

Perfectionism and academic engagement, the mediating role of passion for the studies

Perfeccionismo y engagement académico, el papel mediador de la pasión por los estudios

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ABSTRACT

In recent years, university institutions, together with the traditional interest in academic performance, are showing attention to the well-being of students. The concept of engagement tries to link both areas and suggests that there are motivational mechanisms common to well-being and performance. University adults choose to pursue high degree studies out of a desire for development that translates into a passion for learning. This passion has shown both positive and negative outcomes on well-being. Perfectionism has been shown to be a predictor of academic performance with different results in student health. For this reason, it is intended in the following work to analyze the relationship of perfectionism on the academic engagement and the mediating effect of passion for the studies, in 545 distance education university students, through a quasi-experimental design. Mediation analyzes are performed using the Partial Least Squares (PLS) method with SmartPLS software. Thus,

self-oriented perfectionism has a significant relationship with academic engagement, both directly and through passion, especially harmonious passion. A different effect is observed with socialized perfectionism. The model presents an adequate predictive level ($Q^2 = [.435 - .630]$). Therefore, passion constitutes a mediating variable between students' perfectionist beliefs and academic engagement in the study sample ($SRMR < .08$; $R^2 = 45\%$ $p < .005$). Theoretical and practical implications are analyzed, such as the importance of implementing strategies that encourage students to play an active, challenging, and flexible role in their learning process.

Keywords: perfectionism, engagement, passion, students, adult learning

RESUMEN

En los últimos años las instituciones universitarias, junto al interés tradicional sobre el rendimiento académico, están mostrando atención hacia el bienestar de los estudiantes. El concepto de *engagement* trata de vincular ambos ámbitos y sugiere que hay mecanismos motivacionales comunes al bienestar y rendimiento. Los adultos universitarios especialmente optan por cursar estudios universitarios por un afán de desarrollo que se traduce en una pasión por aprender. Esta pasión, ha evidenciado efectos tanto positivos como negativos sobre el bienestar. Por otra parte, el perfeccionismo ha mostrado ser un predictor del desempeño académico con resultados ambivalentes en la salud de estudiantes. Por ello, se pretende en el siguiente trabajo analizar la relación del perfeccionamiento sobre el *engagement* académico y el efecto mediador de la pasión en 545 estudiantes universitarios de educación a distancia a través de un diseño cuasiexperimental. Se realizan análisis de mediación utilizando el método Partial Least Squares (PLS) con el software SmartPLS. Los resultados señalan que las dimensiones de pasión armoniosa y obsesiva, y el perfeccionismo autocentrado y socialmente prescrito difieren en sus puntuaciones en *engagement* académico. Así, el perfeccionismo autocentrado presenta una relación significativa con el *engagement*, tanto directamente como a través de la pasión, especialmente la armoniosa. Se observa un efecto diferente con el perfeccionismo socializado. El modelo presenta un adecuado nivel predictivo ($Q^2 = [.435 - .630]$). Por tanto, la pasión constituye una variable mediadora entre las creencias perfeccionistas de los estudiantes y el *engagement* académico en la muestra de estudio ($SRMR < .08$; $R^2 = 45\%$ $p < .005$). Las implicaciones teóricas y prácticas son analizadas, como la importancia de implementar estrategias que fomenten en el estudiantado un papel activo, retador y flexible de su aprendizaje.

Palabras clave: perfeccionismo, *engagement*, pasión, estudiantes, aprendizaje adulto

INTRODUCTION

University students in late youth or early adulthood (World Health Organization [WHO], 2022) opt for their studies as a pathway for self-development or to pursue a vocation (Schneller & Holmberg, 2014). These students often have to combine family and professional obligations with their studies and opt for distance education. This student body has a high motivation for their studies, which enables them to cope with numerous obstacles (Carlsen et al., 2016). On the one hand, young adults' passion for learning entails dedicating time, developing an identity and feeling fulfilled according to achievement and vocational goals (Sverdlik et al., 2021). On the other hand, there is a thin line that relates achievement goals and perfectionism in academic performance (Méndez-Giménez et al., 2015). The latter, shows a complex relationship with academic performance, as perfectionistic efforts potentially do contribute to higher performance in the face of perfectionistic concerns that hinder and diminish students' well-being (Madigan, 2019). To understand these implications in the student's life, from positive education (see Seligman & Adler, 2019), we pursue to study the variables involved in the psychological well-being of students in distance education and in their academic success and what role they play (Williams et al., 2018).

