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Identity motives and passion: The mediating role of identifying with an activity

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Abstract

Research objectives and problems: Favorite activities often become central to self-definition, as passions and identity intertwine. This study examined whether the satisfaction of six identity motives – distinctiveness, continuity, self-esteem, belonging, efficacy, and meaning – predicts the strength and type of passion, and whether identifying with an activity mediates these relationships.

Research methods: A total of 209 adults completed validated tools to assess identity motives, identification with a favorite activity, and passion. Mediation analysis was conducted using the PROCESS macro for SPSS.

Process of argumentation: Based on the dualistic model of passion and the motivated identity construction theory, the study tested direct and indirect paths: from motives through identification to passion.

Research findings and their impact on the development of educational sciences: Efficacy, continuity, and meaning were found to predict identity formation, which in turn predicted both harmonious and obsessive passion. Additionally, meaning and distinctiveness showed direct associations with the intensity of passion. These findings underscore the identity-based foundations of passionate engagement, which is relevant for fostering motivation in education.

Keywords:

identity motives,
passion,
identification with
activity

Conclusions and/or recommendations: The results highlight the motivational and identity-based foundation of passionate engagement. Supporting identity-related motives and identification with learning activities may promote sustained and adaptive engagement. Further longitudinal research is recommended.

Introduction

The first systematically developed model of passion is the dualistic model (DMP) proposed by Vallerand (Mageau et al., 2009; Vallerand, 2008, 2012b; Vallerand et al., 2003), in which passion is defined as “a strong inclination toward a self-defining activity that individuals like (or even love), that they value, and in which they invest time and energy. These activities come to be so self-defining that they represent central features of one’s identity” (Vallerand, 2008). This kind of activity is not merely a form of entertainment that gives pleasure; it is part of personal identity (Vallerand, 2008, 2012). Research based on this model shows that the pursuit of passions gives people a sense of satisfaction and fulfillment, improves their quality of life, and is conducive to the experience of positive emotions (Philippe et al., 2009; Rousseau & Vallerand, 2008; St-Louis et al., 2015).

According to the DMP, passion can be integrated into identity in two qualitatively different ways (Vallerand et al., 2003), leading to the distinction between obsessive passion (OP) and harmonious passion (HP). These two forms of passion differ primarily in the way the activity is internalized and the consequences of this internalization for functioning. Obsessive passion stems from a controlled internalization of the activity into the self, typically resulting from external or internal pressure (e.g., social expectations or self-imposed contingencies of worth). As a result, the individual experiences a compulsive urge to engage in the activity, which leads to conflicts between the activity and other aspects of life (Bouize-garene et al., 2018; Vallerand, 2008). The lack of control over the urge to participate is associated with negative affect, rumination, and interpersonal conflict when individuals are unable to engage in their activity (Carpentier et al., 2012; Mageau & Vallerand, 2007).

The other type, harmonious passion, results from the activity being autonomously internalized into one's identity. In this case, the individual feels a desire to engage in an activity voluntarily and without pressure, while maintaining control over the engagement. Those with HP are able to reconcile engagement with other aspects of life without experiencing conflicts and to flexibly engage in their activity. Meta-analytical findings indicate that harmonious passion is associated with adaptive outcomes, such as enhanced well-being, persistence, and positive affect, and does not interfere with other important life goals (Curran et al., 2015). The present study investigates not only the types of passion, but also its strength, understood as long-term engagement and interest that comprises three defining components: time investment, a love of the activity, and the perception of the activity as being personally important. In other words, the strength of passion reflects the degree to which an activity is a passion: a lasting engagement significant to the individual.

Passion also plays an important role in teaching and education. On the one hand, passion fosters persistence and motivation, which are crucial for success in learning. For example, research suggests that harmonious passion can help students in their education to persist towards their anticipated careers in a balanced and positive way (Bonneville-Roussy et al., 2013). The path analysis results indicate that harmonious passion was associated with the adoption of mastery goals, which subsequently led to higher performance levels within a population of expert musicians. Conversely, obsessive passion was linked to a negative impact on performance achievement (Bonneville-Roussy et al., 2011a).

On the other hand, a recent study conducted by Chichekian, Vallerand, and Rahimi (2024) revealed that students who perceive their teachers as passionate about teaching resulted in more positive and fewer negative emotions in the classroom, affecting students' perceptions of their passion. Additionally, positive classroom emotions were shown to cultivate students' harmonious passion, while both positive and negative emotions contributed to the development of obsessive passion. These findings offer support for a passion transmission model in education, highlighting the role of teachers' passion and support of students'

autonomy in shaping their passion for a subject through their emotional experiences in class (Chichekian et al., 2024).

