performance) through the mediating role of different factors, including goals. However, such research did not assess the two types of passion. Subsequent research on passion and performance did. Such research conducted with athletes (Vallerand, Mageau, et al., 2008, Study 2) and classical musicians (including professional world-class musicians; Bonneville-Roussy, Lavigne, & Vallerand, 2011) found support for a more elaborate model wherein one adaptive type of achievement goals (Elliot & Church, 1997) termed mastery goals (having the goal to improve at the task) mediates the impact of both types of passion on deliberate practice, whereas a maladaptive type of goals, performance-avoidance goals (having the goal to not do worse than others), mediates the negative impact of obsessive passion on performance. It seems that whereas harmonious passion facilitates only the use of adaptive goals, obsessive passion leads to the adoption of both adaptive (mastery) and dysfunctional (performance-approach) goals as pertains to performance.

Also of interest is the finding that in several of the passion-performance studies (Bonneville-Roussy et al., 2011; Vallerand et al., 2007, Study 1; Vallerand, Mageau, et al., 2008, Study 2), psychological well-being was also assessed. Results revealed that harmonious passion was positively and significantly related to psychological well-being, whereas obsessive passion was either negatively related or unrelated to it. This is in line with research reported previously on passion and psychological well-being. It thus appears that both types of passion can positively contribute to long-term performance. However, with harmonious passion, there is a bonus (p. 96) as one may reach high levels of performance while "having a life" (i.e., being happy). Such does not seem to be the case for obsessive passion.

Clearly additional research is needed regarding the role of passion in performance at work. However, the present findings highlight the fact that there seem to be two roads to high performance: the harmonious and the obsessive roads. The harmonious road is characterized by the sole goal of wanting to improve (i.e., mastery goal), which leads to deliberate practice and high levels of performance over time. In addition, through the experience of positive experiential factors (i.e., absorption), harmonious passion seems to be conducive to high-level short-term, performance. Of additional interest is that the harmonious road to excellence seems to be paved with psychological well-being. Thus, high-levels of short-term and long-term performance need not be obtained at the expense of happiness. On the other hand, the obsessive path to excellence is paved with both adaptive (i.e., mastery) and maladaptive (i.e. performance-avoidance) goals and a less intense level of absorption that is not conducive to performance or psychological well-

being. Thus, although passion is necessary to reach excellence, harmonious passion seems more adaptive than obsessive passion.

In sum, research reviewed in this section reveals that passion for work is involved in a number of outcomes. Furthermore, the type of passion makes a difference. Specifically, having a harmonious passion for one's work is positively associated with better cognitive functioning, affective experiences, psychological well-being (and the absence of ill-being), positive relationship development and maintenance, and performance. Although obsessive passion has been positively related to some positive outcomes (e.g., performance), it is typically either unrelated or negatively related to outcomes reviewed in this chapter. The fact that obsessive passion may at times lead to some positive outcomes needs to be further studied. For instance, not giving up in the face of obstacles is certainly a consequence that should follow from obsessive passion because of the rigid persistence it creates, and perhaps more so than from harmonious passion. Thus, depending on whether giving up at some point is adaptive or not, there may be situations where obsessive passion may lead to better outcomes than harmonious passion. Future research on this issue is important.

Perhaps one caveat is in order. In this section, we have been using the term "outcomes." One is reminded that the reviewed research mostly used correlational designs. Thus, we cannot firmly conclude that passion "causes" outcomes. However, two important sets of studies need to be considered. First, the results of two studies conducted in the workplace using a cross-lagged panel design revealed that although passion predicts changes in outcomes, outcomes do not predict changes in passion (Carbonneau et al., 2008; Lavigne et al., 2012, Study 2). Second, recent laboratory research reveals that experimentally inducing harmonious passion leads to better situational outcomes (more adaptive cognitive processes, less energy depletion, and so forth) than inducing obsessive passion (Bélanger, Lafrenière, Vallerand, & Kruglanski, 2013b). This is basically done by having people write extensively about a recent engagement in the passionate activity that was either harmonious or obsessive in content (see Bélanger et al., 2013b). Clearly, additional research on the causality issue between passion and outcomes is necessary before one can firmly conclude that passion *causes* outcomes, and especially in the workplace. However, the previous research suggests that it may indeed be the case.

