The Role of Passion for Teaching in Intrapersonal and Interpersonal Outcomes

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The purpose of this study was to determine the role of passion in teachers’ burnout symptoms, work satisfaction, and perceptions of positive student classroom behaviors. The dualistic model of passion (Vallerand et al., 2003) proposes 2 types of passion: harmonious and obsessive. In previous studies, harmonious passion has been shown to lead to adaptive outcomes (e.g., well-being and satisfaction), whereas obsessive passion has been shown to lead to less adaptive outcomes (e.g., shame and negative affect). In this study, 494 teachers completed measures of passion for teaching and various outcomes associated with the teaching profession twice over a 3-month period. Results of a cross-lag model based on structural equation modeling revealed that increases in harmonious passion for teaching predicted increases in work satisfaction and decreases in burnout symptoms over time, while changes in obsessive passion were unrelated to such outcomes. In addition, increases in both harmonious and obsessive passion predicted increases in teacher-perceived adaptive student behaviors over time. Overall, the results of the present study suggest that passion for teaching is an important concept to consider in education.

Keywords: passion, teaching, student outcomes, burnout, work satisfaction

Passion is not a luxury, a frill, or a quality possessed by just a few teachers. It is essential to all good teaching. (Day, 2004, p. 11)

Teaching is a complex and demanding career that requires intense dedication. Daily difficulties teachers face include stress (Wilhelm, Dewhurst-Savellis, & Parker, 2000), inadequate support from the school administration, student discipline problems, and low salaries (Ingersoll, 2001). Every year, such harsh conditions make a number of teachers choose to leave the profession, which implies that those who stay committed to their position must feel a deep and genuine love for their job (Elliott & Crosswell, 2001). This is congruent with Day’s (2004) claim that passion is essential in the teaching realm. Although the idea that passionate teachers have a positive impact on their students is widely accepted (Day, 2004; Fried, 1995; Patrick, Hisley, Kempler, & College, 2000), positions vary considerably as to the quality of personal outcomes teachers derive from their passion. On one hand, some authors claim that passion in the workplace is the antidote to burnout because it characterizes people who are continually energized and reinvigorated by their work (Dlugos & Friedlander, 2001; Grosch & Olsen, 1994; Selder & Paustian, 1989). On the other hand, others consider that passion is one of the causes of burnout because it leads people to engage with too much intensity in a sphere of their life and neglect other life domains (Coulehan, 2002; Freudenberger, 1985; Marcil, 1991). Also, although the high level of commitment required by the teaching profession is a source of satisfaction for many teachers, others find the demands too great a burden (Day, 2004; Elliott & Crosswell, 2001) and report that teaching is “too absorbing” and “takes up too much of [their lives]” (Nias, 1989, p. 39).

How can passion lead a number of teachers to derive psychological well-being and satisfaction from their professional lives while driving others to be consumed by their teaching to the point where they end up suffering and experiencing negative emotions and burnout? Although much has been written about passion for teaching, very little empirical research and no formal theory or model seem to exist. The purpose of the present study was to attempt to address the above question by using a new conceptualization of passion (Vallerand et al., 2003).

A Dualistic Model of Passion

Vallerand et al. (2003) defined passion as a strong inclination or desire toward an activity (e.g., one’s job) that one likes (or even loves) and finds important and in which one invests time and energy. We further posit that the representation of an activity that
one likes and in which one engages on a regular basis will be incorporated in that person’s identity to the extent that the activity is highly valued (Aron, Aron, & Smollan, 1992; Csikszentmihalyi, Rathunde, & Whalen, 1993), thereby leading to a passion for this activity. Such a passionate activity comes to be so self-defining that it represents a central feature of one’s identity. For instance, those who have a passion for teaching do not merely say that they teach; they are teachers.

The passion model distinguishes two types of passion: harmonious and obsessive passion. There are two different processes by which an activity can be internalized in one’s identity, each of them resulting in a specific type of passion. Harmonious passion emanates from an autonomous internalization (Deci & Ryan, 2000; Vallerand, 1997) of the activity into one’s identity. Such an internalization occurs when an individual freely accepts an activity as important to him or her. No contingencies are attached to the passionate activity such that activity engagement is personally endorsed. The autonomous internalization comes from an intrinsic tendency of the self (Deci & Ryan, 1985, 2000, 2002; Ryan & Deci, 2003) and produces a motivational force to engage in the activity willingly (Vallerand, 1997; Vallerand, Fortier, & Guay, 1997). Individuals do not feel an uncontrollable urge to engage in the passionate activity, but rather freely choose to do so. Thus, when it comes to harmonious passion, behavioral engagement can be seen as flexible: People are able to decide when and when not to engage in the activity. For example, a teacher with a harmonious passion for teaching who is offered an opportunity to give a tutorial class at lunchtime might decide to decline the offer because such a task would reduce time that should be devoted to relaxing, reenergizing, and socializing with colleagues. The harmoniously passionate activity (e.g., teaching) can be seen as occupying a significant but not overpowering space in the person’s identity and is in harmony with other aspects of the person’s life (Vallerand et al., 2003). This should lead people with a harmonious passion to be able to fully concentrate on the task at hand and experience positive outcomes both during activity engagement (e.g., positive affect and flow) and after activity engagement (e.g., satisfaction or no guilt). Moreover, when prevented from taking part in their passionate activity, they should be able to focus their attention and energy on other tasks, without constantly ruminating about the passionate activity.