Few studies, however, have investigated the determinants of passion (Bouizegarene et al., 2018; Mageau et al., 2009). In particular, there are few studies that address what contributes to the inclusion of an activity in a person's identity, what promotes their identification with the activity, and what identity processes are involved in developing a passion (Bouizegarene et al., 2018), although in Vallerand's model (Vallerand et al., 2003) identification with a passion is its defining feature, distinguishing passion from other forms of engagement. The study revealed (Bouizegarene et al., 2018) that HP was positively associated with identity integration and informational identity style, whereas OP was negatively associated with identity integration and positively associated with normative identity style. Bouizegarene and colleagues also found that an informational identity style led to HP, especially when accompanied by a high level of identity integration.

From the social cognitive point of view, represented by Vignoles' (2011) motivated identity construction theory, identity encompasses those aspects of life (e.g., roles or favorite activities) that satisfy certain basic motives: distinctiveness, continuity, self-esteem, belonging, efficacy, and meaning. It postulates that the construction of personal (and social) identity is driven by the satisfaction of these six basic motives. The model includes *the distinctiveness motive*, directed towards establishing and maintaining a sense of being that differs from others – a sense of uniqueness; *the continuity motive*, referring to the motivation to maintain a sense of continuity of who one is in time (between the past, present, and future) and regardless of the situation; *the self-esteem motive*, which concerns the motivation to maintain and strengthen a positive self-concept; *the belonging motive*, concerning the need to maintain and strengthen a sense of being close to and accepted by others, both in dyadic relationships and in a group; *the efficacy motive*, oriented towards maintaining and strengthening the sense of competence and control; and *the meaning motive*, which refers to the need for meaning or purpose in one's existence. Considering the development of passion from the perspective

offered by the motivated identity construction theory, one can conclude that the satisfaction of basic identity motives is a factor related to the development of passion. The activity associated with the satisfaction of these motives becomes an aspect of one's identity and thus turns into a lasting passion. Moreover, the individual's identification with the activity probably plays a key role in this process, which takes place when the activity satisfies the identity motives.

Based on the dualistic model of passion (Vallerand, 2008, 2012) and the identity construction theory (Vignoles et al., 2006), the present study addresses the issues of the determinants of passion and its links with activity and identity. We explored which of the basic identity motives (distinctiveness, continuity, self-esteem, belonging, efficacy, and meaning) might explain the strength and type of passion (obsessive and harmonious). We also expected that identification with a favorite activity would mediate the relationship between motive satisfaction and passion. Passion also plays a significant role in the educational context, where it supports motivation, sustained engagement, and long-term persistence in learning (Bonneville-Roussy et al., 2013; Chichekian et al., 2024). Exploring how identity motives contribute to the development of passion may help educators better understand the psychological mechanisms that foster students' internal commitment to learning activities.

Background

The main problem addressed in the study is the links between identity motives and the strength and type of passion and the mediating role of identification with activity between motives and passion. Identification results in experiencing the activity as personally significant, which means that – in a way – when engaging in the activity, the individual fulfills an important aspect of themselves and experiences satisfaction with the activity; this is reflected in the strength of passion and in its obsessive and harmonious forms. Moreover, research shows that passionate people identify more strongly with their activity than non-passionate individuals

(Mageau et al., 2009). Therefore, in the present study we predicted that identification with activity would be positively related to both the strength and the type of passion and that its relationship to obsessive passion would be stronger. We were interested in which motives were indirectly, directly, or both indirectly and directly related to the strength and type of passion and whether the type of passion differed in terms of its direct links with motives.

Identification with activity is treated as a mediator between motives and passion. It is assumed that if an activity satisfies all motives, it promotes identification with that activity, which in turn is a mediator in the relationship between the motives and the strength and type of passion. Direct relationships between motives and passion are also possible. This particularly applies to the self-esteem motive. Research shows that obsessive passion is related to lower levels of global self-esteem and self-esteem fluctuation resulting from activity performance, whereas people with harmonious passion do not report such relationships (Mageau et al., 2011). Based on these findings, we expected that the self-esteem motive would be directly and negatively related to obsessive passion and positively related to strength of passion and harmonious passion.

