

## The Journal of Behavioral Science (TJBS)

Original Article

### The Relationship of Passion, Burnout, Engagement, and Performance: An Analysis of Direct and Indirect Effects among Indonesian Students

Dorothea Wahyu Ariani<sup>1\*</sup>

#### Author Affiliation

<sup>1</sup>Associate Professor, Department of Management, Mercu Buana Yogyakarta University, Yogyakarta, Indonesia

\*Corresponding author email:  
ariani1338@gmail.com

#### Article Information

*Received:* 31.3.21

*Revised:* 20.4.21

*Accepted:* 21.4.21

#### Keywords

academic performance,  
harmonious passion,  
learning engagement,  
obsessive passion, student burnout

#### Abstract

Passion among students is one of the variables that can increase learning engagement and academic performance and reduce burnout. This study investigated whether both types of passion, harmonious passion and obsessive passion were related and influence burnout, engagement, and academic performance among Indonesian students. The subjects were 563 undergraduate business students in Indonesia. The test results using multiple regression analysis showed that student burnout had no effect on academic performance ( $\beta = -0.06, p > 0.05$ ), while both types of passion and learning engagement had a positive effect on academic performance ( $\beta = 0.27, p < 0.01$ ;  $\beta = 0.15, p < 0.01$ ;  $\beta = 0.23, p < 0.01$  for harmonious passion, obsessive passion, and learning engagement, respectively). The results also showed that the relationships between two types of passion and academic performance were mediated by student burnout and learning engagement in sequence. The model was fit with theories and data as indicated by the results of the measurement models  $> 0.90$  (GFI = 0.99, AGFI = 0.95, CFI = 0.99, NFI = 0.99, TLI = 0.94, IFI = 0.99). Furthermore, this confirms that in order for Indonesian students to carry out their academic activities and prevent burnout, it is necessary to have two types of passion. The theoretical implications of the study were discussed considering the dualistic model of passion and self-determination theory. Finally, the practical implication especially in improving the academic performance was the need to develop passion to encourage engagement with activities and improve performance.

Performance cannot be achieved without passion. Researchers have believed that passion plays a key role in engagement and optimal performance (see Pradhan et al., 2017; Vallerand & Verner-Filion, 2020; Verner-Filion et al., 2017 for review). Furthermore, according to Sigmundsson et al. (2020), passionate people would be able to increase their effort, be more diligent, and have a higher level of enthusiasm. According to the dualistic model of passion (DMP; Vallerand & Verner-Filion, 2020), passion is a strong feeling towards activities that are liked or loved and are considered important, and also impacts individuals to invest their time and energy in those activities.

In the early 2000s, passion was a widely studied variable however, in general, research on this

variable currently uses sports and athletic research settings and is usually associated with burnout (St-Louis et al., 2020). The effect of having passion when carrying out work activities have now been studied, and it has been discovered that the condition could increase positive experiences at work, such as engagement, however, it could also cause psychological decline such as burnout (Trepanier et al., 2014). According to Stoeber et al. (2011), there has not been much research on the relationship between harmonious passion and obsessive passion with learning engagement and student burnout. Most of these relationships were investigated in employees (Vallerand et al., 2010). Therefore, research on passion in education is still needed. Passion also provides the psychological energy that causes people

to be engaged to valuable activities (Curran et al., 2015), and according to Sigmundsson et al. (2020), this strong feeling is a type of motivation and is related to both the effects that produce energy and time and to a person's identity (Sigmundsson et al., 2020). Individuals are said to have a passion for work activities that become their identity (Bouzigarene et al., 2017). Research on this variable has mainly been carried out in Western cultures, rather than in Eastern cultures (Ho et al., 2011). Moreover, according to Burke et al. (2015), there is indeed a difference between passions in Western and Eastern cultures, because research on such variables in Eastern cultures lags behind that in Western cultures. Furthermore, in individualist societies, harmonious passion is stronger, while in collectivist cultures, individuals are an integral part of society so that obsessive passion is stronger (Curran et al., 2015). Therefore, research on passion, especially in collectivist eastern countries, is still needed.

Two types of passion have been developed through the process of internalization, namely harmonious passion (HP) and obsessive passion (OP), and they are moderately correlated (Vallerand & Verner-Filion, 2020). Furthermore, Orehek et al. (2012) found that both passions were independent or weakly correlated, while Belanger et al. (2013) stated that the difference between HP and OP is qualitative, not quantitative. Curran et al. (2015) supported the trend that HP was positively associated with positive results, while OP was generally associated negatively with adaptive outcomes, and positively associated with maladaptive outcomes. Moreover, these results are in line with those of another research by Burke et al. (2015), Schellenberg et al. (2016), and Zigarmi et al. (2018). Finally, previous research by Chen et al. (2020), and Kent et al. (2018) found that HP reduces burnout, while OP does the opposite.

A number of studies have demonstrated that HP can promote performance (e.g., Kent et al., 2018; Moe, 2016; St-Louis et al., 2020), while OP brings negative consequences (e.g., Lalande et al., 2017; Lavoie et al., 2021). However, Ho et al. (2011) stated that OP has no effect on performance. Burke et al. (2015) stated that the relationship between OP and performance still needs to be investigated. However, the results of these studies were carried out on western cultures, while in eastern cultures it could be different.

The aim of this study was to replicate previous research by examining the relationship between HP,

OP, engagement, burnout, and performance in students with a collectivistic culture (Curran et al., 2013) by examining direct and indirect relationships. Fredrick et al. (2010) stated that research on passion is rarely carried out in the academic field. However, the literature on motivation and engagement provides insight into how classes are organized to support this variable. Also, because passion is internalized into personal identity, the emphasis on the variable is found in sports, recreational activities, and work (St-Louis et al., 2020). Therefore, in the field of academics, especially with regards to students, the relationship model is different (see research results from Orsini et al. (2019) and Toth-Kiraly et al. (2019).

### **Theory Development and Hypotheses**

Harmonious and obsessive passion are uniquely related to various variables (Orosz et al., 2016). A number of studies have demonstrated that passion can promote students' academic performance and can increase learning engagement and reduce burnout (Chen et al., 2020; Ruiz-Alfonso et al., 2018; St-Louis et al., 2020; Toth et al., 2021; Vallerand & Verner-Filion, 2020). Previous research results indicated a trend that HP was associated with positive outcomes, while OP was almost always associated with negative outcomes (Clohessy et al., 2020; Pollack et al., 2020). However, the results of these studies were carried out in Western cultures, while in Eastern cultures it could be different and still needs to be studied.