Conversely, obsessive passion results from a controlled internalization (Deci & Ryan, 2000) of the activity into one’s identity. Such an internalization originates from intrapersonal or interpersonal pressure either because certain contingencies are attached to the activity, such as feelings of social acceptance or self-esteem, or because the sense of excitement derived from activity engagement becomes uncontrollable. For instance, although a teacher really enjoys his profession, he might experience an internal desire to teach because it is the only activity that might allow him to maintain a sense of self-worth. In such a case, teaching is no longer a truly volitional choice, but rather an activity this individual feels he has to do (e.g., to feel like a worthy person). People with an obsessive passion are controlled by their activity; it is as if they cannot help but to engage in it. Because the activity becomes out of one’s control, it can take up disproportionate space in a person’s life. This can lead one to neglect other life domains (e.g., family, friends, and leisure), thereby resulting in conflict in one’s life. For instance, a teacher with an obsessive passion for teaching might agree to partake in a committee organizing school activities—in addition to her regular class assignment—although such additional tasks would overload her and conflict with family activities. While attending the committee’s meetings, she might be upset with herself for working instead of being at home with her husband and children. She might therefore have difficulties focusing on her task and may not experience positive affect while doing it. She might even feel guilty afterward. Thus, because of its controlled nature, it is proposed that obsessive passion can eventually lead to less adaptive outcomes. Although some benefits (e.g., improved teaching skills) might follow from this type of passionate involvement, so do harsh costs (e.g., personal and family problems and burnout).

Research has provided empirical support for several aspects of the passion conceptualization. First, the existence of two constructs, corresponding to harmonious and obsessive passion, has been supported by results from exploratory and confirmatory factor analyses with the Passion Scale (Vallerand, Vallerand, Ratelle, Mageau, & Provencher, 2002; Vallerand et al., 2003, Study 1; Vallerand et al., 2006, Study 1). Second, partial correlations (controlling for the correlation between the two types of passion) revealed that both harmonious and obsessive passion were positively associated with measures of activity valuation and measures of the activity being perceived as a passion, thereby providing support for the definition of passion. Empirical evidence has also shown that the two types of passion are associated with different affective experiences (Vallerand et al., 2003, Study 1). Thus, harmonious passion is positively associated with flow and positive emotions experienced during activity engagement, whereas obsessive passion is positively associated with negative emotions (e.g., shame) after engagement with the activity and when prevented from engaging in the activity altogether. Obsessive (but not harmonious) passion is also related to conflict with other aspects of one’s life (Séguin-Lévesque, Laliberté, Pelletier, Blanchard, & Vallerand, 2003; Vallerand et al., 2003, Study 1), to rumination and negative affect when the person is prevented from engaging in the passionate activity (Ratelle, Vallerand, Mageau, Rousseau, & Provencher, 2004; Vallerand et al., 2003, Study 1), and to rigid persistence in ill-advised activities (Vallerand et al., 2003, Studies 3 and 4), eventually leading to chronic injuries in dancers (Rip, Fortin, & Vallerand, 2006) and to pathological gambling (Philippe & Vallerand, 2007; Ratelle et al., 2004).

It should be noted that support for these findings has been obtained in a variety of activities including work (Vallerand & Houfourt, 2003), gambling (Mageau, Vallerand, Rousseau, Ratelle, & Provencher, 2005; Ratelle et al., 2004; Rousseau et al., 2002), Internet use (Séguin-Lévesque et al., 2003), sports (Vallerand et al., 2003, Study 2; Vallerand & Miquelon, 2007; Vallerand et al., 2006), and several types of recreational activities such as reading and playing music (Vallerand et al., 2003, Study 1).

On Passion for Teaching: The Present Research

Passion appears to be an important concept to consider in education because the teaching profession requires teachers to invest time, energy, and their hearts in their teaching (Day, 2004). Passion is not only what attracts and keeps teachers in the profession (Nias, 1996), it is also what makes them constantly search for
more effective ways to reach their students and master their craft (Zehm & Kottler, 1993). Thus “passion is not an option. It is essential to high-quality teaching” (Day, 2004, p.3). Although several authors have emphasized the importance of passion in the teaching profession (Day, 2004; Elliott & Crosswell, 2001; Fried, 1995; Nias, 1996), the construct has not yet been the subject of extensive empirical research. The scientific study of passion in the teaching realm is especially relevant because paradoxical conceptions of passion have been proposed in the education literature. Thus, it appears that “passion can lead to enhanced vision [. . .] but it can also restrict wider vision and lead to the narrow pursuit of a passionately held conviction at the expense of other things” (Day, 2004, p. 11). The main purpose of the present research, therefore, was to use the recent theoretical framework of passion proposed by Vallerand et al. (2003) to provide a better understanding of the role of passion for teaching in various teacher and student outcomes.