One of the most widely used indicators to measure psychological well-being is engagement (Leiter & Maslach, 2017). This has been studied in the workplace and positive consequences have been found in workers such as higher motivation and performance, better health and less perceived stress (see Leiter & Maslach, 2017). It has also been analyzed in academia (see Barr et al., 2015; Lisbona et al., 2012; Merhi et al., 2018; Salanova et al., 2005). Engagement is defined as an enduring and positive state of mind with work (Leiter & Maslach, 2017) and includes three dimensions: vigor, referring to high levels of cognitive resources and persistence in coping with obstacles; dedication to the task performed or set of tasks; and absorption, or the ability to concentrate deeply, with the feeling that time "flies by". Therefore, academic engagement is considered a positive motivational construct where students are highly and intrinsically motivated (Salanova et al., 2005). This explains their greater persistence in the face of academic tasks and difficulties, or their higher academic satisfaction and performance (Salanova et al., 2005; Tinto, 2012).

Intrinsic motivation stems from the individual's own desires and needs; for example, vocation and enjoyment for the mere performance of the corresponding activity (Deci & Ryan, 2002). In this sense, passion and perfectionism would explain high student motivation and persistence to achieve academic engagement, especially in distance education students, where their motivations for study are closely linked to personal development (Schneller & Holmberg,

2014). Specifically, academic passion can be defined as a high motivation for studies, devoting significant time and effort to them, being a central part of a person's identity (Vallerand et al., 2020). It is a predictor of student happiness and satisfaction (Bernabé et al., 2014). According to Vallerand et al. (2020), there are two underlying processes for a person to develop passion towards an activity. The first is the valuation of the activity, either by interest, importance or experienced affectivity. The second is the internalization of it as part of his or her personal identity or the degree to which the activity represents the individual's self-concept. People with high passion will experience high motivation and persistence even in situations where a significant investment of energy and effort with high demands is required (Barr et al., 2015). This explains why passion is also an important predictor of academic performance (Vallerand et al., 2020). On the other hand, perfectionism is a multidimensional personality disposition toward the pursuit of excellence accompanied by high self-demand (Hewitt & Fleet, 1991). In academia, adaptive perfectionism is linked to higher levels of satisfaction, psychological well-being, self-esteem, high academic goals and greater self-determination (Lagos et al., 2017). However, the explanatory models of both variables show a "hidden side" for both perfectionism and passion. In both cases they have presented positive and negative consequences on students' well-being (see Vallerand et al., 2020). On the one hand, according to the dual passion model (Vallerand et al., 2020), passion can be either harmonious or obsessive. In the former, the student would study in a controlled and autonomous way, experiencing well-being for the pleasure of performing the tasks involved in his or her studies and learning. While, in the second, the student is emotionally dependent on the activity, perceives less control and is conditioned to the search and need for external rewards such as social acceptance (Lafrenière et al., 2012). Something similar has been observed in the processes of self-regulation of one's own learning, where Richardson et al. (2012) point out how autonomy and self-regulation contributed to internalize the activity as part of the individual's identity, due to the fact that responsibility is shifted to the individual, making him/her responsible for the goals that are set, in what terms and with what deadlines. This is in contrast to a totally externally regulated context in which the person would merely meet the deadlines already set. Thus, passion also acts as a regulator between beliefs and learning (Sverdlik et al., 2021). In this regard, Vallerand et al. (2020) link the experience of harmonious passion with positive affect and flow, whereas negative affect and anxiety relate it to the obsessive dimension of passion. Both dimensions are associated with persistence (Vallerand et al., 2020), understood as an active coping strategy, although they do not have the same experience. That is, persistence in the obsessive dimension would result more rigid, less self-controlled and less adaptive compared to persistence in those