### **The Dualistic Model of Passion**

Passion is defined as a strong tendency and desire or enthusiasm for activities that people like, find important, are motivated to carry out, and invest energy and time into (Jachimowicz et al., 2018; Sigmundsson et al., 2020). Therefore, passionate individuals have a higher psychological adjustment level to work than those that are unpassionate. Passion is often associated with personality because the concept is believed to be a form of power from within an individual or a dispositional factor (Balon et al., 2013). Passion is the internalization of activities that satisfy needs (Lalande et al., 2017) and play an important role in development and achievement (Verner-Filion et al., 2017).

Passion includes either being harmonious or obsessive in nature. Individuals could have both passions and change them from HP to OP or vice versa (Xiang et al., 2017). Passion is conceptualized

as duality, which is a distinct component, but not mutually exclusive (Vallerand & Houliort, 2019). Harmonious passion (autonomous internalization) allows individuals to engage in passionate activities that are safe, flexible, open, aware, and unstressed (e.g., Bouizegarene et al., 2017; Lavoie et al., 2021; St-Louis et al., 2018). Therefore, HP leads to greater positive outcomes (e.g., Carpentier et al., 2012; St-Louis et al., 2020) and prevents burnout (e.g., Ruiz-Alfonso et al., 2018; Vallerand et al., 2010).

Conversely, OP (controlled internalization) creates uncontrolled impulses, is a form of rigid engagement, but becomes overwhelming and can lead to love in activity in a defensive and closed way (e.g., Bouizegarene et al., 2017; St-Louis et al., 2018; Lavoie et al., 2021). Therefore, OP leads to negative outcomes (e.g., Marsh et al., 2013; St-Louis et al., 2020). The exploratory study by applying DMP indicated that HP was positively related to psychological adjustment unlike OP which was negatively associated (e.g., Houliort et al., 2015; Verner-Filion et al., 2018). Thus, the first hypothesis is:

H1: Harmonious passion and obsessive passion are positively related.

### **Passion, Student Burnout, and Learning Engagement**

As the theory of passion develops, it is still considered important in various studies to discover why passion is translated into performance (Astakhova & Porter, 2015). This is because this concept appears adaptive to contextual influences (Curran et al., 2011). Stroe et al. (2020) stated that the development of passion could increase motivation, improve well-being, and produce more positive affect. Regarding the consequences of passion, a number of studies stated that HP has positive affective, cognitive, behavioral, and relational consequences, while OP causes more negative outcomes such as burnout (see Chen et al., 2020; Curran et al., 2015; Marsh et al., 2013; Verner-Filion et al., 2017 for review). However, some research found that OP does not always cause maladaptive outcomes (Gustafsson et al., 2016).

Burnout is characterized as low emotional energy, while engagement is characterized as high emotional energy. Students' learning engagement is the fulfillment of tasks related to positive feelings (Schaufeli et al., 2002a). Meanwhile, burnout is a concept that is opposite to engagement (e.g.,

Morales-Rodriguez et al., 2019; Poulsen et al., 2014; Robins et al., 2015; Zabuska et al., 2018). Student burnout is a problem that affects poor students' academic performance (Schaufeli et al., 2002b). Based on the empirical evidence, this study proposes the following hypotheses:

H2a: Harmonious passion and learning engagement are positively related.

H2b: Obsessive passion and learning engagement are negatively related.

H3a: Harmonious passion and student burnout are negatively related.

H3b: Obsessive passion and student burnout are positively related.

### **Passion and Academic Performance**

A number of studies have demonstrated that HP can also promote better students' academic performance (see Phelps & Benson, 2012; Ruiz-Alfonso & Leon, 2016 for review). This is because HP directs individuals autonomously to focus on increasing their competencies. Harmonious passion is flexible and autonomous, so that it leads to adaptive outcomes (Vallerand & Houliort, 2019). Meanwhile, OP can cause negative feelings and negative consequences such as burnout due to controlled internalization of activities. Previous studies have proven this (see Bonneville-Roussy et al., 2013; Marsh et al., 2013; Ruiz-Alfonso & Lion, 2016 for review). Obsessive passion reflects a lack of self-control, thus leading to maladaptive outcomes (e.g., Curran et al., 2015; Whelan & Clohessy, 2020; Kent et al., 2018). Harmonious passion leads to higher performance, while OP has no effect on performance (e.g., Astakhova & Porter, 2015; Burke et al., 2015; Curran et al., 2015). Researchers have also proven a lot that learning engagement can improve academic performance (Morales-Rodriguez et al., 2019), while student burnout can weaken academic performance (Zabuska et al., 2018). According to SDT, both types of passion encourage individuals to be autonomous and controlled to carry out their activities, including learning activities to achieve performance (Legault, 2017). Based on the concepts of DMP and SDT, as well as some of the results of further research, the current study investigated the role of learning engagement and student burnout in the relationship between passion and academic performance. Thus, based on previous empirical studies, the following hypotheses are proposed:

- H4a: Harmonious passion and academic performance are positively related.
- H4b: Obsessive passion and academic performance are negatively related.
- H5: The effect of passion on academic performance is mediated by learning engagement and student burnout

## Method

### Participants

To investigate how passion affects learning engagement, student burnout, and academic performance, students of undergraduate programs in a student City in Indonesia, namely Yogyakarta were used. Yogyakarta as both a cultural and student city always upholds local wisdom and student creativity with the most assertive and disciplined education system in Indonesia. There are 900 undergraduate business and economics students from private universities participated in the study. This was based on the adequacy of respondents according to multivariate criteria which require that the number of respondents should be five times the number of questions (Hair et al., 2010). The questionnaire in this study contained 58 items, thus, at least 290 respondents were needed. The students were selected based on the criteria, namely students that have passed the first evaluation or were in the fifth semester, according to the evaluation criteria of the first stage of the Directorate of Higher Education in Indonesia (DIKTI). The questionnaires were distributed when the students were in the learning process on campus. Also, of the 563 questionnaires filled out by the students (response rate = 62.56%).

### Procedure

After the questionnaire was declared valid in content validity, it was tested to ensure whether the statement could be understood by the respondent. Respondents were asked to fill out the questionnaires during class after obtaining permission from their lecturers. To guarantee anonymity, participants did not write their data on the questionnaire, therefore, they felt comfortable. Also, they responded to all items on a 1 to 5 Likert scale, where 1 = strongly disagree and 5 = strongly agree. The respondents were made to understand that their answers to the questionnaire questions were completely confidential. Data collection was carried out from

August 2019 to March 2020. The complete questionnaire was tested for construct validity and reliability.