School boards and administrators are increasingly concerned with teachers’ professional satisfaction and burnout, two personal outcomes that play a crucial role with regards to teachers’ intentions to stay committed (or not) to their jobs (Fore, Martin, & Bender, 2002; Shann, 1998). Although no empirical study has looked directly at the relationship between passion for teaching and professional outcomes, research on passion in other domains has clearly suggested that harmonious and obsessive passion should be differently associated with satisfaction and burnout in the teaching realm. Indeed, in previous studies, harmonious passion has been shown to lead to a number of adaptive outcomes, including enhanced subjective well-being and vitality (Rousseau & Vallerand, 2003, 2006; Vallerand et al., 2006, 2007, 2008), reduced depression and anxiety, positive affective experiences at work (Vallerand & Houlefort, 2003), and positive emotions during and after engagement in the passionate activity (Vallerand et al., 2003, Study 1). Conversely, obsessive passion has been associated with maladaptive outcomes such as reduced work satisfaction (Vallerand & Houlefort, 2003) and negative emotions both during and after engagement in the passionate activity (Vallerand et al., 2003, Study 1). Thus, one purpose of the present study was to replicate and extend past findings on the more adaptive outcomes derived from harmonious (vs. obsessive) passion with respect to work satisfaction and burnout.

Much has been written about the potential of passion for teaching to produce student benefits (e.g., Day, 2004; Fried, 1995). However, to the best of our knowledge, no empirical work has tested this relationship. Obsessive and harmonious passion should lead to positive student outcomes because enthusiasm, which is a key overt characteristic of passion (Selder & Paustian, 1989), has been shown to promote students’ vitality (Patrick et al., 2000). Another purpose of this study was therefore to remedy the lack of research concerning the role that teachers’ passion may play in students’ adaptive classroom behaviors. An additional purpose was to use a cross-lag panel model to test for the directionality of effects between passion and outcomes. Specifically, such a design allowed us to determine whether changes in harmonious and obsessive passion predicted changes in outcomes (i.e., work satisfaction, burnout, and teacher-perceived student behaviors) over time or, conversely, whether changes in outcomes predicted changes in passion. A final and exploratory purpose of the present study was to assess the prevalence of passion in the teaching realm.

Overall, we made a number of predictions. First, we expected increases in harmonious passion to predict increases in work satisfaction over time and increases in obsessive passion either to predict losses of work satisfaction or to be unrelated to it. Second, we hypothesized that increases in harmonious passion would predict losses in burnout symptoms over time, whereas we expected increases in obsessive passion either to predict increases in burnout symptoms or to be unrelated to them. Third, we expected increases in both harmonious and obsessive passion to predict enhanced perceptions of positive student behaviors over time. Fourth, although we hypothesized that changes in harmonious and obsessive passion at Time 1 would predict changes in specific outcomes (as detailed above), we did not expect the reverse. That is, we did not expect changes in work satisfaction, burnout symptoms, and teacher-perceived student classroom behaviors to predict changes in both types of passions. Finally, we hypothesized that a majority of teachers would be passionate.

Method

Participants

Participants were 494 teachers (373 women, 119 men, and 2 who did not identify their gender) from French-Canadian schools in two school boards from the Quebec City area. Our sample consisted of 306 elementary teachers, 120 high school teachers, 20 teachers in adult education, 46 teachers in vocational and technical education, and 2 who did not specify their school level. Age ranged from 23 to 64 years (M = 43.07 years, SD = 10.16). The mean number of years of teaching experience was 15.82 years (SD = 10.33). A total of 653 participants took part at Time 1; of these, 494 also took part at Time 2, yielding a response rate of 75.7%.

Procedure

This study was conducted over a 3-month-period and consisted of two data collections (i.e., March and June). At each phase of the study, teachers were asked to fill out a questionnaire and return it in a prestamped envelope. Follow-up telephone calls were made to increase the return rate.

Instruments

Passion. The Passion Scale (Vallerand et al., 2003) contains two sections. The first assesses the extent to which people have a passion for an activity (i.e., teaching in the present study). The level of passion is measured with the mean of four criterion items that reflect the definition of passion. Specifically, participants are asked to report the extent to which they value the activity, devote time to it, love it, and view it as a passion (see appendix). These four items were highly intercorrelated in the present study: the

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1 Respondents who took part in both phases of the study were significantly older and had more years of experience as a teacher (as assessed at Time 1) than respondents who only took part in Time 1. However, controlling for those variables in the model did not change the pattern of results.
Cronbach’s alphas were .79 and .78 at Times 1 and 2, respectively. The second section of the Passion Scale assesses harmonious and obsessive passions with two six-item subscales. In the present study, harmonious and obsessive passions were found to be unrelated ($r_s = .01$ and .00, at Times 1 and 2, respectively).² A sample item for harmonious passion is “My job as a teacher is in harmony with the other activities in my life”; a sample item for obsessive passion is “I have almost an obsessive feeling for my job as a teacher.” The Cronbach’s alpha values for these two subscales were .87 and .76, respectively, at Time 1 and .87 and .80, respectively, at Time 2. Responses to all items were scored on a 7-point Likert scale ranging from 1 (“I do not agree at all”) to 7 (“very strongly agree”). Much support exists for the validity and the reliability of the Passion Scale (see Rousseau et al., 2002; Vallerand et al., 2003, 2006). In this study, a confirmatory factor analysis of the Passion Scale yielded an acceptable fit to the data, $\chi^2(23, N = 494) = 138.16$, $p < .001$, comparative fit index = .96, normed fit index = .95, standardized root-mean-square residual = .08, root-mean-square error of approximation = .10, confidence interval = [.09–.12].