On the Determinants of Passion

Initial Development of Passion

How does one become passionate for one's work? And if one becomes passionate, how does he or she develop a harmonious rather than an obsessive passion? In light of the important role that passion plays in a variety of work outcomes, these questions become of major interest. The DMP posits that three processes are particularly important: activity selection, activity valuation, and the internalization of the activity in identity (Mageau et al., 2009; Vallerand, 2008, 2010). Activity selection refers to the person's preference for the activity over other activities. In line with SDT (Deci & Ryan, 2000), we believe that people explore their environment in order to grow as individuals. In so doing, they engage in a variety of activities. At some point, people start to show preference for some activities, especially those that are enjoyable and allow them the satisfaction of the needs for competence, autonomy, and relatedness. Of these activities, a limited few are perceived as particularly enjoyable and to have some resonance with how people see themselves. Of course, this is all subjective and an activity that is perceived as enjoyable and as related to identity by someone may not be perceived as such by another person. To the extent that the person feels that a specific activity reflects true choice and interests and is consonant with his or her identity, the person (p. 97) may start to value this activity greatly. Activity valuation (or the subjective importance given to the activity by the person) represents the second process in the development of passion. It is expected to play a key role in the internalization of the activity in identity. Indeed, theory and research underscores the fact that behavior (Kelman, 1968), regulations (Deci et al., 1994; Sheldon, 2002; Vallerand, 1997), groups we belong to (Tajfel & Turner, 1986), as well as the people we love (Aron et al., 1992) can be internalized in identity and self. Thus, what was once outside in the environment is now part of us. If what we highly value is an enjoyable activity (or its representation) that is consonant with our identity, then the activity will be internalized in the self, and a passion for the activity is likely to develop.

In line with SDT (Deci & Ryan, 1985, 2000), the DMP posits that such an internalization process is much more than an inside versus outside process. Specifically, what has been internalized inside of us can be more or less aligned with one's sense of self, depending on the type of internalization that takes place. The more aligned with the self is the internalized representation, the more the latter is in line with our values, regulations, and under our control. In other words, what has been internalized can be of different quality depending on the type of internalization that has taken place. SDT posits the existence of

two main types of internalization process, the autonomous internalization process and the controlled internalization process, each leading to either harmonious or to obsessive passion. Obsessive passion results from a controlled internalization of the activity into one's identity. A controlled internalization originates from intrapersonal and/or interpersonal pressure typically because certain contingencies are attached to the activity, such as feelings of social acceptance or self-esteem (see Mageau et al., 2011), or because the sense of excitement derived from activity engagement is uncontrollable. Conversely, harmonious passion results from an autonomous internalization of the activity representation into the person's identity. An autonomous internalization occurs when individuals have freely accepted the activity as important to them without any or little contingencies attached to it. This type of internalization emanates from the intrinsic and integrative tendencies of the self (Deci & Ryan, 2000; Ryan & Deci, 2003).

The DMP further posits that the type of internalization process that occurs depends on at least two types of variables: the social environment and one's personality. To the extent that one's social environment (e.g., parents, teachers, coaches) is autonomy-supportive, an autonomous internalization is likely to take place, leading to harmonious passion. Conversely, to the extent that one's social environment is controlling, a controlled internalization takes place, leading to obsessive passion. Similarly, if an individual has a type of personality that fosters one's autonomy, such as an autonomous personality (as indexed by the Global Motivation Scale; Guay, Mageau, & Vallerand, 2003), then, the autonomous internalization process should take place, leading to harmonious passion. However, when one's personality is more of the controlled type (generally doing things out of internal or external pressure), the controlled internalization process should be in operation, leading to obsessive passion.

