

Passion types and subjective well-being for Saudi women: Exploratory study

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A growing literature is emerging about passion types and subjective well-being. No studies were interested in exploring passion types and subjective well-being for Saudi women. Three studies were conducted. Data was collected from Riyadh ($n = 474$, $n = 241$ and $n = 329$). The first and second studies have been conducted to test the psychometric properties of passion scale for Saudi women. The goal of the third study was, however, twofold: (i) testing the mediation of subjective vitality in the relationships between HP, OP and life satisfaction and (ii) testing the effect of selected variables such as the marital status, the couple relationships conflict, the age and the leisure activities differences on passion types and life satisfaction. Passion scale (11 items) had a satisfaction validity and reliability (Study 1 and 2). HP predicted positively the subjective vitality, which directly predicted the life satisfaction, whereas OP was none significant predictor of vitality and direct negative predictor of life satisfaction. In general, the family status, couple relationships conflict, leisure activities and age had no effect neither on passion types nor on life satisfaction. Subjective vitality was partially a mediation between only harmonious passion and life satisfaction. In addition, selected variables have no effect on passion types and life satisfaction for Saudi women.

Keywords: harmonious passion, obsessive passion, vitality, life satisfaction, saudi women

The type of the engagement in performed activity might play an important role in subjective well-being (SWB). For example, with old adults, the engagement in favorite activities was related positively to SWB, while practicing a non-favorite activities was unrelated to SWB (Reich, Zautra, & Hill, 1987). Numerous studies have given experimental support which proved the positive relationship between engagement in activity and SWB with aging persons (Leventhal, Rabin, Leventhal, & Burns, 2001; Rousseau & Vallerand, 2008). However, the relationship between engagement in activity and SWB is complex and numerous factors might influence the degree to which engagement is beneficial for aging persons (McAuley, Blissmer, Katula, Duncan, & Mihalko, 2000; Netz, Wu, Becker, & Tenenbaum, 2005). On the basis of these, it is possible to conclude that high levels of engagement in activity eventually lead to greater levels of SWB (Kozma, Stone, & Stones, 2000). To sum up, results are probably needed to identify more variables that may increase the likelihood that adult persons will benefit from an active lifestyle.

The Dualistic Model of Passion (DMP): In the line with the Self-Determination Theory (DMP), individuals engage in a variety of activities to explore their environment and grow as individuals (Genevieve A Mageau & Vallerand, 2007; Vallerand et al., 2003; Vallerand et al., 2006). Of these, few will be perceived as agreeable, enjoyable and having resonance with how persons see themselves. From these few activities, one or more favorite activity will eventually be preferred and will develop to be come a passion. Furthermore, the Self-Determination Theory and literature have shown that elements from the environments can be internalized in an independent or controlled variable (Grolnick, Deci, & Ryan, 1997). Passion can be composed of two types: Obsesive Passion (OP) and Harmonious Passion (HP).

Obsesive Passion (OP) is a result of controlled internalization of the desired activity into the individual's identity. Due to Vallerand et al. (2007), controlled internalization results from intra and/or interpersonal pressure, mostly because certain contingencies are attached to feelings of social acceptance as a needed and desired activity and/ or even because of the sense of excitement that is derived from engagement in activity which is uncontrollable. On the contrary, Harmonious Passion (HP) results from autonomous internalization of the activity representative of the person's identity. Autonomous internalization happens when an individual has openly accepted the activity as important to him/her with no or little contingencies. This type of internalization emanates from the intrinsic and integrative tendencies of the self (Ryan & Deci, 2003). It makes a motivational force to take part in the action energetically and induces a feeling of volition and personal endorsement about pursuing the activity. When HP is at play, the individual does not experience an uncontrollable urge to engage in the passionate activity, but rather freely chooses to do so. With this sort of passion, the activity occupies a significant, yet not overpowering space in the individual's identity and is in harmony with different aspects of the individual's life.

Accordingly, passion is described as having a harmonious passion. Yet, there is another sort of passion which is obsessive passion. Those who are obsessively passionate feel an uncontrollable urge to engage in their activity and experience a conflict between their passion and other aspects of their lives (Vallerand, 2012a). The literature review supports the concept of harmonious and obsessive passion. More than one hundred studies have supported the concept of passion and focused on a host of cognitive, affective, behavioral, relational, and performance outcomes experienced through hundreds of desired activities. Previous research reveals that HP predicts more adaptive outcomes than OP. (Vallerand, 2015).

Subjective Well-Being Component: The overall field of subjective

well-being is a large broad concept that refers to one's positive experience in life. While originally studied as a one-dimensional variable, research has acknowledged its multidimensional nature. For example, Keyes (2002), proposed a gradient from ill-being to well-being. He described individuals with complete mental health as 'flourishing' in life with high-levels of SWB. He defined the components of SWB as positive emotions, psychological and social well-being. Additionally, individuals with incomplete mental health are 'languishing' in life with low-levels of SWB.