Validity and reliability testing were conducted to test the measurements. Validity testing was carried out through confirmatory factor analysis (CFA), while the reliability testing used internal consistency with Cronbach's Alpha (Hair et al., 2010; Sekaran & Bougie, 2016). Questionnaire items were valid if the loading factor was at least 0.5, while reliability with internal consistency was achieved if the Cronbach Alpha value was at least 0.7 (Hair et al., 2010). Valid and reliable question items were used in correlation testing. Multiple linear regression was used to test the direct effect model. SEM analysis with a two-step approach was used to test the model mediation (Byrne, 2010).

### Measurements

The passion for the study was measured using the scale described by Vallerand et al. (2003), namely the passion scale. This instrument included 6 items that measure HP (e.g., This activity allows me to live a variety of experiences,  $\alpha = 0.85$ ) and 7 items that measure OP (e.g., I have difficulty imagining my life without this activity,  $\alpha = 0.85$ ). The results of the validity test indicated that 6 of the 7 items that measured HP were valid (loading factors 0.72 to 0.82). Furthermore, 7 of the 8 OP items were valid (loading factors 0.547 to 0.83).

The learning engagement questionnaire was obtained from Schaufeli et al. (2002a). This questionnaire includes three dimensions of engagement. The current study used composite values for learning engagement. Meanwhile, 16 of the 17 learning engagement items were reliable (e.g., When I get up in the morning, I feel like going to class  $\alpha = 0.91$ ). The results of validity test indicated that 16 of the 17 items were valid (loading factors 0.51 to 0.78).

Student Burnout instruments were also obtained from Schaufeli et al. (2002a). The multi-functional instrument contains three dimensions of burnout. The current study uses composite values for burnout. Therefore, only 7 of the 16 student burnout items were reliable (e.g., Studying or attending a class is really a strain for me,  $\alpha = 0.88$ ). The results of validity test also indicated that 7 of the 16 items were valid (loading factors 0.66 to 0.84).

The students' academic performance questionnaire was obtained from Koopmans et al. (2013) modified for students. This questionnaire includes 10 questions (e.g., It took me longer to complete my work tasks than intended,  $\alpha = 0.84$ ). The results of validity test also indicated that all academic performance items were valid (loading factors 0.56 to 0.76).

## Results

Initial data analysis used descriptive statistics. Multiple linear regression analysis was used to examine the direct effect of all independent variables on the dependent variable. Furthermore, structural equation modeling (SEM) was carried out to investigate the mediation effect of the model. The effect of model mediation was indicated by the model suitability criteria in SEM.

### Bivariate and Partial Correlation

Correlation analysis was used to ensure that the variables were related, and the bivariate and partial correlations are presented in Table 1.

The mean of all variables in Table 1 were moderate to high (between 2.49 and 3.86), while the standard deviation was moderate to high (between 0.57 and 0.89). This proved that the respondents filled out the questionnaire independently. Meanwhile, the students' HP was higher than their OP, while the students' burnout was lower than their engagement to learning activities. The correlation between the two constructs used in this study was significantly positive or negative. In addition, all the correlations that were obtained were not quite strong. The results of correlation analysis between variables showed that student burnout was significantly

negatively related to all other variables (HP, OP, learning engagement, and academic performance) while the relationship between the two dimensions of passion, learning engagement, and academic performance was positive significantly.

The partial correlation between the two types of passion was classified as less strong ( $r = 0.42, p < 0.01$ ), and this was consistent with the results of previous studies (example, Orehek et al., 2012). Hypothesis 1 was supported. The bivariate correlation indicated that student burnout was negatively significantly related to other variables tested in this study ( $r = -0.40, p < 0.01$ ;  $r = -0.13, p < 0.01$ ;  $r = -0.34, p < 0.01$ ;  $r = -0.26, p < 0.01$  for the correlation between student burnout and HP, OP, learning engagement, and academic performance respectively). In other words, H3a was supported whereas H3b was not supported.

The correlation between HP and OP with students' academic performance was also significantly positive ( $r = 0.47, p < 0.01$  and  $r = 0.39, p < 0.01$  for the correlation between academic performance and two types of passion HP and OP respectively). This indicated that H4a was supported, while H4b was not supported. The correlation between learning engagement and academic performance was also significantly positive ( $r = 0.47, p < 0.01$ ). Furthermore, the correlation between two dimensions of passion and learning engagement was significantly positive ( $r = 0.53, p < 0.01$  and  $r = 0.55, p < 0.01$  for the correlation between learning engagement and two types of passion HP and OP respectively). This study indicated that H2a was supported, while H2b was not supported. For students, learning activities could be seen as fun, important activities, and their identity.

**Table 1**

### *Descriptive Statistics and Correlation*

	Mean	SD	CR	HP	OP	LE	SB	AP
1. Harmonious Passion (HP)	3.86	0.73	0.92	1.00				
2. Obsessive Passion (OP)	2.96	0.85	0.92	0.42**	1.00			
3. Learning Engagement (LE)	3.31	0.84	0.93	0.51**	0.52**	1.00		
4. Student Burnout (SB)	2.49	0.89	0.94	-0.40**	-0.13**	-0.34**	1.00	
5. Academic Performance (AP)	3.53	0.71	0.92	0.476**	0.39**	0.47**	-0.26**	1.00

Notes. CR = Composite Reliability

\*\*significant at the 0.01 level (2-tailed)

### Analyses of the Proposed Model

To test the direct relationships between all independent variables and the dependent variable, an analysis was carried out through multiple regression analysis. The results of this direct effect test are presented in Table 2.

The results of the direct influence test in Table 2 showed that HP, OP, and learning engagement improved academic performance. This is consistent with the results of previous studies such as Ho and Pollack (2014) and Pollack et al. (2020). Meanwhile, these results indicated that student burnout had no

effect on academic performance, so it did not confirm the research results of Morales-Rodriguez et al. (2019) and Zabuska et al. (2018) who found that burnout reduced performance. Furthermore, to test the mediating model, an analysis was carried out through SEM with a two-step approach using AMOS (Byrne, 2010). This model was to test the relationship model between HP, OP, learning engagement, student burnout, and academic performance based on DMP and SDT. The results of the relationship model test are presented in Table 3 and Figure 1.