students with high scores in the passion harmony dimension (Vallerand et al., 2020). This would contribute to explain the explanatory and differentiated role of harmonious passion with respect to academic engagement, in accordance with studies such as Lisbona et al. (2012). Thus, students who experience greater harmonious passion towards their studies devote sustained and persistent efforts over time to activities and situations that require a greater investment of personal energy even in the face of a low number of resources, obtaining more positive results (Bernabé et al., 2014).

On the other hand, regarding perfectionism and engagement, several studies initially linked perfectionism in general with more maladaptive coping and poorer outcomes (Hewitt & Flett, 1991; Madigan, 2019). Subsequent research (Verner-Fillion & Vallerand, 2016) evidenced that perfectionism shows both positive relationships with adaptive outcomes e.g., academic engagement (see Damian et al. 2017), and with maladaptive outcomes such as workaholism (see Stoeber et al., 2018). Specifically, according to Hewitt and Flett (1991), perfectionism can be classified into Self-oriented and Socialized, depending on whether the mandates originate, respectively, from oneself or are imposed by others. That is, depending on whether the person sets high standards of demand for a task or set of tasks and internalizes them as part of his or her identity. In the academic field, Flett and Hewitt (2014) analyze how self-oriented perfectionism, which presents a highly heterogeneous profile, is related to greater stress before exams. However, there is contrary evidence associating self-centered perfectionism with positive consequences such as positive affect, subjective well-being, life satisfaction, and academic performance (Ashby et al., 2012; Hewitt & Fleet, 1991). In contrast, the role of socialized perfectionism is more clearly linked to higher levels of both negative affect, depression, anxiety, stress, and poorer academic performance (Ashby et al., 2012). According to Jowett et al. (2016) it is externally imposed perfectionistic concerns that are negatively linked to engagement and positively linked to burnout, while those of internal and self-imposed origin are associated with an internal attribution of success and adequate academic performance (Aguilar-Durán, 2020). De la Fuente et al. (2020) points out different coping strategies depending on the type of perfectionism of the students. In the case of perfectionist efforts, the positive emotions experienced predispose to the use of problem-focused coping strategies and to engagement; in contrast, in the case of perfectionist concerns, negative emotions predispose to the use of emotion-focused strategies and to a state of burnout.

Madigan (2019), in her meta-analysis establishes that perfectionism, especially self-oriented perfectionism, has been linked to higher academic engagement given that those students with high standards of demand are more involved with the task, and invest more effort, motivation and perseverance. In a similar line, Stoeber (2012) evidenced in another meta-analysis the perfectionist eagerness with higher

academic performance. However, other authors do not observe conclusive results on the relationship between perfectionism and greater academic success (Stoeber & Otto 2006), psychological well-being (Lagos et al., 2017) or engagement (Jowett et al., 2016). Thus, it seems that the influence of other intermediate variables, such as passion that would explain these differences, (Madigan, 2019; Verner Fillon & Vallerand, 2016).