**Work satisfaction.** We assessed work satisfaction with the French-Canadian version (Blais, Vallerand, Pelletier, & Brière, 1989) of the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), adapted to the worklife for the purpose of this study. The instrument consists of five items that are measured on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is “In most ways my job is close to my ideal.” The Cronbach’s alphas in this study were .88 and .90 at Times 1 and 2, respectively.

**Burnout.** Burnout was assessed using the French-Canadian version (Dion & Tessier, 1994) of the Maslach Burnout Inventory (Maslach & Jackson, 1986). The psychometric properties of the French-Canadian version of the Maslach Burnout Inventory are similar to those of the original version (see Dion & Tessier, 1994). The instrument measures three dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment. However, in line with past research (Coders & Dougherty, 1993; Shirom, 2003), we used only the first two dimensions—considered the “core of burnout”—in the present study. Emotional exhaustion (nine items) is characterized by a lack of energy and a feeling that one’s emotional resources are used up (e.g., “I feel emotionally drained from my work”). Depersonalization (five items) refers to a negative, callous, and detached attitude toward the people with whom one works (e.g., “I feel I treat some students as if they were impersonal objects”). Responses were scored on a 7-point Likert scale varying from 1 (never) to 7 (everyday). The Cronbach’s alpha values were .70 and .77 for depersonalization and .92 and .93 for emotional exhaustion, at Times 1 and 2, respectively.

**Teacher-perceived student behaviors.** We used three items from the French-Canadian version (Fernet & Sénécal, 2004) of the Pupil Behavior Patterns Scale (Friedman, 1995) to assess teachers’ perceptions of student behavior patterns. Responses were scored on a 4-point Likert scale varying from 1 (never) to 4 (very often). A sample item was “Students in my class are cooperative and enthusiastic.” High scores are indicative of adaptive student classroom behaviors. The Cronbach’s alphas in this study were .73 and .75 at Times 1 and 2, respectively.

### Results

Means, standard deviations, and correlations of the model variables are presented in Table 1. We performed all structural equation modeling analyses on a raw data file using maximum likelihood estimation procedure (EQS version 6.1; Bentler, 1993). The model tested in the present study was composed of 10 latent variables: 5 exogenous variables (i.e., harmonious passion, obsessive passion, work satisfaction, burnout, and student behaviors at Time 1) and 5 endogenous variables (i.e., harmonious passion, obsessive passion, work satisfaction, burnout, and student behaviors at Time 2). As shown in Figure 1, each latent variable had between two and five indicators. The three items of the Pupil Behavior Patterns Scale were used as the indicators of the student behaviors factor, and the five items of the Work Satisfaction Scale were used as the indicators of the work satisfaction latent variable.

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² Correlations between harmonious and obsessive passions have been found to vary across studies. This would suggest that whether the two types of passion are orthogonal or not may be a function of the type of activity at hand.

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<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>1. Harmonious passion (at T1)</td>
<td>4.92</td>
<td>1.02</td>
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<tr>
<td>2. Obsessive passion (at T1)</td>
<td>2.65</td>
<td>1.04</td>
<td>-.14*</td>
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<td>3. Work satisfaction (at T1)</td>
<td>4.44</td>
<td>1.16</td>
<td>.73**</td>
<td>-.07</td>
<td>—</td>
<td></td>
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<tr>
<td>4. Burnout (at T1)</td>
<td>1.97</td>
<td>1.00</td>
<td>-.63**</td>
<td>.38**</td>
<td>-.74**</td>
<td>—</td>
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<tr>
<td>5. Positive student behaviors (at T1)</td>
<td>2.85</td>
<td>0.56</td>
<td>.32**</td>
<td>.02</td>
<td>.40**</td>
<td>-.36**</td>
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<tr>
<td>6. Harmonious passion (at T2)</td>
<td>4.95</td>
<td>1.02</td>
<td>.80**</td>
<td>-.11*</td>
<td>.58**</td>
<td>-.50**</td>
<td>.26**</td>
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<td>7. Obsessive passion (at T2)</td>
<td>2.59</td>
<td>1.06</td>
<td>-.13**</td>
<td>.88**</td>
<td>-.06</td>
<td>.34**</td>
<td>.01</td>
<td>-.10*</td>
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<tr>
<td>8. Work satisfaction (at T2)</td>
<td>4.50</td>
<td>1.20</td>
<td>.71**</td>
<td>-.08</td>
<td>.83**</td>
<td>-.63**</td>
<td>.34**</td>
<td>.73**</td>
<td>-.09*</td>
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<tr>
<td>9. Burnout (at T2)</td>
<td>2.00</td>
<td>1.04</td>
<td>-.62**</td>
<td>.31**</td>
<td>-.66**</td>
<td>.85**</td>
<td>-.32**</td>
<td>-.60**</td>
<td>.32**</td>
<td>-.70**</td>
<td>—</td>
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<tr>
<td>10. Positive student behaviors (at T2)</td>
<td>2.90</td>
<td>0.59</td>
<td>.36**</td>
<td>.10**</td>
<td>.38**</td>
<td>-.31**</td>
<td>.78**</td>
<td>.31**</td>
<td>.09</td>
<td>.38**</td>
<td>-.36**</td>
<td>—</td>
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</tbody>
</table>