**Table 2**

*The Results of Testing the Effect of Passion, Learning Engagement, and Student Burnout on Academic Performance*

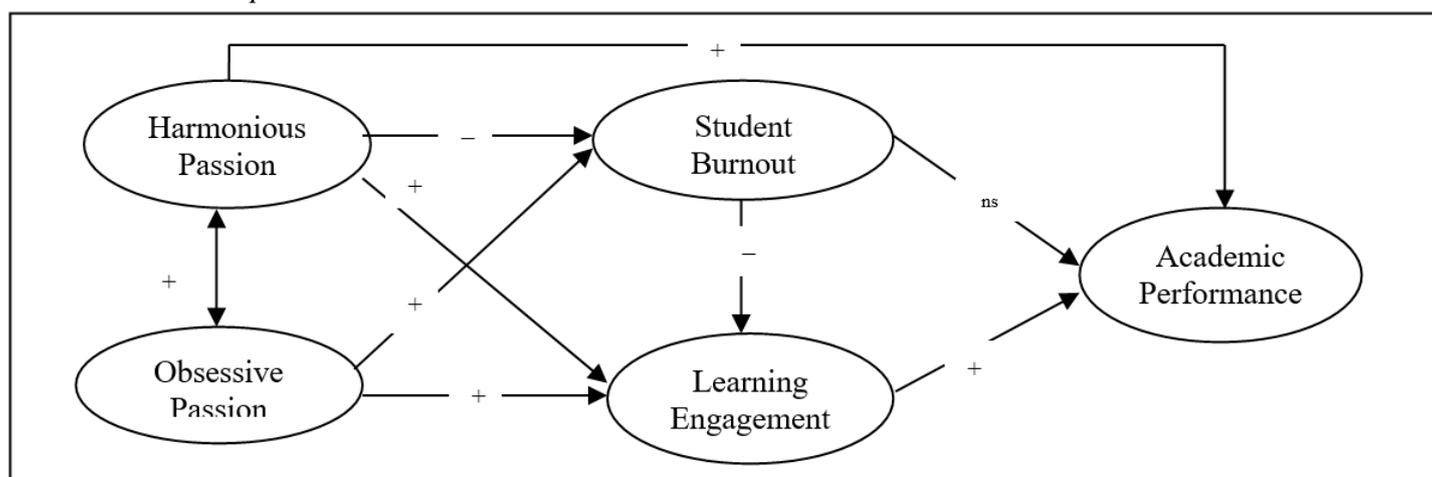
Model	B	SE B	$\beta$	t	p
1 (Constant)	1.83	.18		10.37	.00
Harmonious Passion	.22	.04	.26	5.81	.00
Obsessive Passion	.11	.03	.15	3.30	.00
Learning Engagement	.19	.04	.23	4.86	.00
Student Burnout	-.04	.03	-.06	-1.44	.15

Note. Dependent Variable: Academic Performance

**Table 3**

*The Results of Testing the Effect of Passion on Academic Performance are Mediated by Learning Engagement and Student Burnout*

	$\beta$	Critical Ratio
Harmonious Passion → Learning Engagement	0.31**	6.13
Harmonious Passion → Student Burnout	- 0.54**	- 9.81
Harmonious Passion → Academic Performance	0.32**	5.13
Obsessive Passion → Learning Engagement	0.42**	9.42
Obsessive Passion → Student Burnout	0.11**	1.99
Student Burnout → Learning Engagement	- 0.22**	- 5.16
Learning Engagement → Academic Performance	0.32**	5.52
Student Burnout → Academic Performance	0.03	0.67
Harmonious Passion ↔ Obsessive Passion	0.505**	9.35
GFI = 0.99    AGFI = 0.95    CFI = 0.99    Chi-square = 5.18    df = 1    P = 0.02		
NFI = 0.99    TLI = 0.94    IFI = 0.99    RMR = 0.00    RMSEA = 0.08		

**Figure 1***The Fit Relationship Model*

The results of the second relationship model indicated that learning engagement was influenced by HP and OP. However, HP had a significant negative impact and OP had a significant positive impact on the student burnout. These two dimensions of passion had a direct effect on student burnout and learning engagement. Meanwhile, academic performance was positively and significantly influenced by HP and learning engagement, while student burnout did not directly affect academic performance. Learning engagement also mediated the influence of OP on academic performance (H5 was supported). Student burnout had a significant negative effect on learning engagement and reduced students' engagement to learning activities. HP and OP had significant influence on each other.

Based on the results of testing the mediating models and the value of the goodness-of-fit index (GFI), the mediating model showed the suitability between theories and data because of this model had a GFI above 0.9. Based on criterion  $\chi^2$ , this model was the best suited to the existing theories and data because it had the smallest  $\chi^2$  value. Furthermore, the suitability of the model with this data and theory was supported by other criteria whose value was also more than 0.9, such as the Adjusted Goodness-of-Fit Index (AGFI), Comparative Fit Index (CFI), and Normed Fit Index (NFI), Tucker-Lewis Index (TLI), and Incremental Fit Index (IFI), and Mean Square Error of Approximation (RMSEA) that were within the accepted ranges (between 0.05 and 0.08).

### Discussion

The main purpose of this study was to examine whether harmonious passion (HP), obsessive passion

(OP), learning engagement, and student burnout were related to and affected academic performance. The results indicated that HP, OP, and learning engagement had an effect on academic performance, but student burnout did not. However, even though it varies, the relationships between the five variables under study were significant. Besides that, students have two types of passion, even though the average of HP is higher than OP. Furthermore, although these two types of passion influenced each other, they relate differently with various things, such as learning engagement, student burnout, and academic performance. The results support previous studies such as Birkeland and Buch (2015), Ho et al. (2011), Houliort et al. (2015), and Orosz et al. (2016).

Furthermore, this study indicated that these two types of passion significantly correlated positively with learning engagement. This supports previous research by Burke et al. (2015), Curran et al. (2015), and St-Louis et al. (2020) which discovered that passion provided positive benefits because passionate individuals want to engage in their tasks. This indicated that both passions were needed in the field of education in order that students could be able to increase their motivation.