These hypotheses were tested in two series of studies (Mageau et al., 2009; Vallerand et al., 2006; Studies 1 and 3). In a first series of studies (Mageau et al., 2009, Study 3), the role of the autonomy-supportive social environment as well as that of activity selection and valuation and identity processes in the development of passion were assessed. First-year high school students who had *never* played a musical instrument before and who were taking their first music class completed a series of questionnaires early in the term assessing activity selection (i.e., preference for music over other activities) and valuation (perceived parental activity valuation and perceived parental and child activity specialization), autonomy support from parents and music teachers, as well as identity processes. The authors sought to determine who would develop a passion for music by the end of the semester, and among these passionate students, which type of passion they would display (i.e., harmonious or obsessive passion). Results from discriminant analyses revealed that the students who ended up being moderately passionate for music (36% of the sample) at the end of the term had, earlier in the term, reported higher levels of

activity valuation and specialization, identity processes, and parental and teacher autonomy support than those students who did not develop a passion. Thus, these variables (activity selection, activity valuation, identity processes, and autonomy support from the environment) seem to represent the key variables in the development of a passion for an activity, such as music, as hypothesized.

Subsequent analyses focused on the 36% of passionate novice musicians and compared those who had developed a harmonious passion with those who had developed an obsessive passion. It (p. 98) was found that high perceived autonomy support from close adults (parents and music teachers) and children's activity valuation were conducive to the development of harmonious passion. High levels of parental perceived valuation for music and lack of autonomy support were found to predict the development of obsessive passion. Results of two other studies dealing with sports and music revealed that both *perceived* (Mageau et al., 2009, Study 1) and *actual* autonomy support (as reported by the parents themselves; Mageau et al., 2009, Study 2) were conducive to harmonious passion. In sum, the results of the Mageau et al. (2009) studies demonstrate the role of activity valuation and autonomy support (and control) from significant adults in the development of a passion in general, and harmonious (obsessive) passion in particular.

In the second series of studies, Vallerand et al. (2006, Studies 1 and 3) tested the role of activity valuation and personality variables in the occurrence of the two types of passion among athletes. In the first study (Vallerand et al., 2006, Study 1), results from a path analysis revealed that activity valuation coupled with an autonomous personality (as assessed by the Global Motivation Scale; Guay et al. 2003) predicted harmonious passion. Obsessive passion resulted from activity valuation coupled with a controlled personality. These findings were replicated in a second study (Vallerand et al., 2006, Study 3) using a short longitudinal design. Thus, overall, in addition to social factors, personality factors also appear to play a role in the development of both types of passion.

The On-Going Development of Passion

The DMP further posits that once a passion for a given activity has initially developed, its development continues as it is on-going. Thus, increases and decreases in activity valuation lead to similar modulation in the intensity of passion. Furthermore, the presence or absence of social and personal factors that pertain to the autonomous versus controlled internalization process influence the on-going development of passion in a corresponding fashion (e.g., more harmonious than obsessive passion). It should be noted that the internalization process is not an all or none process. Thus, elements referring to both types of passion may have been internalized to different degrees leading both types of passion to be present within the individual to different degrees. One important

consequence of this state of affairs is that it should be possible to facilitate one or the other type of passion by making salient certain social or personal factors. In other words, although a predominant type of passion is usually in operation for a given individual toward a specific activity, it is possible to further reinforce the predominant passion or to make the other type of passion operative depending on which type of social or personal factors is made salient. Recently, research conducted in the workplace has looked at the role of both personal and social factors as determinants of the two types of passion.

Personal Factors

We have seen in the previous section that individuals with an autonomous personality (e.g., Guay et al., 2003) are more likely to internalize an activity in their self in a more autonomous way and thus to develop a harmonious passion for a given activity, whereas individuals with a controlled personality are more likely to internalize things in a more controlled fashion and to develop an obsessive passion (Vallerand et al., 2006). Recent research conducted in the workplace has also underscored the role of two other individual differences in the development of passion for work. A first one pertains to emotional intelligence. Emotional intelligence refers to a group of abilities that allows one to work efficiently with one's emotions and those of others at the intrapersonal and interpersonal levels (Brackett & Mayer, 2003; Salovey & Mayer, 1990). Managers that have a high level of emotional intelligence are more in tune with their strengths and weaknesses; show more empathy; know what impact they have on others; and are more competent at coping, managing, and making good use of their emotions as well as that of others (Salovey & Mayer, 1990). The opposite is believed to be true for managers with a low level of emotional intelligence.