To sum up, the main aim of the study was to examine the associations between six identity motives, identification with activity (identity interest), and passion. Drawing on theoretical frameworks and existing empirical evidence, five research hypotheses were proposed. We predicted that (1) the satisfaction of the six motives by an activity would have a positive relationship with identification with the activity. We hypothesized that (2) all motives except self-esteem would be positively associated with the strength and type of passion. Moreover, we expected that (3) the self-esteem motive would correlate negatively with obsessive passion and positively with harmonious passion. We also predicted that (4) identification with activity would be a significant mediator between motives and passion. Finally (5), since identification is a crucial feature of passion, it should directly contribute to the strength of passion and should be positively related to HP and OP.

Materials and Methods

Participants and Procedure

Participants ($N = 209$) were recruited by trained research assistants from among university students and willing persons from their social environment. Their participation was voluntary and anonymous. The study participants were 209 Polish-speaking individuals living in Poland: 119 women, 89 men, and 1 unspecified. Their mean age was 32 years ($SD = 10.8$). The respondents completed all questionnaires in private.

Measures

Passion for an Activity. In order to assess passion, we administered the Passion Scale (Vallerand et al., 2003). This 16-item measure consists of two 6-item subscales, assessing HP and OP. Four items concern the defining elements of passion and can be used to assess strength of passion (SP; e.g., “I spend a lot of time doing this activity”). The participants were asked to rate all items on a 7-point Likert scale (from 1 = “do not agree at all” to 7 = “very strongly agree”). The reliability coefficients for the HP, OP and SP subscales were .83, .84, and .86, respectively. The participants were asked to respond to the items with reference to a specific activity that they were passionate about. The Polish adaptation of the Passion Scale has been found to have acceptable validity and reliability (Kwapis & Batory-Ginda, 2023).

It is important to mention that an activity is considered a passion when a person has scored 4 or higher on the SP subscale, which serves as a criterion subscale. This cut-off point is computed as the mean of four SP item scores and has served in many studies to differentiate between people who are passionate about an activity and those who are not (Bonnevill-Roussy et al., 2013).

Identity Motives. To assess the satisfaction of identity motives, we adapted the Identity Questionnaire developed by Vignoles and colleagues (2006) to the context of people’s passionate activities. Participants rated to what extent their passionate activity is associated with feelings of self-esteem, self-efficacy, continuity, distinctiveness, belonging, and

meaning. Each of the six motives was measured by means of a single question (e.g., in the case of efficacy: “To what extent does your activity make you feel competent?”), using a 7-point rating scale (1 = “not at all” and 7 = “extremely”).

Identification With Activity. The Identity Interest Scale measures the level of identification with an activity. It was also developed for the purposes of this study in order to supplement the DMP-based measurement of SP with the measurement of identification with activity. The instrument consists of 5 items (e.g., “My activity is an important part of who I am”), which the respondents rate on a scale from 1 to 7 (1 = “completely disagree” and 7 = “completely agree”). The reliability of the scale, measured with the internal consistency coefficient (Cronbach’s α), is .92.

Results and Discussion

Data Analysis

The analysis was performed using the PROCESS macro (v.3.1) for SPSS. For each dependent variable – strength of passion, obsessive passion, and harmonious passion – we tested six separate mediation models (Model 4), each with one identity motive as the independent variable (X), identification with activity as the mediator (M), and the passion outcome as the dependent variable (Y). In each model, the remaining five identity motives were included as covariates to control for shared variance. This approach yielded a total of 18 mediation analyses. Indirect effects were tested using the bootstrapping method with 1,000 resamples. The first mediation analysis (for strength of passion) was performed for the total sample of 209 subjects. Further analyses, concerning OP and HP, were performed only for those participants whose activity met the passion criterion ($N = 184$).

There were no missing values. Data screening for outliers revealed no value higher than three standard deviations from the mean. We performed a correlation analysis to determine the relationships between the variables. Means, standard deviations, and correlations for all the variables are presented in Table 1.

