

## Self-Esteem as a Mediator Between Passion and Academic Perfectionism for Postgraduate Students

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### Abstract

The recent study tries to examine the relationship between postgraduates' passion and self-esteem, as well as to determine how much passion and self-esteem scores predict perfectionism. In the first study, (126) Egyptian postgraduate students completed questionnaires for the Passion Scale and Self-Esteem Measure on Google Form. In the second study, (113) postgraduate students from Egypt's various regions, enrolled in various fields of postgraduate studies, completed the Passion Scale, Self-Esteem Measure, and Academic Perfectionism Scale. Data is used in descriptive statistics, Pearson Correlation Analysis, Multiple Linear Regression Analysis, and Path Analysis to explore the aim of the study. The findings of this study show that criteria and harmonious passions can predict self-esteem for postgraduate students, which means that self-esteem can be increased by influencing harmonious passion. Furthermore, they showed that self-esteem doesn't predict perfectionism. Moreover, the analysis revealed that self-esteem cannot be a mediator in the relationship between criterion passion, harmonious passion, and obsessive passion on one hand and perfectionism on the other hand; this differentiation makes them important.

**Key words:** Self-Esteem, Harmonious Passion, Obsessive Passion, Academic Perfectionism.

## Introduction

Passion towards an activity means that a person loves it, has a strong tendency towards it, and has to spend time and power to do it (Vallerand et al., 2003; Anderson, 2018).

The relationship between passion and psychological variables can be seen obviously, and there is a similar relationship between passion and behavioural outcomes (Bureau et al., 2019).

As related processes, the two types of passion (harmonious and obsessive) are responsible for forms of adaptive or maladaptive adjustment and are associated with perfectionism (Verner-Filion & Vallerand, 2016). Harmonious passion allows the individual to fully engage in the activity they are passionate about with a safe feeling of self-esteem.

Nevertheless, obsessive passion leads an individual to take part in the activity with a weak and contingent feeling of self-esteem (Vallerand, 2010).

That is to say, a vast number of studies have underlined the mediating role of self-esteem. They have looked into the relationships between variables by using self-esteem as a moderating factor (Mao et al., 2020).

It is observed during the last three decades-a noticeable change in modern societies-is an increase in perfectionism (Piotrowski et al., 2021), so that this phenomenon takes high regard in the psychology field. That is why some researchers began to study (Ibrahim & Syamsuri, 2018).

Perfectionism is a characteristic of personality that is essential for comprehending human behaviour and progress. There has been a concern about the bad elements and results of perfectionism, but little has been explored in its relation to adaptive personality characteristics and normal functioning (Kamushadze et al., 2021).

Vallerand (2010) found that individuals who are passionate about a certain

activity care deeply about it and, at the same time, aspire to excel at it.

As a result, perfectionism may be a crucial personal factor of passion.

A perfectionist is defined as a person having high standards of accomplishment. Also, Ibrahim and Syamsuri (2018) note that perfectionism is especially common in learners and people with above-average intelligence.

Perfectionism is one of several psychological factors affecting the lives of adolescents. However, the literature review shows that there are no studies examining self-esteem as a proposed mediator defining the impact of passion on perfectionism.

## **Review of literature:**

### **Passion:**

The word "passion" is derived from the Latin language from the origin "passio," which denotes motion, strength that overtakes judgement, and enthusiasm. (Demirci & Çepikkurt ,2018).

As defined psychologically, passion refers to time and energy spent by an individual on what he admires or likes and believes is important for him (Vallerand et al., 2003; Vallerand, 2008; St-Cyr et al., 2021).

Vallerand (2010) notes that the concept of passion has had several definitions. One of which stands for a strong tendency towards an object, activity, or notion. Passion is frequently related to personality since it is thought to be a source of power within an individual or a dispositional characteristic (Ariani, 2021).

Furthermore, when people find a passion, it becomes a part of who they are and how they see themselves (St-Louis et al., 2018).

Most expanded passion definitions originate from Vallerand et al. (2003), whose description of passion is "a strong predisposition toward an activity which an individual likes and considers important, so the person devotes more

time and power." Passionate activities are more than things someone does; they are a part of their identity (Vallerand et al., 2003; Anderson, 2018; St-Louis et al., 2021; Schellenberg & Bailis, 2017; Peixoto et al., 2021).