The SWB is typically divided not only horizontally into the concepts of satisfaction with life and vitality, but also vertically into the cognitive (beliefs and outlook) and the affective (moods and the emotions). A focus on the cognitive (rather than the affective) aspects of well-being investigates the dimension's more cognitively, which suggest that they are accessible and temporally stable in nature (Diener & Lucas, 2000; Oishi, Diener, Suh, & Lucas, 1999).

Life satisfaction is the cognitive assessment of one's life as a whole. In arriving at overall evaluations of life, individuals typically use their own set of criteria and standards in weighting the different aspects of their lives (Pavot & Diener, 1993). Consequently, it is often more meaningful to assess global judgments of life satisfaction rather than satisfaction with specific life domains (Pavot & Diener, 1993). Life satisfaction can be assessed by specific to a particular domain in life (e.g., work, family) or globally. However, the life satisfaction construct incorporates the full range of satisfaction (i.e., from very low to very high) and thus measurement of this personal strength is fitting for a positive psychological paradigm interested in optimal wellbeing and human fulfillment. Life satisfaction is then a more general construct of SWB. Life satisfaction predicts social and health behavior. People higher in SWB, measured by life satisfaction, are more likely in ensuring years to do exercise or to stay happily married (Luhmann, Lucas, Eid, & Diener, 2013).

Moreover, vitality is a subjective feeling; it has been variously defined as a sense of feeling really alive, invigorated, or full of energy and enthusiasm for life. The concept of subjective vitality refers to the state of feeling alive and alert and having energy available. Vitality is considered then as an aspect of eudaimonic well-being (Ryan & Deci, 2001), as being vital and energetic is part of what it means to be fully functioning and psychologically well. Various authors have used a number of adjectives in adjective selection tests in order to capture the concept. These have included active, peppy, energetic, vigorous, lively (Ryan & Deci, 2001), enthusiastic, zeal, zest, and exhilarated (Shaver, Schwartz, Kirson, & O'Connor, 1987). It is interesting to note that in these adjective tests, affective terms such as happy, content, pleased, elated, overjoyed, satisfied, cheerful, joyful and delighted and satisfied did not load on the factor described as 'vigor'.

With different ages, results show that harmonious passion (OP) is positively associated with psychological well-being indicators such as purpose of life, positive affect, meaning in life, life satisfaction and vitality, while being negatively related to depression and anxiety (Rousseau & Vallerand 2003, 2008; Vallerand et al., 2007; Vallerand et al., 2008). On the contrary, obsessive passion (OP) predicts higher levels of depression and anxiety, but it is negatively related or unrelated to the positive indices (Philippe et al., 2009; Rousseau & Vallerand, 2003, 2008).

Although a growing body of research has validated Vallerand et al.'s model of passion, few studies have studied passion for academic activities. Passion types have been linked to different cognitive and

affective outcomes in a diverse range of domains (Vallerand et al., 2006; Young, de Jong, & Medic, 2015). The effect of passion types has also been studied in different domains (Bonneville-Roussy, Lavigne, & Vallerand, 2011; Ratelle, Vallerand, Mageau, Rousseau, & Provencher, 2004). Findings show that OP reported higher level of ruminations and anxiety as well as lower level of concentration and subjective vitality. In the light of (Rousseau & Vallerand, 2008) study, little information has been known about the relationships between passion types and subjective vitality and life satisfaction, as components of subjective well-being for women in Arab countries, more specifically in Saudi Arabia country.

The present research: Passion scale has rarely been used in Arab countries. It was only used in recent studies in Egypt with physically active old adults (Marei Salama-Younes, 2015). However, it has not yet been explored with Saudi samples and more precisely for Women. For that, two studies have been firstly conducted with Saudi women. The first study aimed to test its internal reliability and factor structure. The objective of the second was to test its temporal stability and convergent validity. Finally, the third one is twofold: (i) test the mediator role of subjective vitality in the relationships between passion types and life satisfaction and (ii) test the effect of marital status (married vs single), couple relationships conflict (frequent vs rarely), leisure activity (in groups vs individually) and age (17- 22 vs 23- 29 yr) on HP, OP and life satisfaction.

In more detail, in the first study, it was hypothesized that passion scale is composed of two correlated subscales; HP and OP. For testing the factor structure, the confirmatory factor analysis will be used. Moreover, passion types have an acceptable internal consistency in term of reliability. For the second study, it was hypothesized that HP and OP should have positive and significant correlation with other subjective well-being measures. In this study, HP should positively correlate with the emotional and psychosocial well-being subscales (Rousseau & Vallerand, 2008). However, the OP should not be related with the subjective well-being scales. Additionally, as passion types could be more trait than state, it could be temporally stable between two times.