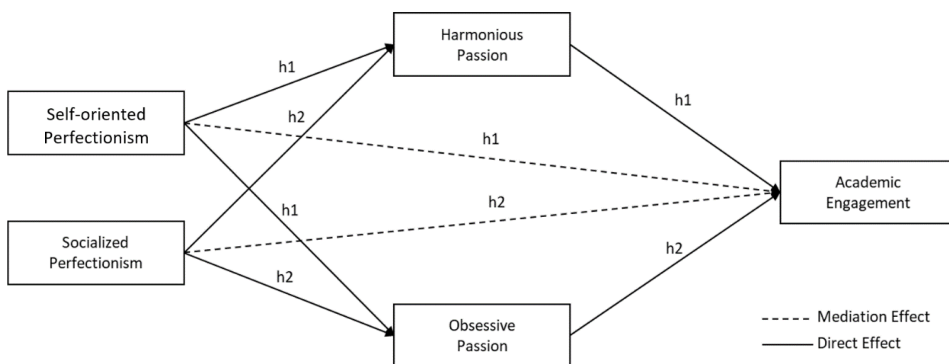
Perfectionism will be considered an antecedent of academic passion to regulate study (Verner-Filion & Vallerand, 2016), in the sense that it responds to a personality disposition and the passion construct is a more contextual and motivational variable. Specifically, self-oriented perfectionism shares with harmonious passion the higher degree of integration, attunement and alignment with the person's identity; on the other hand, socialized perfectionism has in common with obsessive-type passion its mainly external origin, less integration in the self and the experience of less self-control and greater negative affect. This autonomy, characteristic of harmonious passion, is one of the three basic needs of Self-Determination Theory (Deci & Ryan, 2002). Therefore, those variables and characteristics that are linked to this need will be linked to greater psychological well-being or engagement (Jowett et al., 2016; Lagos et al., 2017; Vallerand et al., 2020). Thus, the student with a higher level of self-demand will tend to study harmoniously and therefore will experience greater academic engagement. Whereas, if perfectionism is of external origin, the demand comes from external mandates, the passion would be obsessive or with less self-regulatory control and would be guided by social contingencies, experiencing lower academic engagement (Bernabé et al., 2014; Madigan, 2019). Therefore, the aim of the present study is to analyze the effects of perfectionism on academic engagement and the regulatory role of passion for studies as a mediating variable. Figure 1 shows the expected relationships. Thus, it is expected, on the one hand, that self-oriented perfectionism will have a mediated effect, directly and inversely with the harmonious and obsessive dimension, respectively on academic engagement; and, on the other hand, that socialized perfectionism will present a direct relationship with the obsessive dimension and inversely with the harmonious dimension of passion and also differentiated effects on academic engagement. Specifically, the hypotheses of the present work are:

HYPOTHESIS

- Hypothesis 1.* Self-oriented perfectionism has a direct relationship with harmonious passion and an inverse relationship with obsessive passion and differential mediated effects on academic engagement.
- Hypothesis 2.* Socialized perfectionism has a direct relationship with the obsessive dimension and an inverse relationship with the harmonious dimension of passion and differential mediated effects on academic engagement.

Figure 1

Proposed theoretical model



METHOD

Participants

The sample was composed of 545 university students in late youth and adulthood [19 - 35 years]. All came from the National University of Distance Education. Most of them were undergraduates (97%) while the rest were studying for a university master's degree. The sample, of which 74% were women, had a mean age of 27 years ($SD=4.13$). 47.5% were in their 4th degree, 21.3% were in their 3rd degree, 26.6% were in the first years of their degree. 79.4% of the participants are pursuing health science degrees, 12.4% are pursuing social science degrees, 3.6% are pursuing engineering degrees, and 2.7% are pursuing educational science degrees.

Variables and instruments

Sociodemographic variables

An *ad hoc* questionnaire was developed to record the sociodemographic and educational variables of the participants. Thus, different scales were used to obtain information on gender, year of birth and current degree.

Perfectionism

Perfectionism was measured using the Multidimensional Perfectionism Scale (MPS) by Hewitt and Flett (1991) adapted to the Spanish population by Carrasco et al. (2009). It is composed of two dimensions: self-oriented perfectionism (e.g., “One of my goals is to be perfect in everything I do”) and socially prescribed perfectionism (e.g., “My family expects me to be perfect”). Both are composed of 5 items. The items used a 5-point Likert-type scale (1= Strongly disagree; 5= Strongly agree). The internal consistency of the self-oriented perfectionism scale was $\alpha = .90$ and $\alpha = .84$ for the socialized perfectionism scale.