The object of one's passion has a meaning as it forms a portion of an individual's personality.

However, the hard work level is determined by the passion type that is created for this activity (Bélanger & Ratelle, 2021).

Passion can be explained as an intense desire or enthusiasm for something, or seen through preferences that are expressed by a strong sense toward an important tendency that motivates will and behaviour (Sigmundsson et al., 2019).

Harmonious and obsessive passions have a moderate relationship (Vallerand & Verner-Filion, 2020; Ariani, 2021; Anderson, 2018).

In this concept, Vallerand et al. (2003) postulated two types of passion: harmonious and obsessive, with each of them connected to various outcomes, experiences, and ways to integrate an activity into an individual's personality (Ruiz-Alfonso, & León, 2016).

The construct has two dimensions: obsessive passion (OP) and harmonious passion (HP).

The two separate forms of passion, which can be distinguished based on how the desire has been integrated into an individual's identity (Marsh et al., 2013). Each of these aspects generates a deep commitment to a specific activity in their own way, but they differ in regard to the way this passionate activity is merged into an individual's personality (St-Cyr et al., 2021).

HP can be defined as a motivating factor that leads people to intentionally take part in an activity that is under their control that is harmonious with other parts of their deeds. Hence, while passionate activity fills a central place in one's life and leads an individual to carry it out in a flexible, active, and

adaptive way (Bélanger & Ratelle, 2021).

HP encourages healthy engagement, but OP discourages it by creating strict assertiveness and negative emotions (Vallerand et al., 2003; Chichekian & Vallerand, 2021).

That dualistic model of passion proposes that the difference is based on dimensions of quality and quantity (Vallerand, 2010).

The quantity dimension refers to how individuals feel passionate about activities and appears when people think particular activities are valuable, important, and interesting in their identities, leading them to internalise the activity as if it is a part of their lives (Schellenberg & Bailis, 2015).

Although passion is not a stable trait in people (Ruiz Alfonso et al., 2018), individuals who have a harmonic passion see the activity as crucial to their lives and willingly participate in it (they choose to do so) (Vallerand et al., 2003).

People with obsessive passions like the activity, but they are inter-obligated to participate because they believe contingencies are tied to it. (Vallerand et al., 2003; Anderson, 2018).

Curran et al. (2015) argue that in spite of the dualistic model's significant relationship and experimental support, the literature contains conflicting data at both the dualistic and partial levels.

While HP usually predicts adaptive behaviour and outcomes, other studies have not succeeded in emphasising such effects. Furthermore, in contrast to the dualistic paradigm, there have been cases where HP has shown minor beneficial associations with negative consequences (e.g., unpleasant effects, workout, dependency).

According to Mareï (2018), being passionate about a certain activity will cause the individual to engage in the activity regularly, spanning several years and perhaps life.

Furthermore, a harmonious passion towards an activity will usually result in the sensation of positive emotions throughout the engagement.

Although the overwhelming majority of passion studies adheres to Vallerand et al. (2003)'s conception, other academics have attempted to define what passion is in the educational environment. According to Coleman and Guo (2013), "passion for learning" refers to a learner's extreme interest in any single topic that lasts over time and is generally accompanied by a lack of interest in daily activities that their classmates enjoy. (in: Ruiz Alfonso et al., 2018).

Passion in education can be described as a learner's love for ideas, desire to educate others, and love for his students (Ruiz-Alfonso & León, 2016).

It is suggested that OP causes a strict insistence on the activity even when the conditions are unsuitable and may be dangerous (Bureau et al., 2019).

In general, one type of passion will be more prevalent than the other one. Although both types of passion exist within the learner's identity to different degrees (Vallerand et al., 2021).

### **Self-esteem**

Possibly, self-esteem as a personality concept in psychology is the most widely studied and it has "super status" among psychological conceptions due to its prominence in both academic study and popular fiction (Blankstein et al., 2008).

Self-esteem is a concept used to describe an individual's total subjective judgement of his or her self-worth as well as how they feel about it (Boysan & Kiral, 2017). Mao et al. (2020) refer to self-esteem as one's positive or negative attitude regarding himself; one's self-evaluation of one's own value. Self-esteem is inextricably linked to psychological well-being, such as high self-esteem is associated with better well-being than low self-esteem.