Note. $N = 494$; all scales were assessed on a 7-point scale except for teacher-perceived student behaviors, which were assessed on a 4-point scale. T1 = Time 1; T2 = Time 2.

* $p < .05$. ** $p < .01$. 

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Because the variables contained too many items, parcels were used as indicators of the two types of passion as well as the burnout latent variable. For harmonious and obsessive passion, we computed parcels by aggregating Items 1 and 2 from their respective subscale into Parcel 1, Items 3 and 4 into Parcel 2, and Items 5 and 6 into Parcel 3. Parcels were also used for the burnout variable, in which we aggregated items from the Emotional Exhaustion subscale into Parcel 1 and items from the Depersonalization subscale into Parcel 2. Following suggestions by Marsh and Hau (1996), we allowed each of the 16 indicators at Time 1 to covary with its equivalent at Time 2 to prevent inflated estimates of stability. We estimated the covariances between the five latent constructs at Time 1 and the covariances between the disturbance terms at Time 2. For clarity concerns, we omitted covariances in Figure 1.

To test the hypotheses of the present study, we tested a first model. A total of 11 paths were specified: one between each

Figure 1. Results of the structural equation modeling analyses. N = 494. "p < .05. ""p < .01. """"p < .001.
variable at Time 1 and its equivalent at Time 2, one between harmonious passion at Time 1 and each outcome (i.e., work satisfaction, burnout, and teacher-perceived student behaviors) at Time 2, and one between obsessive passion at Time 1 and the outcomes at Time 2. The results showed that the model had an acceptable fit to the data, $\chi^2(417, N = 494) = 949.67, p < .001$, comparative fit index = .95, normed fit index = .91, standardized root-mean-square residual = .08, root-mean-square-square error of approximation = .05, confidence interval = [.05–.06]. Because the chi-square is sensitive to sample size, some researchers have suggested using the normed chi-square, which is the chi-square value divided by the degrees of freedom (Kline, 2005). Bollen (1989) suggested that a normed chi-square value of less than 3.0 indicates a reasonable fit to the data. In the present study, the normed chi-square value was 2.28 (949.67/417). Results revealed that all paths but two (i.e., those from obsessive passion to work satisfaction and burnout) were significant. We conducted the analyses again, omitting the two nonsignificant paths. The model fit indices remained virtually unchanged, as shown in Table 2 (see Model 2). To compare the two models, we used Akaike’s information criterion (AIC) statistic. Within a set of competing nonhierarchical models, the one with the lowest AIC value is preferred (Kline, 2005). The original model yielded an AIC of 115.67. The model in which two paths were omitted (i.e., Model 2) was kept because it yielded an AIC of 114.43, which indicates that it was slightly more parsimonious than Model 1.

The standardized solutions for Model 2 are presented in Figure 1. Each latent variable at Time 1 was strongly and positively associated with its equivalent at Time 2 ($\beta$s ranging from 0.67 to 0.88), suggesting that the constructs are relatively stable over time. Although a large part of the variance of each outcome at Time 2 was explained by the equivalent variable at Time 1, a significant part of the variance of those outcomes was nevertheless explained by either one (for work satisfaction and burnout) or both (for student behaviors) types of passion at Time 1. More specifically, increases in harmonious passion predicted increases in work satisfaction ($\beta = 0.22$) and increases in teacher-perceived adaptive student behaviors ($\beta = 0.14$), as well as decreases in burnout ($\beta = -0.14$) that took place over the 3-month period. We also found that increases in obsessive passion predicted an increased perception of adaptive student behaviors ($\beta = 0.11$) from Time 1 to Time 2.