Workers with high emotional intelligence thus should be able to behave and think in a more autonomous way—act out of choice and in congruence with their personal emotion and values—a condition that should facilitate the emergence of harmonious passion. In a recent study, Houliort and Rinfret (2010) tested this hypothesis with the chief executives of 55 health and social services centers from the Province of Québec. The Bar-On Emotional Quotient Inventory was used to assess the presence and level of emotional intelligence. Results from a path analysis found that high level of emotional intelligence within chief executives was positively and significantly related with harmonious passion for work. Unfortunately, obsessive passion (p. 99) was not assessed in this study, and thus we cannot confirm that the absence or lack of emotional intelligence predicts obsessive passion for work. However, we hypothesize that because individuals with little emotional intelligence are less in-tune with their authentic self, when passionate for work, they should develop an obsessive passion. Future research is needed to determine the role of emotional intelligence (or lack of) in obsessive passion.

Another important personality variable refers to signature strengths use. Strengths are considered as “pre-existing capacity for a particular way of behaving, thinking, or feeling that is authentic and energizing to the user, and enables functioning, development and performance” (Linley, 2008). It has been shown that people use their strengths to different degrees and that those who use their strengths more seem to experience positive outcomes to a larger degree than those who use their strengths less. For instance, workers who use their strengths in their everyday job perform at higher levels (Buckingham & Clifton, 2001; Clifton & Harter, 2003; Harter, Schmidt, & Hayes, 2002), have higher levels of well-being (Berman, 2008; Govindji & Linley, 2007; Park, Peterson, & Seligman, 2004), and remain longer in their organization (Asplund, Lopez, Hodges, & Harter, 2007). Because using one’s strengths allows one to have access to the authentic self, it should also make operative harmonious passion.

Recently, Forest et al. (2012) have tested the above hypothesis. Seligman, Steen, Park, and Peterson’s (2005) intervention program was adapted to the workplace, wherein participants in the experimental condition ($n = 186$) identified their signature strengths and were trained to visualize and describe themselves at their personal best and to use their strengths in their current job for a period of 2 weeks. The experiment also involved a control group ($n = 36$) and both groups participated in a follow-up 2 months after the intervention. Harmonious and obsessive passions for work were measured before and after the intervention. Three key findings were obtained. First, the experimental program was successful in increasing strengths use. Second, increases in the use of signature strengths from Time 1 to Time 2 predicted increases in harmonious passion for work between Time 1 and Time 2. Finally, results also showed that harmonious passion mediated the relationship between strengths’ use and positive outcomes. No significant relationship was found between strengths’ use and obsessive passion. Hence, workers who were aware of their signature strengths and who could enact them at work were more likely to have an increase in harmonious passion than workers who did not know their strengths or could not use them. As hypothesized, it appears that the use of one’s signature strengths allows workers to behave and think in an autonomous way that, in turn, facilitates the experience of harmonious passion for one’s work.

In sum, developing a harmonious or an obsessive passion is partly in workers’ hands. Indeed, both emotional intelligence and signature strengths use are coachable and can be increased as was shown in the Forest et al. (2012) study. By increasing one’s emotional intelligence and identifying and using one’s signature strengths more often, workers can facilitate the emergence of a harmonious passion for work and the positive outcomes that follow.

Social Factors

It was seen previously that significant adults (e.g., parents, coaches, teachers; Mageau et al., 2009) who provide children with autonomy support, that is who provide room for choices and active involvement, foster harmonious passion while those who are more controlling are more likely to either fail to promote passion or to facilitate obsessive passion. Similarly, it is proposed that organizational contexts that are autonomy supportive should promote the development of a harmonious passion for work. In opposition, a controlling working environment would lead to a more obsessive passion.

Houliort and Vallerand (2013) have examined how two key organizational factors, namely leadership style and organizational culture, can affect passion for work. Leaders are expected to have a great impact on their followers and can become significant figures for workers. Leaders color the vision, mission, and values of organizations, have a say in who gets hired, and what policies will be implemented. On top of this, leaders also influence how these activities are carried out. Thus, leaders determine how much autonomy support will take place in the workplace. Two important types of leadership are transformational and transactional leaderships. Transformational leadership takes place when the leader acts toward “the follower beyond immediate self-interests through idealized influence (charisma), inspiration, intellectual stimulation, or individual consideration” (Bass, 1999, p. 11). Transformational leaders act in a way that supports workers’ autonomy and values behaviors and thinking that promote autonomy.