For a long time, research claimed that self-esteem does not change over time.

However, research in the last decade or two has expressed concern about this assumption. Serial research has found that self-esteem rises from adolescent to adult years, peaks at the age of 50 to 60, and subsequently declines as people grow older. As with many other personality traits, a growing amount of research implies that self-esteem follows a normal course over time. (Orth et al., 2018). Personality is basically based on self-esteem traits; their stability has a shared trajectory and interacts with ideas about the way of achieving goals, both independently and in concert with other major characters. Self-esteem can be defined as an individual's positive or negative opinion of themselves and their identity. As a result of disharmony or similarity in connection to the attainment of desired personal values or principles, it represents a person's ability to feel qualified, competent, and successful. Thus, in the process of comparing values and differences, self-esteem might be equivalent to perfectionism (Muoz-Villena et al.,2020). Blankstein et al. (2008) argue that Preusser et al. (1994) were the first to consider self-esteem as a potential mediator.

Kun et al. (2020) suggest that it's understandable that perfectionism would lower one's self-esteem. If a person is required to satisfy expectations set by others, these expectations will be internalised, and the person will strive to meet these expectations at all times. Another distinguishing feature of such people is that their self-esteem is founded on perfectionism criteria. In short, empirical evidence reveals that low global self-esteem and high perfectionist orientations are significant personality correlates of job addiction. Although the conceptual framework is the researcher, these associations remain unresolved.

### **Academic Perfectionism:**

Another variable in the study is perfectionism, which is defined in the dictionary as "to see anything that isn't perfect as unacceptable." Perfectionists have a tendency to establish high criteria for themselves and to be too severe towards their achievements (Cokley et al., 2018).

Multiple studies over the last two decades have validated perfectionism as a multifaceted entity having adaptive and maladaptive aspects (Fuente et al.,2020).

It's often thought of as a two-dimensional personality trait, with one indicating good, which is called adaptive perfection, and the other indicating harmful, which is called maladaptive perfection (Closson, 2017).

Perfectionism, in its maladaptive form, leads people to strive for an unreachable ideal, whereas adaptive perfectionism can occasionally motivate them to achieve their goals (Nowrin, 2018).

When Akbay & Delibalta (2020) examined literature, they observed a positive relationship between perfectionism and academic perfectionism.

There is very little research on academic perfectionism in the literature.

In psychology, perfectionism is a personality trait characterised by a person's quest for perfection and the establishment of high-performance levels, accompanied by critical self-appraisals and concerns about the opinions of others. It is best viewed as a multifaceted trait, as psychologists believe that it has both positive and negative characteristics.

Perfectionism can also be defined as a personality trait characterised by a desire for excellence and a desire to achieve perfection (Kamushadze et al.,2021).

Demirci and Epikkurt (2018) found that perfectionism influences interpersonal relationships as well as being affected by interpersonal interactions. As a result, it has been identified as a multi-dimensional structure

distinguished through setting and striving for unrealistic preferences for himself, a desire to evaluate oneself critically if these norms are not met, extreme worry about errors, fear of the personal accomplishments' quality, and an overreliance on organisation and precision (Ghosh & Roy, 2017; Ruiz-Esteban et al., 2021; Shim et al., 2016).

Slaney et al. defined perfectionism as the desire for and expectation of exceedingly good results that are linked to high levels of professional conduct. Perfectionism was once thought to be a single-dimensional maladaptive feature having largely negative repercussions such as low self-esteem, sadness, disorders of personality, and anxiety. Author later constructed multi-dimensional models of perfectionism that incorporated maladaptive and adaptive characteristics (Kurtovic et al., 2019).

### **The Current Study**

This paper reports two studies, with two different samples, aimed at exploring the association between criteria, harmonious and obsessive passions, and self-esteem for postgraduate students and if self-esteem may mediate the relationship between passion and perfectionism. In the first study, we propose the following hypotheses: 1) Harmonious passion is positively related to self-esteem; 2) obsessive passion is negatively related to self-esteem. In the second study, we propose that 3) self-esteem remains the mediator between passion and perfectionism.