These results also discovered that both types of passion also increased learning engagement directly. This study confirmed the results of research by St-Louis et al. (2018) which found that engagement was influenced by passion. There have been many studies that prove that HP increased learning engagement (see Curran et al., 2015; Ho & Pollack, 2014; Verner-Filion & Vallerand, 2018 for review) while only a few results of previous studies discovered that the OP increased engagement (examples Huang et al.,

2019; Ilies et al., 2018). The results of this study indicated that HP decreased but OP increased student burnout as well as the results of previous research. These results were not in line with previous studies which generally discovered that HP promoted engagement to activities, but that OP inhibited this engagement and caused burnout (see Kent et al., 2018; Schellenberg et al., 2016; Stenseng et al., 2015; Vallerand & Houlfort, 2019 for review).

Furthermore, this study indicated that there was a relationship between the two types of passion and academic performance. These results did not confirm those of previous studies such as Carpentier et al. (2012) and Ho and Pollack (2014). These researchers stated that only HP was associated with performance, not OP. Furthermore, this study supports the previous studies which discovered that academic performance was directly influenced by HP (see Astakoha & Porter, 2015; Bonneville-Roussy et al., 2013; Phelps & Benson, 2012; Pollack et al., 2020; Ruiz-Alfonso & Leon, 2019 for review) and by learning engagement (see Clayton et al., 2017; Stoeber et al., 2011 for review). This supports the results of Lalande et al. (2017) which states that the OP may not affect or decrease the academic performance.

Although it was negatively correlated, student burnout did not have a direct effect on performance, but it reduced learning engagement, so that they were not motivated to learn. The results are not in line with the results of studies by Eklund and De Frese (2015), Gustafsson et al. (2017), and Morales-Rodriguez et al. (2019) who discovered that burnout had an effect on performance. However, this result strengthened previous studies that the student burnout and learning engagement relations were inversely proportional (e.g., Poulsen et al., 2014; Robins et al., 2015).

The purpose of this study was also to examine the mediation model, to find out whether learning engagement and student burnout could be the mediating variables between two type of passion and academic performance. The results of the model testing using a two-step approach of SEM indicated that well-being (learning engagement) and ill-being (student burnout) mediated the relationship model between passion and academic performance serially. Passion, especially HP could directly increase academic achievement, but OP had no direct effect on academic achievement. The effect of HP and OP could be mediated by learning engagement and student burnout.

Learning engagement of students in Indonesia can be improved by strengthening HP (tied to activities because of their fun) and OP (external pressure or self-esteem). Harmonious passion can also reduce burnout, but OP increases student burnout. This study supports previous studies (e.g., Chen et al., 2020; Lopes & Vallerand, 2020; St-Louis et al., 2020). This is because HP is more flexible and has no pressure, while OP can cause uncontrollable and rigid impulses (St-Louis et al., 2020). The condition of students in Indonesia with Eastern culture is similar to students with Western culture, where HP increases engagement and decreases burnout. However, the OP of Indonesian students who can increase learning engagement is different from the OP of students in Western countries which actually reduces learning engagement. In other words, OP in Western culture causes negative outcomes (e.g. Gustafsson et al., 2016; Kent et al., 2018; Marsh et al., 2013; Orosz et al., 2016).

There are potential organizational benefits of passion. Until now, there were four activities that were often used in passion research, namely sports, art, work, and education. In sports and arts, high performance is required to succeed, therefore, OP is demanded higher than HP (Curran et al., 2015; Gould & Maynard, 2009). However, the results of this study indicated that HP is stronger than OP. This is consistent with the results of previous studies which stated that in research settings, work and education have a stronger HP to be successful (Curran et al., 2015). The learning engagement of students in Indonesia was also directly influenced by the OP. Meanwhile, OP is described as internal and external pressure that occurs due to the internalization of controlled activities into personal identities. The feeling of obligation of these students is precisely what drives them to be engaged in academic activities. In addition, students want independence in learning, as this allows them to feel more engaged in academic activities and not experience burnout.

This study contributes to other studies on passion, and to the existing literature in various ways. First, it replicated and extended the existing DMP with evidence that OP does not always predict negative outcomes. Second, it showed that both types of passion would affect learning engagement and student burnout with different influences. Third, this study throws more light on the consequences of both types of passion, which are not only

experienced in workplaces, but also in learning activities. Fourth, in order for students in Indonesia to feel attached to learning, both dimensions of passion must be improved. Finally, different from the studies of Curran et al. (2015), this study found that even in collectivist cultures HP was stronger than OP. Apart from the respondents' jobs or activities, there were differences in passion between Western and Eastern culture (Burke et al., 2015).

### Conclusion

Harmonious passion is a motivational power that directs individuals to engage in willingly and autonomous activities. Furthermore, this form of passion is also in harmony with important aspects of life such as positive social relationships. Obsessive passion is also a strong motivating factor and can control and direct individuals to engage in activities. In the field of education, students' HP and OP were positively related to learning engagement and negatively related to burnout. This shows that the education environment in Indonesia still controlled students to a great extent. In other words, students have not made many choices with regards to the education process.

This study aimed to investigate whether HP and OP were related to students as participants. This is because there was hardly any study on passion in schools. Activities that people are passionate about are those that are important in their lives, those that they like, and are willing to spend time carrying out. Adolescents aged 17 to 23 that live in major cities in Indonesia are usually undergoing undergraduate programs in higher institutions. Therefore, studying in these institutions should be a passionate activity for them. Nonetheless, there are various regulations and demands from both the universities and government that handle the educational activities, which these students need to abide by. Thus, research on passion in the academic field is unique.

The implication of this study is the need for higher education institutions to build a curriculum that could increase students' passion for learning. This is because passion, in the case of Indonesian students strengthens learning engagement. The curriculum and learning process need to be improved to increase HP so that students do not experience burnout.

This study has several limitations that need to be understood because they could affect the interpretation of the findings. The first limitation is that this study uses self-reports in filling out

questionnaires by students which have the potential to increase correlation and beta bounces because of the common method variance (Lindwell & Whitney, 2001). Therefore, further studies are expected to use other ratings for the dependent variable or use secondary data such as absence and student achievement indexes. Second, cross-sectional data which is less reliable in testing the mediating variables was used. Thus, future studies are expected to use longitudinal data to examine the role of passion, student burnout and learning engagement in academic performance. Third, only students from private universities were the respondents. Therefore, further studies need to involve students from government universities and in other cities in Indonesia as respondents to further strengthen and increase the generalizability of their results.