Conversely, transactional leadership characterizes the leader-follower (p. 100) relationship when gratification of self-interest is at the center of the relationship (Bass, 1999). Leaders with a transactional style use monitoring and corrective actions to manage and act in a more controlled way. Transformational leadership has repeatedly been shown to have more positive consequences than transactional leadership (DeGroot, Kiker, & Cross, 2000; Dumdum, Low, & Avolio, 2002; Judge & Piccolo, 2004; Wang, Oh, Courtwright, & Colbert, 2011).

Two studies by Houliort and Vallerand (2013) examined the relationship between leadership style and passion for work. Participants were teachers (Study 1, $n = 1,059$) and white collars, managers, and professionals of an important public organization (Study 2, $n = 147$). The authors used the Multifactor Leadership Questionnaire (Avolio, Bass, & Jung, 1999) to assess participants’ perception of the leadership style adopted by their immediate supervisor and tested whether leadership, transformational and transactional leadership could predict harmonious and obsessive passion, respectively. Correlational and path analyses supported the hypothesized predictions. Specifically, transformational leadership positively predicted harmonious passion, whereas transactional leadership positively predicted obsessive passion. Hence, leaders, just as parents in Mageau et al.’s (2009) research, can promote an autonomous internalization of work within the self by

supporting workers' autonomy. Conversely, when leaders pressure workers to pursue a task or to engage in it a certain way, passionate workers are more likely to develop an obsessive passion.

Another important social factor to consider is that of organizational culture.

Organizational culture represents "how things are done around here," and thus reflects the formal and informal organizational structures and processes, values (strategies, goals, and philosophies), and underlying assumptions (unconscious, taken for granted beliefs, perceptions, and thoughts) (Schein, 2009). An organizational culture brings a particular flavor to workers' experiences because it influences how everyone should behave and think. As such, it can have multiple effects on organizational outcomes. For instance, organizational culture has been found to influence performance (Lee & Yu, 2004), creativity and innovation (Martins & Terblanche, 2003), and knowledge management (Alavi, Kayworth, & Leidner, 2005), just to name a few outcomes. Each culture thus creates a specific working environment with nutrients that can possibly nourish or hinder the development of a harmonious or an obsessive passion for work. Two types of cultures proposed by Cameron and Quinn (2006) were of particular importance in the Houliort and Vallerand's (2013, Study 2) study. The clan culture is based on collaboration, commitment, development, and communication that take place within an organization. Leaders are seen as mentors and team builders and such an organization identifies with innovativeness, vision, and new resources as key ingredients to organization effectiveness (Cameron & Quinn, 2006). Because of its emphasis on worker support and human values, it was hypothesized that a clan culture would lead to harmonious passion for work. Conversely, a market culture focuses on competition, goal achievement, and profitability. Leaders who endorse such a culture are seen as hard driving, highly competitive, and focused on productivity. Because of its aggressive nature and the lack of consideration of workers as individuals with psychological needs, a market culture seems to entail a more controlled environment, and thus it was hypothesized to foster obsessive passion for work.

The above hypotheses were confirmed. Indeed, Houliort and Vallerand (2013, Study 2) found that the clan culture is positively related to harmonious passion for work. A clan culture promotes autonomy support (i.e., facilitate employees' participation in decision making, team work, competence feedback, and so forth) and thus fosters the development of a harmonious passion because it allows for an autonomous internalization of work within the self. Conversely, a market culture endorses control and competition and puts forward tangible rewards while minimizing employees' participation. Unsurprisingly, it was found to nurture the development of an obsessive passion among their passionate workers. Indeed, such environments are thought to promote a controlled type of internalization of work, such that the value of work is, at best, partially integrated

within the self (Deci & Ryan, 2000). Sometimes, however, a leader has to command and dictate what and how work needs to be done. SDT, and specifically research on informational interpersonal contexts, suggests that this can still be done in an autonomy supportive fashion. By using a noncontrolling language, acknowledging workers' feelings, and giving a rationale for the imposed rules and structures, leaders can command and dictate without affecting workers' autonomy (see Deci et al., 1994). This interpersonal style creates a work environment favorable for the development of harmonious passion.