### **First Study**

The main objective of the first study was to investigate the relationship between criteria, harmonious and obsessive passions, and self-esteem for postgraduate students.

These students were enrolled in postgraduate studies in Egyptian universities. As a result, they were supposed to come from a variety of backgrounds and live in a variety of settings.

These learners were predicted to have high levels of self-esteem as a result of their high levels of achievement.

We hypothesised that students' harmonious passions would be positively related to self-esteem but obsessive passions would be negatively associated with self-esteem.

## **Method**

### **Methodology:**

This study used descriptive design to investigate the relationship between criteria, harmonious and obsessive passions, and self-esteem for postgraduate students.

### **Participants**

A total of 126 postgraduate male and female students, located at Damietta University in Egypt, who registered for a diploma, or master's degree, or PhD in Egyptian universities, at faculty of education and faculty of specific education. Participants did not receive any compensation for participating in the study and signed a consent form.

Voluntary participants completed online questionnaires with written explanations.

### **Procedure**

Members who participated in the study completed measures via Google Form software.

The scales used for the postgraduate students contributing to this study were the scale of Passion, the Rosenberg Self-Esteem, and Academic

Perfectionism. The sample was selected randomly, the scales were applied during first term of academic year 2020/2021.

### **Scale of Passion:**

The scale of passion that was used in this study was developed by Vallerand et al. (2003) and has been translated into Arabic by Younis (2015). The validity of the scale was examined through Person correlation, values ranged between (0.83) and (0.96) which all are statically significant, to examine reliability, test-retest was used, correlation values were (0.83) and (0.82) for obsessive and harmonious passion. In this study, validity and reliability have been tested on students at Damietta University, located in Egypt. The scale, which is made up of the two sub-dimensions; obsessive and harmonious passion, has 16 items. Each of them consists of six items each determining levels of obsessive and harmonious passion, nevertheless four items determining the overall level of passion.

The Scale of Passion is a self-assessment scale with a Likert scale of five degrees. The Scale of Passion has previously exhibited satisfactory psychometric qualities (Vallerand et al. 2003).

It has been determined to be stable across five domains. Educational contexts were included, and nineteen different samples were gathered globally (in: Marsh et al. 2013).

As a result, the Scale of Passion items examine HP and OP, which are two different constructs that have positive relations with low to moderate cross-domain association. Postgraduate students were instructed to respond to the questions while recalling their studying experiences for postgraduate degrees. To indicate degrees of passion quantity (criteria passion; CP) and quality (HP and OP), answers for questions introducing the passion criteria, harmonious, and obsessive passion were moderate.

The Cronbach alpha values were .74 and .79 for obsessive and harmonious passion, respectively, for the current study, which implies that this measurement scale is appropriate for use in this study with our sample group.

### **Rosenberg Self-Esteem Scale**

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) remains the most commonly used global self-esteem measure. The findings of Pietrabissa et al.'s study, including community samples from 53 countries around the world, trying to investigate the culture-specific and universal characteristics of self-esteem, found evidence of similarity in the structure of self-esteem across countries (Pietrabissa et al., 2020).

The Self-Esteem Scale of Rosenberg, is a widely used ten-item scale, which measures an individual's general feeling of self-worth and significance, and was used to assess self-esteem. Participants rated to what extent each item fit their personality on a Likert-type scale.

Participants had to evaluate their agreement with each item.

The following rates represent the scores: strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5), so that higher scores show higher self-esteem, five reversed items (2, 5, 6, 8, 9).

The researcher translated it into Arabic, the translation was reviewed by two specialists of Curricula and methods of teaching English language. For the current study, the researcher has calculated the mean of the items of the self-esteem scale (ranging from 1.00 to 5.00, Mean = 3.78, standard deviation = 1.20, Cronbach's alpha = 0.73).

## Results and discussion

### Passion criterion

Students who rated at the average or exceeding ( $\geq 4$ , in the current study) on the criteria subscale were classed as passionate for studying, in line with previous research. The four criterion subscale items had mean values ranging from 4.00 to 12.00 (Mean = 10.16, Std. Deviation = 1.79).

As a result, the entire sample of this study was regarded as passionate students.