**Table 1. Means, standard deviations, and correlations
for all the variables (N = 209)**

	M	SD	1	2	3	4	5	6	7	8	9
1. Strength of passion	21.84	5.208									
2. Obsessive passion	20.99	8.389	.54*								
3. Harmonious passion	32.56	6.265	.70*	.29*							
4. Identity interest	55.95	12.802	.78*	.64*	.58*						
5. Distinctiveness	6.78	2.569	.57*	.47*	.39*	.62*					
6. Continuity	6.61	2.306	.42*	.28*	.37*	.56*	.49*				
7. Self-esteem	7.58	1.915	.59*	.31*	.54*	.55*	.62*	.43*			
8. Belonging	7.09	2.133	.46*	.40*	.30*	.52*	.54*	.39*	.48*		
9. Efficacy	7.24	1.662	.48*	.28*	.42*	.60*	.48*	.52*	.50*	.45*	
10. Meaning	7.24	2.089	.58*	.49*	.48*	.67*	.45*	.51*	.52*	.47*	.56*

* $p < .001$

Strength of Passion. Significant results were found for the model with direct relationships between the motives and identification ($F(6, 202) = 52.72$, $p < .001$) and it explains 61% of the variance in identification. Significant positive relationships between motives and identification were found for continuity ($B = 0.64$, $p < .001$), efficacy ($B = 1.05$, $p < .001$), distinctiveness ($B = 0.38$, $p < .001$), and meaning ($B = 0.83$, $p < .001$). We observed no significant links between the self-esteem and belonging motives and identification with activity. The results concerning the model with direct relationships between strength of passion and both motives and identification indicate that the model is significant ($F(7, 201) = 38.562$, $p < .001$) and explains 57% of the variance. Identification with activity was significantly, positively related to SP ($B = 0.36$, $p < .001$).

To determine the presence of mediation, we used the bootstrapping method with 1,000 interactions. The results indicate that identity motives had a significant indirect effect on strength of passion via identification with activity. Table 2 presents the results of the bootstrap analysis.

We found significant mediation effects in the case of the continuity, meaning, efficacy, and distinctiveness motives. All effects were positive and the strongest effect was observed for the efficacy motive. In the case of continuity and efficacy, the mediation was full, which means that their direct effects were not significant. In the case of meaning and distinctiveness, the mediation was partial, which means that the direct effects of these motives were significant ($B = 0.43, p < .01$; $\beta = 0.33, p < .05$). In the case of self-esteem and belonging, the indirect effects were not significant and self-esteem had only a direct effect on strength of passion ($B = 0.66, p < .001$). The satisfaction of the continuity, meaning, efficacy, and distinctiveness motives increased identification with activity, which in turn increased the strength of passion. As regards the self-esteem motive, satisfaction of it directly increased the strength of passion; the same goes for meaning and distinctiveness, although these motives were also indirectly related to passion.

Table 2. Bootstrap Analysis of the Indirect Effects of Identity Motives on Strength of Passion

	<i>B</i>	<i>SE</i>	95% Confidence Interval	
Continuity > Identity Interest > Strength of Passion	0.23	0.07	0.085	0.369
Meaning > Identity Interest > Strength of Passion	0.30	0.1	0.136	0.527
Efficacy > Identity Interest > Strength of Passion	0.38	0.13	0.154	0.662
Belonging > Identity Interest > Strength of Passion	0.04	0.06	−0.076	0.164
Self-Esteem > Identity Interest > Strength of Passion	0.04	0.07	−0.1	0.186
Distinctiveness > Identity Interest > Strength of Passion	0.14	0.08	0.008	0.311

Obsessive Passion. The results indicate that the model including direct relationships between motives and identification with activity was significant ($F(6, 177) = 43.46, p < .001$) and explained 60% of the variance. Significant positive relationships between motives and identification were found for continuity ($B = 0.72, p < .001$), efficacy ($B = 1.03, p < .001$),

and meaning ($B = 0.71, p < .05$). We observed no significant links between the self-esteem, belonging, and distinctiveness motives and identification with activity.

The results concerning the model of direct relationships between OP and identity motives and identification show that the model is significant ($F(7, 176) = 14.40, p < .001$) and explained 36% of the variance. Identification with activity was significantly, positively related to OP ($B = 0.48, p < .001$).