We tested two alternative models. The first alternative model (i.e., Model 3) considered in this study was one in which the paths from outcomes (i.e., work satisfaction, burnout, and student behaviors) at Time 1 to harmonious and obsessive passions at Time 2 were estimated in addition to the paths from all five variables at Time 1 to their equivalents at Time 2. We tested such a model to help determine the directionality of effects (i.e., whether harmonious and obsessive passions are the antecedents and not the consequences of work satisfaction, burnout, and perceived student behaviors). As can be seen in Table 2, this model resulted in increased chi-square and AIC values. Moreover, results revealed the absence of significant paths from the outcomes at Time 1 to the two types of passion at Time 2. Model 3 was therefore rejected. Finally, we tested another alternative model involving reciprocal effects (i.e., Model 4). In such a model, the paths from passions at Time 1 to outcomes at Time 2 and the paths from outcomes at Time 1 to passions at Time 2 were estimated simultaneously. The model fit indices are shown in Table 2. Model 4 provided no additional information in comparison to the previous models; that is, the paths from harmonious passion at Time 1 to the three outcomes at Time 2 were significant, as was the path from obsessive passion at Time 1 to teacher-perceived student behaviors at Time 2, whereas no significant relations were found between the outcomes at Time 1 and the passions at Time 2. For those reasons and because the model AIC value was higher than that of Model 2 (119.79 > 114.43), the latter was preferred, thereby supporting the proposed model.

As a final and exploratory purpose, we had proposed to assess the prevalence of passion for teaching in our sample. We used the four criteria of passion (i.e., activity valuation, time investment, love for the activity, and activity being a passion; Vallerand et al., 2003) to differentiate between the nonpassionate and the passionate teachers. Teachers with a mean score on the sum of the four criteria at the midpoint (4) or above on the response scale were

Table 2

Goodness-of-Fit Indices of the Four Models

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>NFI</th>
<th>SRMR</th>
<th>RMSEA and CI</th>
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<tbody>
<tr>
<td>1</td>
<td>949.67</td>
<td>417</td>
<td>.95</td>
<td>.91</td>
<td>.08</td>
<td>.05 (.05–.06)</td>
<td>115.67</td>
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<tr>
<td>2</td>
<td>952.43</td>
<td>419</td>
<td>.95</td>
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Note. CFI = comparative fit index; NFI = normed fit index; SRMR = standardized root-mean-square residual; RMSEA = root-mean-square error of approximation; CI = confidence interval; AIC = Akaike’s information criterion.

3 The model was also tested with estimated missing values at Time 2 ($N = 653$) using the full-information maximum likelihood method. The same results were obtained. Furthermore, we tested a Time-1-only model and a Time-2-only model. In the Time-1-only model, harmonious passion was positively associated with satisfaction ($\beta = 0.78$) and student behavior ($\beta = 0.38$) and negatively associated with burnout ($\beta = -0.63$), whereas obsessive passion was positively associated with burnout ($\beta = 0.28$). In the Time-2-only model, harmonious passion was positively associated with satisfaction ($\beta = 0.81$) and student behavior ($\beta = 0.38$) and negatively associated with burnout ($\beta = -0.65$), and obsessive passion was positively associated with burnout ($\beta = 0.27$) and student behavior ($\beta = 0.14$). Both models yielded acceptable fits to the data. Thus, both Time-1-only and Time-2-only models yielded the same basic results as the model involving both time points. We feel that these results provide additional support for our model.
classified as passionate. Results showed that 93.1% of the teachers in the present study were at least moderately passionate about their teaching.\(^4\)

**Discussion**

The general purpose of the present research was to proceed to the empirical study of passion in the teaching realm to achieve a better understanding of the intrapersonal and interpersonal outcomes associated with it. Specifically, we sought to shed light on the role of changes in harmonious and obsessive passions in the changes in work satisfaction, burnout, and teacher-perceived positive student behaviors that take place over time. We expected increases in harmonious passion to predict an augmentation of work satisfaction and a reduction of burnout symptoms over time. Conversely, we expected increases in obsessive passion either to predict a reduction of work satisfaction and an augmentation of burnout symptoms over time or to be unrelated to those outcomes. Moreover, we expected increases in both harmonious and obsessive passions to predict increases in teacher-perceived positive student behaviors over time. Finally, we hypothesized that most teachers would be passionate toward their job. Overall, the results of the present research provided support for all these hypotheses.

**On Passion for Teaching and Intrapersonal Outcomes**

An important conclusion that may be drawn from the present findings has to do with the relationships between passion and intrapersonal outcomes. In line with our hypotheses, increases in harmonious passion were shown to predict increases in job satisfaction and decreases in burnout symptoms over time, and increases in obsessive passion were shown to be unrelated to such outcomes. These findings are particularly interesting because they shed some light on the following inconsistency: Passion seems to lead some teachers to fully enjoy themselves in their jobs, whereas others do not appear to derive such positive benefits (Day, 2004; Nias, 1989). Therefore, our results support the assumption that the quality of outcomes derived from one’s teaching depends on the type of passion held by the teacher. It would thus appear that involvement in an activity central to one’s life (such as teaching) contributes to one’s personal well-being to the extent that harmonious passion underlies such involvement. Conversely, high activity involvement triggered by obsessive passion may not afford similar benefits.