### Self-esteem

100% of our sample was considered self-esteemed;  $M = 3.80$ ,  $SD = .61$ .

### Core results

A descriptive analysis is shown in Table 1.

Pearson's correlation coefficients were used to measure the relations criteria, harmonious and obsessive passions, and self-esteem.

The association between self-esteem and HP was positive and statistically significant ( $r = .321$ ,  $p \text{ value} = .000$ ), though, the link between self-esteem and OP or CP could not reach the significance level ( $r = .006$ ,  $p \text{ value} = .472$  for OP) but ( $r = .173$ ,  $p \text{ value} = .026$  for CP).

To calculate the roles of CP, HP, and OP in self-esteem.

The results indicated that CP, HP, and OP predicted self-esteem for post-graduate students (Multiple  $R = 0.351$ ,  $p = 0.001$ ), explaining 12.4% of the total variance. Only harmonious passion was found to positively predict a student's self-esteem with  $\beta = .336$  ( $p > .01$ ; Table 2).

Finally, on one hand, harmonious passion was positively linked with postgraduate students' self-esteem and can be a predictor of it. On the other hand, criteria passion and obsessive passion are not related to it and can't be

represented as predictors.

**Table (1) Descriptive statistics and correlation matrix (n = 126)**

	<b>M</b>	<b>S. D.</b>	<b>Min.</b>	<b>Max.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Criteria passion</b>	10.16	1.795	4	12	1	.549**	.601**	.173*
<b>Harmonious passion</b>	15.40	2.071	10	18		1	.379**	.321**
<b>obsessive passion</b>	13.79	2.331	7	18			1	.006
<b>self-esteem</b>	37.89	4.938	22	50				1

\*p<.05, \*\*p<.01

**Table (2) Prediction of Passion on self-esteem**

	<b>Multiple R</b>	<b>R2</b>	<b>Adjusted R2</b>	<b>β</b>
<b>Criteria passion</b>	.351	.124	.102	.097 ns
<b>Harmonious passion</b>				-.179 ns
<b>obsessive passion</b>				.336**

\*p<.05, \*\*p<.01, ns= not significant

Results of this study introduced preliminary evidence of the role of criteria, harmonious and obsessive passions in self-esteem for postgraduate students.

### Discussion

Results of the recent study are worthy of attention as they indicate that criteria for harmonious passions can predict self-esteem for postgraduate students, which means that self-esteem can be increased by influencing harmonious passion. Vallerand (2010) has shown that the person’s identity, with obsessive passion, is stuck to some extent to the activity, so that doing well in the passionate activity is important for the individual’s self-esteem.

The results were particularly interesting in that OP moderated the relationship between real performance and self-esteem. And, predictably, harmonious passion had no effect on the relationship between real performance and self-

esteem.

At the bivariate level, harmony passion shared average correlations with self-esteem. Obsessive passion, conversely, had a low negative correlation with self-esteem. Total, harmonious passion shows positive mean measured bivariate and limited correlations with self-esteem (Curran et al., 2015).

These results indicate that postgraduate students who have a harmonious passion also have high self-esteem.

This agrees with results that corroborate previous studies revealing that HP supports wellbeing evidences such as self-esteem (St-Cyr et al., 2021; Peixoto et al., 2021).

That's to say, the relationship between the harmonious passion indicates that if passion can be manipulated in learners, it may increase the likelihood of self-esteem.

## **Second study**

The first study discovered a possible way in which harmonious passion can be linked to self-esteem. Actually, a harmonious passion for post-graduate students seemed to increase self-esteem. However, the hypothesised relationship between obsessive passion and self-esteem was not confirmed. The second study's main purpose is to expand on these preliminary results and explore a model connecting harmonious, obsessive passion, self-esteem, and perfectionism utilising a structural equation model.

Two specific aims were attempted.

Firstly, by manipulating and expanding the findings of the first study to another sample of students. Participants of the second study consisted of postgraduate students with different specializations. The second was, therefore, to investigate the role of both harmonious and obsessive passion in predicting perfectionism via self-esteem. The conjunction of these aims

resulted in the development of this integrated model of perseverance. There are different conceptual connections between the notions of perfectionism and passion, based on hypotheses that different degrees of perfectionism are related to different types of enthusiasm.