### References

- Astakhova, M. N., & Porter, G. (2015). Understanding the work passion – performance relationship: The mediating role of organizational identification and moderating role of fit at work. *Human Relations*, 68(8), 1315-1346. <https://doi.org/10.1177/0018726714555204>
- Balon, S., Lecoq, J., & Rime, B. (2013). Passion and Personality: Is passionate behaviour a function of personality? *Revue Europeenne de Psychologie Appliquee*, 63(2013), 59-65. <https://doi.org/10.1016/j.erap.2012.06.001>
- Belanger, J. J., Lafreniere, M. K., Kruglanski, A. W., & Vallerand, R. J. (2013). When passion makes the heart grow colder: The role of passion in alternative goal suppression. *Journal of Personality and Social Psychology*, 104(1), 126-147. <https://doi.org/10.1037/a0029679>
- Birkeland, I. K., & Buch, R. (2015). The dualistic model of passion for work: discriminate and predictive validity with work engagement and workaholism, *Motivation and Emotion*, 39(30), 392-408. <https://doi.org/10.1007/s11031-014-9462-x>
- Bonneville-Roussy, A., Vallerand, R. J., & Bouffard, T. (2013). The roles of autonomy support and harmonious and obsessive passions in educational persistence. *Learning and Individual Differences*, 23(1), 22-31. <https://doi.org/10.1016/j.lindif.2012.12.015>
- Bouizegarene, N., Bourdeau, S., Leduc, C., Gousse-Lessard, A. S., Houlfort, N., & Robert J. Vallerand (2017). We are our passions: The

- role of identity processes in harmonious and obsessive passion and links to optimal functioning in society. *Self and Identity*, 17(1), 56-74. <https://doi.org/10.1080/15298868.2017.1321038>
- Burke, R. J., Astakhova, M. N., & Hang, H. (2015). Work passion through the lens of culture: Harmonious work passion, obsessive work passion, and work outcomes in Russia and China. *Journal of Business and Psychology*, 30(3), 457-471. <https://doi.org/10.1007/s10869-014-9375-4>
- Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming* (2nd ed.). Routledge, Francis & Taylor Group.
- Carpentier, J., Mageau, G. A., & Vallerand, R. J. (2012). Rumination and Flow: Why do people with a more harmonious passion experience higher well-being? *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 13(3), 501-518. <https://doi.org/10.1007/s10902-011-9276-4>
- Chen, P., Lee, F., & Lim, S. (2020). Loving thy work: developing a measure of work passion. *European Journal of Work and Organizational Psychology*, 29(1), 140-158. <https://doi.org/10.1080/1359432X.2019.17003680>
- Clayton, R. W., Thomas, C. H., Schaffer, B. S., Stratton, M., Garrison, E., & Mathews, L. G. (2017). Exercise and work-family conflict: A field experiment. *Journal of Managerial Psychology*, 32(3), 225-238. <https://doi.org/10.1108/JMP-08-2015-0324>
- Clohessy, T., Whelan, Z., & Paradis, K. F. (2020). Does passion for physical activity spillover into spillover into performance at work? Examining the direct and indirect effects of passion and life satisfaction and organizational performance and innovativeness. *International Journal of Sport and Exercise Psychology*, <https://doi.org/10.1080/1612197X.2020.1766537>
- Curran, T., Appleton, P. R., Hill, A. P., & Hall, H. K. (2011). Passion and burnout in elite junior soccer players: The mediating role of self-determined motivation. *Psychology of Sport and Exercise*, 12(6), 655-661. <https://doi.org/10.1016/j.psychsport.2011.06.004>
- Curran, T., Appleton, P. R., Hill, A. P., & Hall, H. K. (2013). The mediating role of psychological need satisfaction in relationships between types of passion for sport and athlete burnout. *Journal of Sport Sciences*, 31, 597-606. <https://doi.org/10.1080/02640414.2012.742956>
- Curran, T., Hill, A. P., Appleton, P. R., Vallerand, R. J., & Standage, M. (2015). The psychology of passion: A meta-analytical review on a decade of research on intrapersonal outcomes. *Motivation and Emotion*, 39(5), 631-655. <https://doi.org/10.1007/s11031-015-9503-0>
- Eklund, R. C., & DeFreese, J. D. (2015). Athlete burnout: What we know, what we could know, and how we can find out more. *International Journal of Applied Sports Sciences*, 27(2), 63-75. <https://doi.org/10.24985/ijass.2015.27.2.63>
- Fredrick, J., Alfeld, C., & Eccles, J. (2010). Developing and fostering passion in academic and non-academic domains. *Gifted Child Quarterly*, 51(1), 18-30. <https://doi.org/10.1177/0016986209352683>
- Gould, D., & Maynard, I. (2009). Psychological preparation for the Olympic 21 Games. *Journal of Sports Sciences*, 27(11), 1393-1408. <https://doi.org/10.1080/02640410903081845>
- Gustafsson, H., DeFreese, J. D., & Madigan, D. J. (2017). Athlete burnout: Review and recommendations. *Current Opinion in Psychology*, 16, 109-113. <https://doi.org/10.1016/j.copsyc.2017.05.002>
- Gustafsson, H., Hill, A. P., Stenling, A., & Wagnsson, S. (2016). Profiles of perfectionism, parental, climate, and burnout among competitive junior athletes. *Scandinavian Journal of Medicine and Science in Sports*, 26(10), 1256-1264. <https://doi.org/10.1111/sms.12553>
- Hair, J. E., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Prentice-Hall International Inc.
- Ho, V., Wong, S., & Lee, C. (2011). A tale of passion: Linking job passion and cognitive engagement to employee work performance. *Journal of Management Studies*, 48(1), 26-41. <https://doi.org/10.1111/j.1467-6486.2009.00878.x>
- Ho, V. T., & Pollack, J. M. (2014). Passion isn't always a good thing: Examining entrepreneurs' network centrality and financial performance with a dualistic model of passion. *Journal of Management Studies*, 51(3), 433-459. <https://doi.org/10.1111/joms.12062>
- Houliort, N., fernet, C. Vallerand, R. J., Laframboise, A., Guay, F., & Koestner, R. (2015). The role of passion for work and need