Passion

The Spanish adaptation of the passion scale for university students (Lisbona et al., 2012) was used. It evaluates the degree and level of passion regarding an activity where they invest time and energy. It is composed of two dimensions: harmonious passion (e.g. “I am totally involved in my studies”) and obsessive passion (e.g. “My mood depends on whether or not I am able to learn something”) of 6 items each. The response scale is a 5-point Likert-type scale (1= Completely disagree to 5 = Completely agree). The instrument showed an internal consistency of $\alpha = .81$ and $\alpha = .83$ for the harmonious and obsessive passion dimensions, respectively.

Academic engagement

The Spanish version of the Utrecht Work Engagement Survey (UWES-S; Schaufeli & Bakker, 2003) was used for students. It consists of 17 items, grouped into three dimensions: Vigor (6 items; e.g. “I can continue studying for long periods”), Dedication (5 items; e.g. “I am proud of doing this career”) and Absorption (6 items; e.g. “I am immersed in my studies”). The response scale is a 7-point Likert-type scale (0 = Never; 6 = Always). The average of the scale as a whole is used as an indicator of academic engagement, showing an internal consistency of $\alpha = .93$.

All the scales used show satisfactory internal consistency values according to Nunnally and Bernstein (1994).

Procedure

The participants completed a questionnaire using Qualtrics® that included the study variables. The time required to complete the questionnaire was 20 minutes maximum. Exponential non-discriminatory snowball sampling was used to recruit participants (Hernández Ávila & Carpio, 2019). Adult university students were contacted through subject forums where they in turn invited other adult students to participate. They were given a document requesting their participation and guaranteeing their anonymity and confidentiality in the answers provided. After giving their consent to participate in the research, they answered the questions. The study was conducted within the framework of the Declaration of Helsinki (World Medical Association, 2015) and in accordance with the norms of the UNED Bioethics Committee.

Data Analysis

Descriptive statistics (mean, standard deviation and correlation) and reliability analysis of the scales are analyzed. For the reliability analysis of the scales, values above .70 in Cronbach's alpha were considered as indicative of reliability (Nunnally & Bernstein, 1994). Subsequently, for the purpose of the study, the data were analyzed using the Partial Least Squares (PLS) method with the SmartPLS® software (Ringle et al., 2005). For the analysis of the proposed model, the Partial Least Square - SEM (PLS-SEM) methodology was followed, since the objective is the prediction of the constructs of the proposed exploratory model (Hair et al., 2017). The objective of PLS is to predict dependent, latent and manifest variables by maximizing the explained variance (R^2) in the dependent variables and minimizing the error of the residual variance of the endogenous variables in any regression of the model (Wold, 1985). Thus, the technique is an alternative, robust and flexible approach to the traditional one (Martínez-Avila & Fierro-Moreno, 2018). Standardized data were used in the analysis and missing data were excluded. Significance was assessed by Bootstrapping with 500 samples of 100 cases (t-value = 1.96; $p < .05$).

To test the reliability of the model indicators, the composite reliability index (ρ_c) is considered. Values of ρ_c greater than .60 indicate good reliability (Werts et al., 1971). To assess convergent and discriminant validity, the Fornell-Larcker (1981) criterion was followed. Convergent validity would be sufficient for the model if $AVE > .50$. Discriminant validity would be satisfactory if $\sqrt{AVE}(\eta_1) > Cor(\eta_1, \eta_2)$. The HTMT criterion is also used, where the ratio must be less than 1 (Gold et al., 2001). Subsequently, for the study of multicollinearity of the variables that compose the structural model, the VIF value will be used, values lower than 5 are indicative of absence of multicollinearity (Hair et al., 2017). For the study of mediation effects, according to Nitzl et al. (2016), Confidence Intervals (CI90%) are estimated and Variance Accounted For (VAF) is calculated. A mediation effect occurs when the IC90% range does not contain the value zero (Hair et al., 2014). To assess the magnitude of the effects, VAF value $> 80\%$ is indicative of full mediation. In addition to the R^2 as a predictive criterion, the Q^2 indicator is examined to assess the predictive relevance of the structural model using the Stone-Geiser test (Geiser, 1974; Stone, 1974), values should be greater than zero (Chin, 1998).