Both are fundamental components of one's self-concept or identity. (Curran et al., 2014).

In line with the findings of the first study, we postulated that harmonious passion seemed positively related to self-esteem and obsessive passion didn't relate. In regard to passion (the Dualistic Model), it is supposed that psychological control could be positively related to OP but not to HP.

Lastly, based on the first study, we found that seeking perfection, which can be considered autonomous in identity and emerge from it, is positively associated with adaptive outcomes such as self-esteem (Verner-Filion, & Vallerand, 2016).

In summary, the recent model explored three paths: one leading to perfectionism via harmonious passion, self-esteem, and perfectionism; another one leading to perfectionism via obsessive passion, self-esteem, and perfectionism; and the last one leading to perfectionism via criteria passion, self-esteem, and perfectionism.

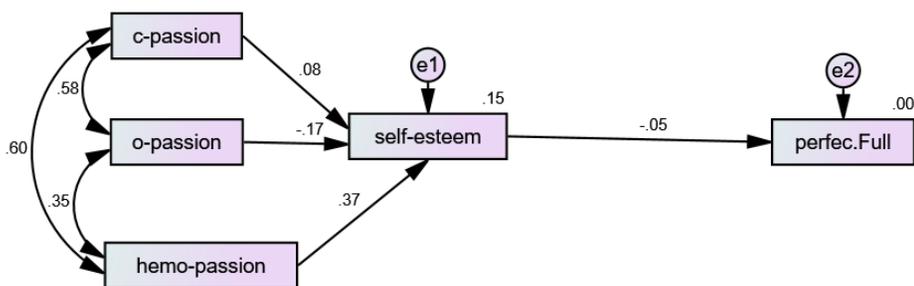


Fig. 1. Path analysis relating passion, self-esteem, and perfectionism in post-graduate students.

## **Method**

### **Participants**

This study recruited 113 male and female students who were registered in postgraduate programmes at Egyptian universities and completed the measurements. Most participants' specialisations were in education (n = 60) and science (n = 35).

The remaining participants' specialisations were humanities (n = 18). According to the level they were enrolled in: diploma (n = 41), master (n = 44), and Ph.D. (n = 28). Furthermore, all students who took part in the study completed a consent form and agreed to provide the answers on the Goggle Form to the psychological scales and the sociodemographic questionnaire. Participation was voluntary in the study, as students did not receive compensation for participating.

### **Procedure**

#### **Measurements**

Postgraduate students completed three questionnaires, including The Passion Scale, the scale of Rosenberg Self-Esteem, and the Academic Perfectionism Scale, which were used for the learners participating in this study. Researcher obtained informed consent from all participants before completing the package of questionnaires, and students were promised confidentiality of their answers. The Passion Scale and the Self-Esteem Scale were used, as in the first study.

#### **Academic Perfectionism Scale**

In 2001, Slaney et al. conceptualised personal standards of perfection and evaluative concerns about perfection as two personality elements of perfectionism.

Putting high and realistic levels for oneself with low standards of negative self-evaluation is described as personal standard perfectionism.

Evaluative concerns regarding perfectionists, on the other hand, establish high, yet unattainable levels and frequently express a sense of being scared of not achieving their objectives or making mistakes. Also, they are often dissatisfied

with their own achievements and suffer from excessive guilt and humiliation when failure or drawbacks occur (Abdollahi et al., 2018; Abbas et al., 2020). The Academic Perfectionism Scale is comprised of 16 items and 3 subdimensions of order, discrepancy, and standards.

The subscale of order is comprised of 5 items, standards include 5 items, and discrepancy is evaluated with 6 items, while an item was deleted by confirmatory factor analysis.

So, each subscale consists of five items.

The scale has 15 items. Each of them is a different situation.

For each, there are 3 different actions.

The student chose one action out of three to indicate his academic perfectionism.

In this study, the Cronbach alpha value for academic perfectionism was .85, which indicates that this scale can be utilised to evaluate a group sample in this study.

## **Results and discussion**

### **criterion of:**

#### **Passion**

Using the same criteria as in First study, we discovered that all of our sample was passionate (average on the subscale ranging from 6.0 to 12.0; Mean = 10.26, Std. Deviation = 1.668).