Future research is needed to identify the psychological processes through which harmonious passion is linked to reduced burnout and enhanced job satisfaction. Past research on passion has shown that during task engagement, harmonious passion is associated with positive affect, whereas obsessive passion is unrelated to positive affect and can even predict negative affect (Mageau et al., 2005; Vallerand et al., 2003, Study 1). Thus, one plausible explanation for the effect of harmonious passion on the intrapersonal outcomes may have to do with the fact that engaging in an activity (such as teaching) out of harmonious passion leads to the cumulative experience of positive affect, which over time translates into increased satisfaction and subjective well-being. This would be consistent with research by Fredrickson and Joiner (2002) that has shown the existence of an upward spiral, whereby positive affect leads to higher levels of subjective well-being that lead to subsequent experiences of positive affect, and so on. Such a spiral may be triggered by the impact of harmonious passion on positive affect. Similarly, a downward spiral involving negative affect and subjective well-being might also exist and may be induced by obsessive passion. In fact, research with elderly individuals by Rousseau and Vallerand (2003, 2008) has suggested that harmonious passion could lead to positive affect that, in turn, leads to increased subjective well-being. The role of affect as a mediator between passion for teaching and intrapersonal outcomes should be more fully examined in future research.

**On Passion for Teaching and Interpersonal Outcomes**

The present research provides valuable information on the role of passion for teaching in teacher-perceived student outcomes. Thus, increases in both types of passion were shown to lead to increases in teacher-perceived adaptive student classroom behaviors over a 3-month period. Although this result is in line with many authors’ claims that teachers who display a passion for their teaching have a positive impact on their students (Day, 2004; Fried, 1995), this study was the first to test this sequence within a theoretical framework. The finding that harmonious and obsessive passion have a similar and positive impact on others is interesting because the two types of passion are fueled by quite different processes. Thus, on one hand, obsessive passion originates largely from ego-invested structures within the person (Hodgins & Knee, 2002), which lead the individual to be defensive and to keep open to the world. On the other hand, harmonious passion emanates from the authentic integrating self (Deci & Ryan, 2000; Hodgins & Knee, 2002) and allows the individual to fully open up to various experiences. We suggest that students might perceive the vitality, intensity, and enthusiasm (Patrick et al., 2000) common to harmonious and obsessive passion because those are visible signs of passion. However, we posit that students are unaware of the processes underlying the two types of passion and, therefore, would not be expected to distinguish an obsessively passionate from a harmoniously passionate teacher. This would explain why increases in teacher-perceived positive student behaviors were positively predicted by increases in both harmonious and obsessive passions, although teachers themselves did not derive the same personal benefits from the two types of passion. Further examination of the interpersonal impact of passion is clearly needed. In fact, although the type of passion a teacher experiences does not seem to make a difference for students, it may not be the case for other individuals surrounding passionate teachers. Indeed, research by Séguin-Lévesque et al. (2003) revealed that obsessive passion toward the Internet was positively associated with conflict in the couple relationship but negatively related to dyadic adjustment. In contrast, harmonious passion toward the Internet was associated with less conflict and greater dyadic adjustment. Future research should investigate whether harmoniously and obsessively passionate teachers might have different impacts on significant others such as spouses and colleagues.

Another issue related to the interpersonal domain would be whether the two types of passion lead to different interpersonal

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\(^4\) Removing the nonpassionate teachers (N = 34) from the analyses did not change the pattern of results. Therefore, these participants were not excluded.
effects as a function of the kind of activities at hand. Although there might be no visible signs allowing others to distinguish teachers’ harmonious passion from their obsessive passion in the classroom, it could be otherwise in other settings. For example, in the physical activity realm, a teacher with an obsessive passion might be seen as more aggressive and competitive by people surrounding him or her than one with a harmonious passion. These different types of passion might lead to different effects on students. Such a hypothesis constitutes an interesting research avenue to explore.

Implications for the Dualistic Model of Passion

Another implication from the present results pertains to the support they provide for the dualistic model of passion. Our findings first document the differential influences of harmonious and obsessive passion on the intrapersonal level. They showed that although obsessive passion is unrelated to well-being benefits, harmonious passion can make a significant difference in teachers’ lives by boosting job satisfaction and decreasing the risks of burnout over time. These results are congruent with those from previous studies that demonstrated that harmonious passion is associated with more adaptive outcomes than is obsessive passion (Mageau et al., 2005; Ratelle et al., 2006; Rousseau & Vallerand, 2003, 2008; Vallerand et al., 2003, 2006). Although results showed that changes in obsessive passion did not predict changes in burnout symptoms, it is worth noting that there was an association between these two variables when the measurement times were considered separately ($\beta = 0.28$ at Time 1 and $\beta = 0.27$ at Time 2).

The present study also yielded important findings with respect to interpersonal influences of passion (Vallerand et al., 2003). Results revealed that although divergent at the intrapersonal level, outcomes associated with harmonious and obsessive passions for teaching converge at the interpersonal level. Specifically, results showed that both types of passion foster adaptive student behaviors in the classroom, as perceived by the teacher. They also suggest that the mere fact of being passionate for one’s teaching would be enough to instill adaptive student classroom behavior. Future research is needed to identify the nature of the psychological processes that mediate the positive effects of passion on such student adaptive behavior. For instance, does teacher’s enthusiasm (Patrick et al., 2000) induced by passion represent a crucial mediator of such effects? This hypothesis should be tested in future research.