RESULTS

Table 1 shows the descriptive analyses of the variables and the Cronbach's alpha values of the scales used. All correlations between variables are statistically significant ($p < .01$; $p < .05$).

Table 1
Descriptive and Reliability Analysis of the Measures

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Self-oriented perfectionism	3.16	1.09	-	.33**	.19**	.36**	.21**
2. Socialized perfectionism	2.65	0.89		-	-.11**	.20**	-.10*
3. Harmonious passion	3.75	0.72			-	.18**	.67**
4. Obsessive passion	2.44	0.97				-	.31**
5. Academic engagement	4.26	1.10					-

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

Regarding the proposed model (Figure 1), the composite reliability values of the variables that configure it are above .60 ($\rho_c = [.88 - .93]$) being indicative of an adequate reliability of the measures (Werts et al., 1971). Regarding convergent and discriminant validity in the model, for all constructs, the common variance between the indicators and their constructs was greater than .50 (AVE = [.55 - .83]). According to the criteria of Fornell and Larcker (1981) these values would be satisfactory. Furthermore, the square root of AVE is higher than the correlations with all the other constructs (VAVE = [.73 - .91]), so an adequate degree of convergent and discriminant validity among the variables is observed. Complementarily, the HTMT ratio for the correlations of the indicators shows satisfactory values (HTMT = [.10 - .72]), therefore, there is an adequate convergent and discriminant validity of the constructs in the model.

The proposed model reflects the indirect effect of perfectionism on academic engagement through its two dimensions, with no evidence of multicollinearity (VIF = [1.09 - 1.18]). In the model studied, an $R^2 = .45$ is observed for academic engagement, being a moderate value (Hair et al., 2017). Additionally, regarding the predictive relevance of the structural model, the $Q^2 = [.435 - .630]$ values are adequate values of predictive validity of the model (Chin, 1998; Hair et al., 2017). Adequate levels of fit are also observed (SRMR < .08; $R^2 = .45$; $p < .005$). The coefficients of the structural model can be found in Table 2.

Table 2*Mediation of Passion between Perfectionism and Academic Engagement*

Effects	Coefficients	Bootstrap 90% CI				
<i>Self-oriented perfectionism</i>						
Direct Effects		Percentiles		BC		
Academic engagement	.067*	.005	.131	.005	.130	
Harmonious Passion	.216*	.139	.285	.140	.287	
Obsessive passion	.232*	.258	.377	.259	.378	
Harmonious passion - academic engagement	.563*	.503	.609	.505	.611	
Obsessive passion - academic engagement	.162*	.104	.223	.104	.223	
Indirect effects	Estimated Points	Percentiles		BC	VAF	
<i>Self-oriented perfectionism x passion</i>						
PA – Engagement académico	.121*	.059	.144	.059	.144	63.9%
PO – Engagement académico	.051*	.034	.078	.033	.077	42.9%
<i>Socialized perfectionism</i>						
Indirect effects		Percentiles		BC	VAF	
Academic engagement	-.145*	-.207	-.094	-.204	-.091	
Harmonious passion	-.132*	-.206	-.055	-.204	-.053	
Obsessive passion	.088	-.001	.177	-.002	.176	
Harmonious passion - academic engagement	.563*	.503	.609	.505	.611	
Obsessive passion - academic engagement	.162*	.104	.223	.104	.223	
Indirect effects	Estimated Points	Percentiles		BC	VAF	
<i>Socialized perfectionism x passion</i>						
PA – Engagement académico	-.074*	-.114	-.031	-.114	-.031	33.8%
PO – Engagement académico	.014	-.000	.032	-.000	.032	10.8%
Total indirect effects	.158*	.112	.208	.111	.207	
Self-oriented perfectionism	.173*	.116	.229	.111	.207	71.6%
Perfeccionismo socializado	-.060*	-.106	-.011	-.107	-.011	29.2%