#### **Self-esteem**

According to the similar criteria as in First study, 100% of this sample can be considered self-esteemed.; Mean = 3.69, Std. Deviation = .87

### **Preliminary analyses**

#### **Level differences in variables:**

Preliminary analysis shows the results of the one-way ANOVA in passion, self-esteem, and perfectionism for the levels that students registered (diploma, master, and Ph.D.).

After obtaining the consent of the academies, the study revealed no significant difference existed in regard to all variables.

$F = .509, .847, .561, .549, .940$ , ( $p > .05$ ) for harmonious, obsessive, criteria, self-esteem, and perfectionism, respectively.

### Specialization differences in variables

Preliminary analysis shows the results of the one-way ANOVA in passion, self-esteem, and perfectionism for the specialisations (education, humanities, and science) that students registered in and revealed that there was no statistically significant difference in regard to all variables.

F= .835, .050, .254, .811, .915, (p>.05) for harmonious passion, obsessive passion, criteria passion, self-esteem, and perfectionism, respectively.

### Path analysis

Descriptive statistics for this study (second study) are shown in Table ( 3) The linking criteria, harmonious and obsessive passions, and self-esteem were evaluated using Pearson's correlation coefficients.

The link between self-esteem and HP and CP was positive and statistically significant (r =.355,.202; p value =.000,.032 respectively), but the relationship between self-esteem and OP could not reach the level of significance (r =.003, p value =.977). Also, the link between perfectionism and all the factors of passion and self-esteem cannot reach the level of significance (r = -.042, -.100, -.055, -.053; p =.656,.292,.566,.578 for HP, OP, CP, and self-esteem).

**Table (3) Descriptive statistics and correlation matrix (n = 113)**

	M	S. D.	Min.	Max.	1	2	3	4	5
<b>Harmonious passion</b>	15.72	1.901	9	18	1	.353**	.603**	.355*	-.042
<b>obsessive passion</b>	13.88	2.356	7	18		1	.578**	.003	-.100
<b>Criteria passion</b>	10.26	1.668	6	12			1	.202*	-.055
<b>self-esteem</b>	37.01	5.670	20	50				1	-.053
<b>Perfectionism</b>	39.34	3.017	29	45					1

\*p<.05, \*\*p<.01

The researcher used path analysis to explore and describe the influence of HP, OP, CP, and self-esteem on students’ academic perfectionism.

As revealed in Figure 1, the results of estimating the path analysis fits indicated the data fitted the model with  $\chi^2(3) = 1.165$  (p= .761);  $\chi^2/df = .388$ ; GFI= 0.996; AGFI= 0.979; NFI= .990; CFI= 1.000; RFI = 0.966; and RMSEA =.000. As a result, based on the advice of Hair et al. (2010), it was determined that the model fit the goodness-of-fit indices, indicating a satisfactory fit between (the hypothetical model and the data gathered).

The results in Table (4) show that only HP had a statistically and positive significant effect on academic perfectionism of the students ( $\beta = .369$ ; C.R. = 3.370;  $p = .000$ ). Therefore, the standardised estimate of  $\beta$  was .369 which means that when HP raised by 1 standard deviation, self-esteem also raised by .369 standard deviations.

Also, the association between CP, OP and HP as independents variables and perfectionism as dependent variable was mediated ( $\beta = -.004, .009, -.020$  respectively,  $pp > .05$ ) by self-esteem.

**Table (4) Regression Weights in The Hypothesized Direct Model on the Effect of Passion and self-esteem on academic perfectionism**

Hypothesized Relationship	B	S.E.	B	C.R.	P
CP on self-esteem	.271	.426	.080	.636	.525
OP on self-esteem	-.418	.257	-.174	-1.624	.104
HP on self-esteem	1.10	.326	.369	3.370	***
self-esteem on academic perfectionism	-.028	.050	-.053	-.561	.575

S.E. (standard error); B (unstandardized regression weight); C.R. (critical ratio);  $\beta$  (standardized regression weight);

### Discussion

This study is, in light of the above, aimed at showing the relationships between types of passion and self-esteem. This will be carried out through examining the hypothesis that such effects are due to the mediating role of self-esteem.