To determine the presence of mediation, we used the bootstrapping method with 1,000 interactions. The results indicate that identity motives had significant indirect effects on OP via identity interest. Table 3 presents the results of the bootstrap analysis. We found significant mediation effects in the case of the continuity, meaning, and efficacy motives. All effects were positive, and the strongest effect was observed for the efficacy motive (.49). In the case of continuity, the mediation effect was full. In the case of efficacy and meaning, the mediation effects were partial and there were significant direct effects from two motives: negative for efficacy ($B = -1.15, p < .01$) and positive for meaning ($B = 1.39, p < .001$). In the case of the self-esteem, distinctiveness, and belonging motives, the indirect effects were non-significant; self-esteem and distinctiveness had only direct effects on OP ($B = -0.82, p < .05$; $B = 1.23, p < .001$), while in the case of the self-esteem motive, the effect was negative. Satisfaction of the continuity, meaning, and efficacy motives by an activity increased identification with the activity, which in turn strengthened OP. As far as direct effects are concerned, the lower the satisfaction of the self-esteem and efficacy motives, the higher the level of OP. Meaning and distinctiveness, by contrast, directly strengthened OP.

Table 3. Bootstrap Analysis of the Indirect Effects of Identity Motives on Obsessive Passion

	<i>B</i>	<i>SE</i>	95% Confidence Interval	
Continuity > Identity Interest > Obsessive Passion	0.35	0.14	0.101	0.631
Meaning > Identity Interest > Obsessive Passion	0.34	0.14	0.105	0.666
Efficacy > Identity Interest > Obsessive Passion	0.49	0.20	0.144	0.911
Belonging > Identity Interest > Obsessive Passion	0.13	0.09	−0.030	0.323
Self-Esteem > Identity Interest > Obsessive Passion	0.12	0.10	−0.046	0.366
Distinctiveness > Identity Interest > Obsessive Passion	0.03	0.08	−0.132	0.208

Harmonious Passion. The results concerning the direct relationships between identity motives and identification are redundant with the results concerning OP, since both analyses were performed on the same sample. The results indicate that the model including direct associations of motives and identification with HP was significant ($F(7, 176) = 18.41, p < .001$) and explained 43% of the variance. Identification with activity was significantly, positively related to HP ($B = 0.21, p < .05$).

To determine the presence of mediation, we used the bootstrapping method with 1,000 interactions. The results indicated that there were significant indirect effects of identity motives on HP via identification with activity. Table 4 presents the results of the bootstrap analysis. We found significant mediation effects in the case of the continuity, meaning, and efficacy motives. All these effects were positive and full, which means that the direct effects were not significant. The effect was the strongest for efficacy. In the case of self-esteem, distinctiveness, and belonging, the indirect effects were not significant and self-esteem had a direct effect only on HP ($B = 1.42, p < .001$). Satisfaction of the continuity, meaning, and efficacy motives strengthened identification with activity, which in turn strengthened HP, whereas the satisfaction of the self-esteem motive strengthened HP directly.

Table 4. Bootstrap Analysis of the Indirect Effects of Identity Motives on Harmonious Passion

	<i>B</i>	<i>SE</i>	95% Confidence Interval	
Continuity > Identity Interest > Harmonious Passion	0.15	0.078	0.009	0.315
Meaning > Identity Interest > Harmonious Passion	0.15	0.091	0.010	0.363
Efficacy > Identity Interest > Harmonious Passion	0.21	0.116	0.012	0.468
Belonging > Identity Interest > Harmonious passion	0.06	0.049	–0.013	0.175
Self-esteem > Identity Interest > Harmonious Passion	0.05	0.053	–0.022	0.183
Distinctiveness > Identity Interest > Harmonious Passion	0.01	0.041	–0.065	0.103

Discussion

We expected that the satisfaction of identity motives by a given activity would be positively related to identification and that all motives except self-esteem would be positively related to strength of passion and to both types of passion, while self-esteem would correlate negatively with OP and positively with HP. We also expected that identification would be a significant mediator between motives and passion. Below, we present a theoretical interpretation of the results. However, this explanation is hypothetical, as the research was not conducted in an experimental model.

Strength of Passion

The results show that the satisfaction of motives (continuity, meaning, efficacy, and distinctiveness) leads to identification with an activity, which in turn translates into the strength of the passion. The particularly significant motive is efficacy; from the perspective of the motivated identity construction theory, this means that one's sense of competence and agency associated with performing an activity promotes its integration into one's identity, increases the strength of one's passion, and may thereby strengthen interest and engagement. The results also reveal

the mediating role of identification with activity. As a result of identification, performing the activity makes it possible to experience oneself *in vivo* as an effective person, which increases willingness to engage in the activity, thus increasing the strength of one's passion.