(p. 101) In sum, these findings on the determinants of passion highlight the importance of activity selection, activity valuation, and internalization of the activity within identity and self in the initial development of passion. Once the potential for passion is present and well anchored, personal characteristics, such as emotional intelligence and signature strengths, as well as the interpersonal style adopted by leaders and managers, can affect the on-going development of passion for work. In other words, the worker's idiosyncratic interface with the passionate activity and the organizational environment in which he or she works contribute in determining if the passion is harmonious or obsessive. Additional research is needed to increase the understanding of the development of passion. In this light, both personal and social factors as well as their interaction should be further scrutinized.

Conclusions

In the present paper, research on passion for work was reviewed using the DMP as an organizing structure. The DMP posits the existence of two types of passion, harmonious and obsessive, which can be differentiated in terms of how the representation of the passionate activity has been internalized into one's identity. Harmonious passion originates from an autonomous internalization of the activity into one's identity and promotes a mindful and open form of activity engagement that should facilitate a number of positive work outcomes. Conversely, obsessive passion takes origin in a controlled internalization and is hypothesized to instill a more rigid and conflicted form of task engagement and thus lead to less adaptive outcomes. In addition, the DMP posits that both personal and social factors represent important determinants of passion. Research conducted in the workplace provides strong support for the DMP.

Several directions for future research can be proposed. A first deals with the mediating role of different types of positive work experiences in several outcomes (e.g., psychological well-being, relationships). Specifically, do different types of work experiences (e.g., positive emotions, flow, need satisfaction) have the same impact on outcomes? Which one contributes the most? What is the role of passion in these various

work experiences? A second research direction that seems important deals with the fact that harmonious passion typically leads to positive effects with respect to most if not all outcomes. However, is it always the case? For instance, Amiot, Vallerand, and Blanchard (2006) found that obsessively passionate hockey players were found to be happier than harmoniously passionate players in highly competitive hockey leagues, whereas the reverse was true in less competitive leagues. Does the same situation apply to the workplace? Can harmonious passion sometimes lead to less adaptive outcomes than obsessive passion? And if so, under what type of situation does this take place? Research is needed on this issue. A third potential research area deals with deviant behavior. Research in sports and leisure activities reveals that obsessive passion leads to deviant and immoral behavior, whereas harmonious passion does not (Bureau, Vallerand, Ntoumanis, & Lafrenière, 2013). In light of some of the deviant behavior that took place in the banking system in recent years, such research in the work domain seems important. A fourth research direction pertains to individuals who are nonpassionate for their work. Most of the research reviewed compared harmonious with obsessive passion for work. Thus, very little is known about nonpassionate workers. How do they fare relative to those who have a predominant harmonious or obsessive passion with respect to work outcomes? The only available research reveals that nonpassionate people display lower levels of psychological well-being than people who are harmoniously passionate for a given activity (Philippe et al., 2009) but do not differ from those who display an obsessive passion. Would this pattern of results hold up with respect to passion for work? Research is needed to shed some light on this issue.

Finally, a last research avenue pertains to the determinants of passion. Such research should attempt to identify how best to promote the development of a harmonious passion (and prevent an obsessive passion) for work, thereby leading to optimal outcomes. How can we best promote the transference of passion (see Cardon, 2008), and especially harmonious passion in organizations? Already we know that both encouraging the use of personal strengths (e.g., Forest et al., 2012) and fostering autonomy-supportive environments through transformational leadership and choice (e.g., Houliort & Vallerand, 2013; Liu et al., 2011) facilitates harmonious passion. However, do these practices work for all workers, including those who may have already developed an obsessive passion for work? Research is needed in order to develop best practices that would take into account individual differences in one's passion at entry point to facilitate a harmonious passion and associated benefits in a specific work environment.

(p. 102) In sum, research reviewed in this chapter underscores the fact that passion for work does matter. However, the type of passion also matters. Specifically, harmonious passion for work generally leads to the experience of positive work outcomes, whereas obsessive passion, although ensuring heavy work engagement, does not lead to optimal

outcomes and may even lead to some deleterious effects. In this light, attention should be given to determinants that promote a harmonious passion for work. Future research on some of the issues raised above therefore appears rather promising.

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