- satisfaction in psychological adjustment to retirement. *Journal of Vocational Behavior*, 88(1), 84-94.  
<https://doi.org/10.1016/j.jvb.2015.02.005>
- Huang, Y. C., Cheng, J. S., & Change, L. L. (2019). Understanding leisure trip experience and subjective well-being: An illustration of creative travel experience. *Applied Research in Quality of Life*, 1, 1-22.  
<https://doi.org/10.1007/s11482-019-09727-y>
- Ilies, R., Lanaj, K., Pluut, H., & Goh, Z. (2018). Intrapersonal and interpersonal need fulfillment at work: Differential antecedents and incremental validity in explaining job satisfaction and citizenship behavior. *Journal of Vocational Behavior*, 108, 151-164.  
<https://doi.org/10.1016/j.jvb.2018.07.2015>
- Jachimowicz, J. M., Wihler, A., Bailey, E. R., & Galinsky, A. D. (2018). Why grit requires perseverance and passion to positively predict performance. *Proceedings of The National Academy of Sciences*, 115(40), 9980-9985.  
<https://doi.org/10.1073/pnas.1803561115>
- Kent, S., Kingston, K., & Paradis, K. F. (2018). The relationships between passion, basic psychological needs satisfaction and athlete burnout: Examining direct and indirect effects. *Journal of Clinical Sport Psychology*, 12(1), 75-96. <https://doi.org/10.1123/jcsp.2017-0030>
- Koopmans, L., Bernaards, C., Hildebrandt, V., van Buuren, S., van der Beek, A. J., & de Vet, H. C. W. (2013). *International Journal of Productivity and Performance Management*, 62(1), 6-28.  
<https://doi.org/10.1108/17410401311285273>
- Lalande, D. R., Vallerand, R. J., Lafreniere, M. A. K., Verner-Filion, J., Laurent, F. A., & Forest, J., & Paquet, Y. (2017). Obsessive passion: A compensatory response to unsatisfied needs. *Journal of Personality*, 85(2), 163-178.  
<https://doi.org/10.1111/jopy.12229>
- Lavoie, C. E., Vallerand, R. J., & Verner-Filion, J. (2021). Passion and emotions: The mediating role of cognitive appraisals. *Psychology of Sport & Exercise*, 54, 101907.  
<https://doi.org/10.1016/j.psychsport.2021.10907>
- Legault, L. (2017). Self-determination theory. In V. Zeigler-Hill, T. K. Shackelford (eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1-9).  
[https://doi.org/10.1007/978-3-319-28099-8\\_1162\\_1](https://doi.org/10.1007/978-3-319-28099-8_1162_1)
- Lindwell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114-121.  
<https://doi.org/10.1037//0021-9010.86.1.114>
- Lopes, M., & Vallerand, R. J. (2020). The role of passion, need satisfaction, and conflict in athletes' perceptions of burnout. *Psychology of Sport & Exercise*, 48.  
<https://doi.org/10.1016/j.psychsport.2020.101674>
- Marsh, H. W., Vallerand, R. J., Lafreniere, M. A. K., Parker, P., Morin, A. J. S., Carbonneau, N., Jowett, S., Bureau, J. S., Fernet, C., Guay, F., Abduljabbar, A. S., & Paquet, Y. (2013). Passion: Does one scale fit all? Construct validity of two-factor passion scale and psychometric invariance over different activities and language. *Psychology Assessment*, 25, 796-809.  
<https://doi.org/10.1037/a0032573>
- Moe, A. (2016). Harmonious passion and its relationship with teacher well-being. *Teaching and Teacher Education*, 59, 431-437.  
<https://doi.org/10.1016/j.tate.2016.07.017>
- Morales-Rodriguez, F. M., Perez-Marmol, J. M., & Brown, T. (2019). Education burnout and engagement in occupational therapy undergraduate students and its associated factors. *Frontiers in Psychology*, 10, 2889.  
<https://doi.org/10.3389/fpsyg.2019.02889>
- Orehek, E., Mauro, R., Kruglanski, A. W., & van der Bles, A. M. (2012). Prioritizing association strength versus value: The influence of self-regulatory modes on means evaluation in single goal and multigoal context. *Journal of Personality and Social Psychology*, 102(1), 22-31. <https://doi.org/10.1037/a0025881>
- Orosz, G., Vallerand, R. J., Bothe, B., Toth-Kiraly, I., & Paskoj, B. (2016). On the correlates of passion for screen-based behaviors: The case of impulsivity and the problematic and non-problematic Facebook use and TV series watching. *Personality and Individual Differences*, 101, 167-176.  
<https://doi.org/10.1016/j.paid.2016.05.368>
- Orsini, C., Tricio, J., Tapia, D., & Segura, C. (2019). How dental students' course experiences and satisfaction of their basic psychological needs influence passion for studying in Chile. *Journal of Educational*