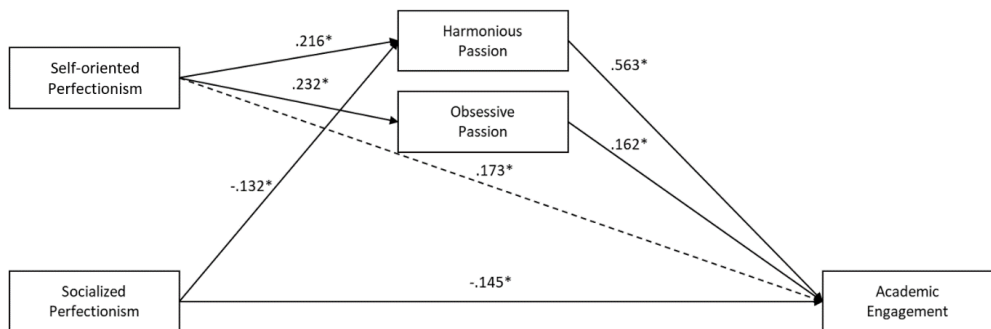
Note. Coefficients are significant IC: 90% BC: Bias Correct. VAF: Variance Accounted For.

* *p*-value < .05.

Regarding mediation analysis, the results show indirect effects of self-oriented perfectionism on engagement both through the harmony dimension ($\beta = .12$; $p = .000$) and the obsession dimension ($\beta = .05$; $p = .000$). In agreement with Hair et al. (2014) VAF values $> 20\%$ and $< 80\%$ are obtained, indicative of partial mediation. Although the indirect effect is superior in the harmonious versus obsessive dimension, the differential effects between both mediators are not shown to be statistically significant in the case of self-oriented perfectionism ($\beta = .05$; $CI90\% = [-.011 - .103]$ $BC = [-.010 - .104]$). As for the effects of socialized perfectionism, an indirect effect on engagement is observed through the harmonious dimension of passion ($\beta = -.07$; $p = .003$ Vs. $= .01$; $p = .082$). This mediation would be partial (VAF = 33.8%). No significant direct effect of socialized perfectionism on the obsessive dimension of passion is observed ($\beta = .08$; $p = .062$). Thus, the total indirect effect of self-oriented perfectionism on engagement occurs through both harmonious and obsessive passion, with partial mediation in both cases. Socialized perfectionism, however, shows smaller total indirect effects and only marginally through the harmony dimension of passion (Figure 2).

Figure 2

Final model of Perfectionism, Passion and Academic Engagement



* p -value $< .05$.

DISCUSSION AND CONCLUSIONS

The general aim of the present study was to analyze the indirect effects of perfectionism on academic engagement through the passion for their studies experienced by adult distance learners. First, it is observed that self-oriented perfectionism explains students' harmonious passion although the results are inconclusive regarding the relationship between socialized perfectionism and the obsessive dimension, in line with previous studies (Verner-Filion & Vallerand, 2016). On the other hand, regarding the passion experienced by students, the results show that although both types, harmonious and obsessive, are linked to high levels of academic engagement, it is harmonious passion that shows a stronger relationship for the sample analyzed, in line with previous work (Lisbona et al., 2012). Regarding hypothesis 1, in relation to the indirect effects analyzed, the results indicate that self-oriented perfectionism is linked to higher academic engagement when students experience harmonious and balanced academic passion. But, on the other hand, it is also observed that these self-imposed standards are related to certain degrees of study obsession and are not necessarily associated with lower academic engagement. Although the magnitude of the effect of harmonious passion on academic engagement is larger, the mediation effects do not differ from each other. One possible explanation for these findings is that both the desire to preserve the ideal self, fear of failure, and external evaluation by students converge to explain participants' academic engagement (Vallerand et al., 2020). However, in view of the results, students' internally derived perfectionistic beliefs seem to have a higher predictive role on academic engagement. This is explained because self-imposed standards of internal origin are associated with an internal attribution of successes (Aguilar-Durán, 2020), which raise the level of demand and therefore the motivation and persistence necessary to achieve such goals, so they will be related to a greater extent with the degree of academic engagement. As for hypothesis 2, socialized perfectionism is negatively related to academic engagement and harmonious passion; however, no mediation effects of obsessive passion with engagement are observed. Therefore, the results do not allow us to confirm the maladaptive consequences in students who study obsessively, without limits or control over study behavior. But they do point to the positive role of the adaptive effects of perfectionism in academia when studying is done in a balanced or harmonious way (Ashby et al., 2012; Hewitt & Fleet, 1991). It is observed, therefore, that greater autonomy and control in study behavior is linked to more adaptive coping strategies (Merhi et al., 2018) that regulate perfectionistic beliefs to achieve greater academic engagement. According to the resource conservation model (Hobfoll, 1989), studying with limits and in balance, characteristic of harmonious passion, acts as a personal resource that reduces the negative effects associated