Also, the satisfaction of the continuity motive is positively related to identification. The sense of continuity presupposes that the activity being measured has been performed many times and, consequently, may have already been integrated into the individual's identity, which is why a positive relationship is observed between this motive and identification with activity. Continuity in understanding oneself and a consistent self-narrative despite the passing years is a universal need conducive to internal integration (McAdams, 2001). By performing the activity, the individual maintains the relationship between their past self and their present self, and therefore there is a link between continuity and identification.

Neither the efficacy motive nor the continuity motive is directly related to strength of passion. Their significance manifests itself only in the presence of identification with activity. What also favors identification with activity is satisfaction of the meaning motive. The results suggest that if a person experiences a sense of meaning when performing an activity, the activity may be integrated into their identity. In that case, engagement in the activity intensifies the sense of meaning in life, which translates into consolidated engagement and strengthened passion. The results also reveal that meaning satisfaction increased the strength of passion directly as well. The direct relationship between the meaning motive and strength of passion may indicate that this motive stimulates engagement in the activity without the need to identify with it.

Furthermore, the satisfaction of the distinctiveness motive promotes identification with activity. This means that if an activity makes an individual feel that they are unique, they more willingly identify with this activity. In this case, we also found a direct relationship to passion. Satisfaction of the self-esteem motive had only a direct effect on strength of passion. In a way, such a result points to the dominant role of self-esteem and generalized striving for self-worth (Tesser & Martin, 2006). As in the case of meaning and distinctiveness, this finding shows that satisfying

this motive is so important that it does not have to be mediated by identification.

Of the six identity motives, only belonging turned out to be irrelevant both to identification with activity and to the strength and type of passion. It is possible that the significance of this motive manifests itself in passions that involve cooperation with others, but this conjecture requires empirical verification. In summary, the satisfaction of efficacy, continuity, meaning, and distinctiveness motives indirectly increased the strength of passion via identification with activity.

Types of Passion

Our mediation analysis revealed that the continuity, efficacy, and meaning motives were related to identification with activity, which in turn was related to the types of passion. No relationship was found between identification and distinctiveness. This may be due to the nature of the sample, which consisted of individuals who reached or exceeded the cut-off score on the Strength of Passion subscale, indicating that their favorite activity met the criteria for a developed passion. This would suggest that when an activity is not a clearly developed passion, the distinctiveness motive promotes identification, increases the strength of passion, and ceases to be significant once a passion has developed. It is as if in those individuals whose activity is already a fully formed passion, the satisfaction of the desire to make themselves unique does not matter.

In the case of both OP and HP, we observed significant mediation effects of identification with activity for the continuity, meaning, and efficacy motives. All effects are positive, and the strongest one was observed for efficacy. From the perspective of the motivated identity construction theory, the sense of continuity and meaning in life and the experience of one's competence in the context of an activity favor identification with it and strengthen both harmonious and obsessive engagement. The results suggest that identification is more strongly related to OP than it is to HP. This is consistent with the predictions and with other research indicating that individuals with obsessive passion perceive their activity as occupying

a larger part of their identity than individuals with harmonious passion (Vallerand et al., 2003, Study 1).

OP and HP differ mainly in the number of direct effects, the type of mediation (full or partial), and the role of the self-esteem motive. In the case of HP, all mediation effects are full. In other words, the continuity, efficacy, and meaning motives strengthen HP only when accompanied by identification with activity. In the case of OP, by contrast, full mediation is observed only for the continuity motive, whereas for the meaning and efficacy motives the mediation is partial: positive in the case of meaning and negative in the case of efficacy. This suggests that in the case of obsessive passion, the activity is also performed in order to provide a sense of meaning without the presence of identification. In the case of efficacy, the negative effect suggests that a lower satisfaction of this motive leads to stronger obsessive engagement. However, in view of the correlational design of the study, the reverse relationship between these variables should also be taken into consideration. It can be concluded that the obsessive mode of engagement is not conducive to satisfying the competence motive, and that – due to the fact that obsessive passion often involves conflict with other domains of an individual's life and that this kind of passion may be difficult to control – it may contribute to lower performance and a sense of lower competence and influence. The analysis of the direct relationships between OP and the meaning and efficacy motives suggests that individuals with obsessive passion engage in their activity in order to experience meaning even if they do not have a sense of competence and efficacy.