The mediational sequence has fixed order as follows (passion  $\rightarrow$  self-esteem  $\rightarrow$  perfectionism) (Verner-Filion & Vallerand, 2016).

Recently, Curran et al. (2014) provided an assertion for the order as: perfectionism  $\rightarrow$  passion sequence but not the contrary.

Accordingly, when considering how perfectionism and passion influence each other, perfectionism should determine the types of passion exhibited (Curran et al., 2014). However, Curran’s study only explored the relationship between perfectionism and

passion. To our knowledge, no researches have yet gone behind these exploratory and important results and looked at the potential mediating impacts of passion in the correlation between perfectionism and achievement outcomes (Demirci & Çepikkurt, 2018).

Nevertheless, it is found that self-esteem can partially mediate the relationship between EC perfectionism and students' personal and academic concerns. PS perfectionism was not related to academic concerns.

PS was associated with personal concerns both directly and indirectly through low levels of self-esteem in women only.

In this study, the moderating model was confirmed for self-esteem between passion and academic perfectionism.

Though, the collected data did not fully show a mediating relationship for perfectionism, but prior studies gave some support to mediating role for self-esteem with perfectionism. Cokley et al. (2018) argue that 'adaptive perfectionists' are pushed by positive power and a desire for success, which can facilitate an individual's self-esteem.

Nevertheless, maladaptive perfectionists are moved by negative power and a desire to be away from failure, which can decrease self-esteem. Similar results showed that perfectionistic concerns were correlated with low self-esteem, and self-esteem acted as a mediator between perfectionistic concerns and OC symptoms (Miegel et al., 2020).

It seems logical to recommend that the self-esteem of such people is based on conditions as perfectionist levels (Kun et al., 2020).

Also, the negative dimension of perfectionism has been related to negative outcomes as low self-esteem (Stoeber et al., 2008).

So, it is suggested that passion for individual's studies is key in interpreting the adaptive nature of perfectionism (Verner-Filion, & Vallerand, 2016).

There is a growing corpus of studies on passion and its impact on academic and professional results. Passion is a well-known personality trait that we theorised should be linked to academic perfectionism.

We also hypothesised that, given the well-known mediating role of self-esteem, which means that self-esteem could mediate the connection between passion and perfectionism. The current study discovered a more complicated association between passion and self-esteem due to the multifaceted character of passion.

These findings add to our knowledge of the connection between passion, self-esteem, and perfectionism.

As for the sample, the study sample differs from other samples of previous literature in that they enrolled in postgraduate studies optionally, as they could stop studying after graduation.

That is to say, they are supposed to be highly self-esteemed.

As for the independent variable, this study tried to reverse the correlation between academic perfectionism and passion. Unfortunately, the model did not fit. As a result, a previous study has found that self-esteem is significantly associated with criteria and harmonious passions. As a result, it is not surprising that recent research has looked into self-esteem as a possibly crucial mediator of academic perfectionism.

The current study emphasises the significance of criterion passion and harmonious passion in good self-esteem. The current study is the first to demonstrate how obsessive and harmonious passion can predict self-esteem.

However, self-esteem did not act as a mediator between passion and perfectionism. Future studies are needed to further examine the significance of these findings for other areas of education.

### **Implication:**

The main aim of this study was to explore the association between criteria, harmonious and obsessive passions, and self-esteem for postgraduate students and if self-esteem may mediate the relationship between passion and perfectionism.

It was done through two separate studies in order to shed light on the importance of types of passion and perfectionism for an important sample of learners, whom see that learning can continue after graduation, with special attention to passion whereby these samples made themselves knowledgeable for all practical purposes, as dictated by their passion towards their study.

Accordingly, the first major practical contribution of the present research is that it presents a questionnaire for perfectionism that contains situations on time and about what is in mind.

A second important implication of the study derives from our finding on the inverted relation of passion and perfectionism. Findings point to a specific set of sequence that cannot be inverted. Although analyzing data with a view to identifying types of passion goes beyond the remit of the current study.

As for self-esteem, it was related to passion, but cannot mediate the relationship between passion and perfectionism.

Future research should investigate additional potential relationships between these variables through a different samples and measures.

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