- Evaluation for Health Professions*, 16(37).  
<https://doi.org/10.7910/DUN/XD2QMD>
- Phelps, P. H., & Benson, T. R. (2012). Teachers with a passion for the profession. *Action in Teacher Education*, 34(1), 65-76.  
<https://doi.org/10.1080/01626620.2012.642289>
- Pollack, J. M., Ho, V. T., O'Boyle, E. H., & Kirkman, B. L. (2020). Passion at work: A meta-analysis of individual work outcomes. *Journal of Organizational Behavior*, 41(4), 311-331. <https://doi.org/10.1002/job.2434>
- Poulsen, A. A., Meredith, P., Khan, A., Henderson, J., Castrisos, V., & Khan, S. R. (2014). Burnout and work engagement in occupational therapists. *British Journal of Occupational Therapy*, 77, 156-164. <https://doi.org/10.4276/030802214X13941036266621>
- Pradhan, R. K., Panda, P., & Jena, L. K. (2017). Purpose, Passion, and Performance at the Workplace: Exploring the Nature, Structure, and Relationship. *The Psychologist-Manager Journal*. <https://doi.org/10.1037/mgr0000059>
- Robins, T. G., Roberts, R. M., & Sarris, A. (2015). Burnout and engagement in health profession students: the relationships between study demands, study resources and personal resources. *Australasian Journal of Organisational Psychology*, 8, e1. <https://doi.org/10.1017/orp.2014.7>
- Ruiz-Alfonso, Z., & Leon, J. (2016). The role of passion in education: A systematic review. *Educational Research Review*, 19, 173-188. <https://doi.org/10.1016/j.edusev.2016.09.001>
- Ruiz-Alfonso, Z., & Leon, J. (2019). Teaching quality: Relationships between passion, deep strategy to learn, and epistemic curiosity. *School Effectiveness and School Improvement*. Advance online publication. <https://doi.org/10.1080/09243453.2018.1562>
- Ruiz-Alfonso, Z., Vega, L. S., & Beltran, E. V. (2018). What about passion in education? The concept of passion, why it is important and how teachers can promote it. *European Scientific Journal*, 14(1), 19-28. <https://doi.org/10.19044/esj.2018.v14n1p19>
- Schaufeli, W. B., Martínez, I. M., Marques-Pinto, A., Salanova, M., & Bakker, A. B. (2002a). Burnout and engagement in university students: a cross-national study. *Journal of Cross Cultural Psychology*, 33, 464-481. <https://doi.org/10.1177/0022022102033005003>
- Schaufeli, W. B., Salanova, M., Gonzales-Roma, V., & Bakker, A. B. (2002b). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92. <https://doi.org/10.1023/A:1015630930326>
- Schellenberg, B. J. I., Bailis, D. S., & Mosewich, A. D. (2016). You have passion, but do you have self-compassion? Harmonious passion, obsessive passion, and responses to passion-related failure. *Personality and Individual Differences*, 99, 278-285. <https://doi.org/10.1016/j.paid.2016.05.003>
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill Building Approach* (7th ed.). John Wiley & Sons, Ltd.
- Sigmundsson, H., Haga, M., & Hermundsdottir, F. (2020). The passion scale: Aspects of reliability and validity of the new 8-item scale assessing passion. *New Ideas in Psychology*, 56, 100745. <https://doi.org/10.1016/j.newideapsych.2019.06.001>
- Stenseng, F., Forest, J., & Curran, T. (2015). Positive emotions in recreational sport activities: The role of passion and belongingness. *Journal of Happiness Studies*, 16(5), 1117-1129. <https://doi.org/10.1007/s10902-014-9547-y>
- St-Louis, A. C., Rapaport, M., Poirier, L. C., Vallerand, R.J., & Dandeneau, S. (2020). On emotion regulation strategies and well-being: The role of passion. *Journal of Happiness Studies*. Advance online publication. <https://doi.org/10.1007/s10902-020-00296-8>
- St-Louis, A. C., Verner-Filion, J., Bergeron, C. M., & Vallerand, R. J. (2018). Passion and mindfulness: Accessing adaptive self-processes. *The Journal of Positive Psychology*, 13(2), 155-164. <https://doi.org/10.1080/17439760.2016.124577>
- Stoeber, J., Childs, J. H., Hayward, J. A., & Feast, A. R. (2011). Passion and motivation for studying: Predicting academic engagement and burnout in university students. *Educational Psychology*, 31(4), 513-528. <https://doi.org/10.1080/01443410.2011.570251>
- Stroe, S., Sirén, C., Shepherd, D., & Wincent, J. (2020). The dualistic regulatory effect of passion on the relationship between fear of failure and negative affect: Insights from facial expression analysis. *Journal of Business*

- Venturing*, 35, 105948.  
<https://doi.org/10.1016/j.jbusvent.2019.105948>
- Toth, I., Heinanen, S., & Puumalainen, K. (2021). Passionate and engaged? Passion for inventing and work engagement in different knowledge work contexts. *International Journal of Entrepreneurial Behavior & Research*, 27(9), 1-25. <https://doi.org/10.1108/IJEER-09-2020-0632>
- Toth-Kiraly, I., Bothe, B., Marki, A. N., Rigo, A., & Orosz, G. (2019). Two sides of the same coin: The differentiating role of need satisfaction and frustration in passion for screen-based activities. *European Journal of Social Psychology*, 49(6), 1190-1205. <https://doi.org/10.1002/ejsp.2588>
- Trepanier, S. G., Fernet, C., Austin, S., Forest, J., & Vallerand, R. J. (2014). Linking job demands and resources to burnout and work engagement: Does passion underlie these differential relationships? *Motivation and Emotion*, 38(3), 353-366. <https://doi.org/10.1007/s11031-013-9384-z>
- Vallerand, R. J., Paquet, Y., Philippe, F. L., & Charest, J. (2010). On the role of passion for work in burnout: A process model. *Journal of Personality*, 78(1), 289-312. <https://doi.org/10.1111/j.1467-6494.2009.00616.x>
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Leonard, M., & Gagne, M. (2003). Les passion de l'ame: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85(4), 756-767. <https://doi.org/10.1037/0022-3514.85.4.756>
- Vallerand, R. J., & Houliort, N. (2019). On passion for work: A brief history and an introduction. In Vallerand, R. J. & Houliort, N. (Eds.), *Passion for Work: Theory, Research, and Applications* (pp. 3-14). Oxford University Press. <https://doi.org/10.1093/oso/9780190648626.001.0001>
- Vallerand, R. J., & Verner-Filion, J. (2020). Theory and research in passion for sport and exercise. In Tenenbaum, G. & Eklund, R. C. (Eds.), *Handbook of Sport Psychology* (4th ed., pp. 206-229). John Wiley & Sons., Inc. <https://doi.org/10.1002/9781119568124.ch11>
- Verner-Filion, J., & Vallerand, R. J. (2018). A longitudinal examination of elite youth soccer players: The role of passion and basic need satisfaction in athletes' optimal functioning. *Psychology of Sport & Exercise*, 39(1), 20-28. <https://doi.org/10.1016/j.psychsport.2018.07.005>
- Verner-Filion, J., Vallerand, R. J., Amiot, C. E., & Mocanu, I. (2017). The two roads from passion to sport performance and psychological well-being: The mediating role of need satisfaction, deliberate practice, and achievement goals. *Psychology of Sport and Exercise*, 30(1), 19-29. <https://doi.org/10.1016/j.psychsport.2017.01.009>
- Whelan, E., & Clohessy, T. (2020). How the social dimension of fitness apps can enhance and undermine wellbeing: A dual model of passion perspective. *Information Technology & People*, 34(1), 68-92. <https://doi.org/10.1108/ITP-04-2019-0156>
- Xiang, P., Adbuga, B., Liu, J., & McBride, R. E. (2017). Relatedness need satisfaction, intrinsic motivation, and engagement in secondary school physical education. *Journal of Teaching in Physical Education*, 36, 340-352. <https://doi.org/10.1123/jtpe.2017-0034>
- Zabuska, A., Ginsborg, J., & Wasley, D. (2018). A preliminary comparison study of burnout and engagement in performance students in Australia, Poland and the UK. *International Journal of Music Education*, 36, 366-379. <https://doi.org/10.1177/0255761417751242>
- Zigarmi, D., Galloway, F. J., & Robert, T. P. (2018). Work locus of control, motivational regulation, employee work passion, and work intentions: An empirical investigation of an appraisal model. *Journal of Happiness Studies*, 19, 231-256. <https://doi.org/10.1007/s10902-016-9813-2>