with socially prescribed beliefs, such as loss of well-being, lack of control, or fear of external evaluation. On the other hand, studying without limits or guided by external approval or social prestige, characteristic of obsessive passion, reduces the adaptive role that perfectionist beliefs of internal origin may have.

The results therefore seem to indicate, in view of the indicators of the structural model, the explanatory role that students' self-oriented perfectionist beliefs have on academic engagement through the harmonious passion with which they approach their studies. Thus, self-imposed demands will be positively related to a more balanced and controlled study activity, while socially prescribed beliefs will be positively related to a less balanced and autonomous experience of the participants. However, the results found should be taken with caution because, according to the dual passion process model, negative consequences can be expected in the long term if perfectionist beliefs become rigid mandates of demand, which can lead to lower academic engagement by experiencing less harmonious passion, as the results suggest. This is a fine line where other variables may be at work, such as coping, perceived efficacy, resilience, or personal strengths (Merhi et al., 2018).

All the above, together, places the focus on the importance of implementing strategies from universities to foster in students a greater passion for their studies, through the acquisition of an active role in their learning and the establishment of challenging, autonomous and flexible goals. Promoting active student learning (Chickering & Gamson, 1987), through their own involvement in setting their own goals and standards will generate better academic engagement results, specifically with harmonious, balanced and more controlled passion. This phenomenon of the student as an active protagonist of his or her learning is also clearly linked to the impact on academic performance and satisfaction, thanks to greater self-regulation of learning. With it, the student actively participates in setting his or her own academic goals, internalizing them as his or her own (Chickering & Gamson, 1987). Precisely, one of the ways to promote a more balanced passion in studies goes through an adequate previous orientation based, for example, on the vocational preferences, personal and/or professional development and self-realization of the student (Harward, 2016; Tinto, 2012), without obviating flexibility in terms of achievement beliefs.

All the above, together, places the focus on the importance of implementing strategies from universities to foster in students a greater passion for their studies, through the acquisition of an active role in their learning and the establishment of challenging, autonomous and flexible goals. Promoting active student learning (Chickering & Gamson, 1987), through their own involvement in setting their own goals and standards will generate better academic engagement results, specifically with harmonious, balanced and more controlled passion. This phenomenon of the

student as an active protagonist of his or her learning is also clearly linked to the impact on academic performance and satisfaction, thanks to greater self-regulation of learning. With it, the student actively participates in setting his or her own academic goals, internalizing them as his or her own (Chickering & Gamson, 1987). Precisely, one of the ways to promote a more balanced passion in studies goes through an adequate previous orientation based, for example, on the vocational preferences, personal and/or professional development and self-realization of the student (Harward, 2016; Tinto, 2012), without obviating flexibility in terms of achievement beliefs.

Finally, although participation in the research was voluntary, which could encourage greater participation by more motivated students, the sample collected yielded a wide range of scores for the variables analyzed. It would also be interesting to find the differentiating effects of the variables analyzed with the incorporation of one of the indicators most commonly used to measure psychosocial distress, burnout. The introduction of academic burnout as a counterpoint to academic engagement could contribute in the future to obtaining a broader view in the analysis of student well-being or discomfort.

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