HP and OP also differ in their direct relationships to self-esteem and distinctiveness. The relationship between the self-esteem motive and OP is negative and its relationship with HP is positive, whereas the distinctiveness motive is positively related to OP and not significantly related to HP. Sense of distinctiveness is related to obsessive engagement when there is no identification, which means that the need to be unique favors obsessive engagement. Another result that differs between OP and HP concerns the self-esteem motive. The higher the satisfaction of the self-esteem motive, the higher the level of HP; the lower the satisfaction of this

motive, the higher the level of OP. This is consistent with our expectations based on research in which obsessive passion turned out to be related to lower self-esteem (Mageau et al., 2011), while harmonious passion was associated with well-being and positive affect (Carpentier et al., 2012). The negative link between self-esteem and OP indicates that in the case of OP, individuals engage in their activity even if it does not contribute to a positive view of themselves. However, given the correlational design of the study, a reverse relationship should also be considered. Obsessive engagement is not conducive to the satisfaction of the self-esteem motive for reasons that include conflict with other life domains; such a conflict can lead to lower performance and/or a lack of the expected success, which translates into low satisfaction of the self-esteem motive.

To sum up, the results of the present study indicate that both types of passion are related to identification with activity, which means it can be concluded that engagement in an activity they are passionate about is part of the individual's identity. The results also suggest that, due to its links with identification, OP is more strongly associated with identity than HP. At the same time, OP is linked in a more complex way to the satisfaction of basic identity motives than HP, in the sense that in the former case, the passionate activity is also performed for reasons unrelated to identity. This means that harmonious engagement takes place mainly when the individual identifies with the activity, while obsessive engagement occurs not only under those conditions, but also as a result of direct gratification of identity motives. The continuity, efficacy, and meaning motives are related to OP indirectly, through identification. As regards HP, it is directly related to thinking positively about oneself and indirectly related to the meaning, efficacy, and continuity motives via identification, the mediations being full.

Contribution

Based on the results showing what underlies the strength of a passion, it is also possible to formulate implications for the theory of passion. Passion is defined as a stable interest and engagement in an activity. Our results suggest that the lasting character of engagement is achieved

through identification with an activity, which is the case when the activity becomes a relatively stable element of the self. The results indicate that what it takes for a person to identify with an activity is the interaction of the meaning, efficacy, and continuity motives and, until a certain moment, the distinctiveness motive. It is possible that identification and interest consolidate when an activity satisfies these three motives, but it is also possible that identification is a product of interactions between the motives, which are known to be interrelated (Vignoles et al., 2006). The satisfaction of a single motive (e.g., efficacy) may not be enough to trigger the identification process – for example, when a person is good at dancing but it is not important to them. It is possible to imagine an interplay of the meaning and efficacy motives, which may be crucial at the initial stage of developing identification, whereas in the subsequent stages it is the continuity motive that gains significance. This means that a passion can be determined by different factors at different stages of its development. The results suggest the considerable significance of the self-esteem motive, which can stimulate individuals to engage in an activity without the need to identify with it. Perhaps identification is a secondary outcome of engagement stimulated by the self-esteem motive; this can be verified in longitudinal studies.

The results provide insight on how to enhance passion and engagement, which can be particularly significant in education. The findings suggest that identifying with an activity, which is reinforced by identity motives, is crucial. Therefore, in the educational process, for example, the importance and usefulness of the content being taught should be explained to students and given value (meaning motive), or tasks and content should be organized in a way that strengthens the efficacy and self-esteem motives.

Limitations and Implications for Future Research

Some limitations of the study should be mentioned. These involve methodological limitations: it employed a correlational design, which does not allow for explaining causal links; the above explanations, assuming causality, are based on theoretical speculation and are hypotheses.

Experimental and longitudinal studies are necessary to test them. Another methodological limitation is associated with the method of measuring identity motives. Although single-item measurement has its advantages, such as a shorter procedure, a more complex scale should be used in further research to test measurement reliability.

Moreover, the mediation analysis for SP, OP, and HP was performed on similar samples (in the case of OP and HP, the samples were identical). To pinpoint the associations of motives and identification with OP and HP, it is advisable to conduct further research on two samples, one composed of subjects with OP and the other composed of subjects with HP.

Another limitation of the study concerns the choice of method for statistical analysis. Due to the limited sample size ($N = 209$; $N = 184$ for the OP and HP analyses), structural equation modeling was not applied, as such a sample could lead to unstable parameter estimates and seemingly significant effects. Instead, separate mediation analysis using the PROCESS macro was conducted. In future studies, it would be advisable to test the proposed model using structural equation modeling with a larger sample, which would allow for simultaneous estimation of all paths and a more comprehensive assessment of the structure of relationships.

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