Results also provide valuable information about the directionality of effects between passion and outcomes. Thus, harmonious and obsessive passions at Time 1 were significantly associated with the outcomes at Time 2, whereas the reverse (i.e., the association between the outcomes at Time 1 and the passions at Time 2) was not found. These findings support the fact that passion might be more of an antecedent than a consequence of work satisfaction, burnout, and perceptions of adaptive student behaviors. These findings are in line with past research that has shown that passion is implicated in a variety of personal and professional outcomes such as subjective well-being and vitality (Rousseau & Vallerand, 2003, 2008; Vallerand et al., 2006) and reduced depression, reduced anxiety, and positive affective experiences at work (Vallerand & Houlfort, 2003). Thus, additional research over a longer period of time (e.g., a whole academic year) is needed to replicate the present findings.

Finally, much work remains to be done with respect to understanding the processes underlying the development of passion. Why is it that some teachers develop an obsessive passion toward teaching and others take the more beneficial road of harmonious passion? Work by Mageau et al. (in press) has suggested that an autonomy-supportive social environment (i.e., where choices are offered, initiatives are supported, and control is minimized) promotes the emergence of harmonious passion. Further research to clarify the antecedents of passion for teaching appears in order. Such research could result in important theoretical and applied advances, eventually leading to the creation of programs designed to facilitate the development of teachers’ harmonious passion, which would be beneficial for teachers themselves and for their students.

On the Prevalence of Passion in the Teaching Realm

An implication of the present research worth noting is that it empirically showed that passion for teaching appears to be highly prevalent. The hypothesis that a majority of teachers would be passionate toward their job was largely confirmed. Indeed, 93.1% of the teachers in the present sample met the criteria for at least a moderate level of passion toward teaching (Vallerand et al., 2003). These results confirm the widespread notion that teachers are passionate about their job (Day, 2004; Elliott & Crosswell, 2001; Fried, 1995; Nias, 1996) and highlight the relevance of studying passion in the teaching realm. Thus, our study fills an empirical gap by being the first to support the widely accepted claim that teachers are passionate. However, results about the prevalence of passion for teaching are limited to our sample. Thus, these results cannot be generalized to the broader population of teachers. Further research with a sample representative of the teaching population is clearly needed on this issue.

Limitations

Although the results from the present study are consistent with a causal interpretation, the data are correlational in nature, and therefore, definitive conclusions about causality are not warranted. Future research using experimental designs should be used to replicate and confirm the proposed model. Another limitation to consider is that the coefficients of change—although statistically significant—were low ($\beta$s ranging from 0.11 to 0.22). This might be because of the short interval (i.e., 3 months) between the two measurement times that did not allow for much change to take place. This interpretation is supported by the stability coefficients that were rather high (see Figure 1). Therefore, interpretation of the present results should be done with caution. Clearly, subsequent research should use a longitudinal design extending over an entire school year to see whether the present results are replicated and whether higher coefficients of change might be obtained. Finally, we should underscore that the measure assessing student positive behaviors was completed by teachers. Thus, although the results showed that the more passionate the teachers, the more they perceived students to display adaptive behaviors, we cannot conclude that such a finding reflects actual positive student behaviors. Indeed, it is possible that changes in student behavior were because
of changes in teachers' perceptions. Therefore, in future research, it would be important for student behaviors to be reported by the students themselves or assessed by a third party (e.g., through videos), for objectivity concerns.

Conclusion

In sum, the present findings provide interesting answers about the presence and role of passion in the teaching realm. Because harmonious passion promotes positive intrapersonal outcomes and relates to perceived student outcomes, future research is clearly needed to more completely understand the determinants of harmonious passion for teaching. Furthermore, interventions designed to promote a harmonious passion should also be the focus of future research. This would help teachers personally derive the best out of their teaching involvement while sustaining students' interest toward education.

References


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Appendix

The Passion Scale—Adapted for Teaching

1. I spend a lot of time doing my job as a teacher.
2. I like my job as a teacher.
3. My job as a teacher is important for me.
4. My job as a teacher is a passion for me.
5. My job as a teacher is in harmony with the other activities in my life.
6. I have difficulties controlling my urge to do my job as a teacher.
7. The new things that I discover doing my job as a teacher allow me to appreciate it even more.
8. I have almost an obsessive feeling for my job as a teacher.
9. My job as a teacher reflects the qualities I like about myself.
10. My job as a teacher allows me to live a variety of experiences.
11. My job as a teacher is the only thing that really turns me on.
12. My job as a teacher is well integrated in my life.
13. If I could, I would only do my job as a teacher.
14. My job as a teacher is in harmony with other things that are part of me.
15. My job as a teacher is so exciting that I sometimes lose control over it.
16. I have the impression that my job as a teacher controls me.

Key for the Passion Scale

# 1–4, Passion Criteria
# 5, 7, 9, 10, 12, 14, Harmonious Passion
# 6, 8, 11, 13, 15, 16, Obsessive Passion