In the third study, it was hypothesized firstly that the more participants reported to have HP, the more they should experience an increase in life satisfaction. Furthermore, subjective vitality was presumed to mediate these relationships. Moreover, the more participants reported to have an OP, the more they should experience a decrease in life satisfaction (Lalande et al., 2015). Once again, subjective vitality was presumed to mediate this relation. Finally, in the light of Vallerand (2012), it was hypothesized that HP should be positively related to life satisfaction in general. It was hypothesized that OP should not be related or negatively related to overall levels of life satisfaction. In addition, using the same data, it was hypothesized that marital status (married vs single), couple relationships conflict (frequent vs rarely), leisure activity (in groups vs individually) and age (17- 22 vs 23- 28 yr) have an effect on HP, OP, and Life satisfaction.

Study 1

Method

Participants

According to the Arabic version, some verbs have been modified in order to be adapted for Saudi women. According to the translation

and validation methodology, A different expert has revised the Arabic version. In general, minor differences were corrected by agreement between the three bilingual persons and authors. The participants in the first study were 474 Saudi women aged between 17 and 22 years old (M = 19.07, SD = 2.80). There were undergraduate students in College of Education, King Saud University, Riyadh.

Instruments

Passion Scale: The adapted version of the Passion Scale (Vallerand et al., 2003) was administered to assess the type of passion that characterizes participants' activities. It composed of 12 items. harmonious passion was measured by item 1, 3, 5, 6, 8, 10 and obsessive was measured by item 2, 4, 7, 9, 11, 12. Each item was responded to on a 7-point Likert scale ranging from 1 (totally disagree at all) to 7 (totally agree). Sample items for obsessive passion were "I have difficulties controlling my urge to do my work" or "I have almost an obsessive feeling for my work," whereas sample items for harmonious passion were "The new things that I discover in my work allow me to appreciate it even more," or "My activity is in harmony with other things that are part of me."

Procedure

The collection of data was in 12 September and 28 October, 2014. Authors informed a sample about the objective of the study, their participation was voluntarily. Both oral and written instructions were given regarding items understanding (i.e., there was no right or wrong answer to the questions and they should freely state what they think), and they were reassured about the confidentiality of their responses. The sample has completed passion scale just after finishing their session. It was only for two or three minutes.

Statistical analysis

Missing values (representing 1% of the total data) were replaced using a regression imputation procedure. The Confirmatory Factor Analyses (CFA) was performed. The IBM-SPSS software (v.22) was used to perform the correlation matrix and the internal consistency (Cronbach alpha). The LISREL 8.7 software was used to test the CFA and the path analysis.

Results and discussion

The values of 0.70 for internal consistency or greater were considered satisfactory. The reliability of the scale was assessed using Cronbach's Alpha in accordance with standard procedures. In the present study, the Arabic version of passion scale composed of 12 items. The internal consistency for the harmonious and obsessive passion subscale was 0.74 and 0.66 respectively. Consistency became 0.72 after deleting item 10 evaluating the obsessive passion. We performed then the CFA to assess the structure validity for the passion scale. The aim was to test if the model was fitting well the data. There are diferent suggestions in the literature about the number, type, and cut-off values for goodness-of-fit required to be reported for CFA (Byrne, 1998). A popular recommendation is to present three of four indices from different areas. Accordingly, we report several goodness-of-fit indicators including GFI (Goodness-of-Fit Index), NFI (Normed Fit Index), RMR (Root Mean Square Residual), RMSEA (Root Mean Square Error of Approximation), and χ^2/df . The recommended cut-off values for acceptable values are ≥ 0.90 for GFI, AGFI and NFI. The RMR and RMSEA test the fit of

the model to the correlation matrix. As a guideline, values below 0.05 indicate a close fit and values below 0.11 are an acceptable fit. The value of 2 alone may be used as an index, but 2 divided by the degrees of freedom (2/df) reduces its sensitivity to sample size (cut-off values < 2 to 5).

Table 1: The correlations between the 12 items composing the passion scale

Item	Correlations												Descriptive Statistics			
	O1	H2	O3	H4	O5	O6	H7	O8	H9	O10	H11	H12	Min	Max	Mean	SD
O1	-												1	7	4.37	0.46
H2	0.37**	-											1	7	4.93	0.85
O3	0.35**	0.28**	-										1	7	4.39	1.07
H4	0.39**	0.41**	0.29**	-									1	7	4.30	0.39
O5	0.56**	0.40**	0.35**	0.27**	-								1	7	4.24	0.45
O6	0.49**	0.23**	0.37**	0.42**	0.51**	-							1	7	4.42	0.64
H7	0.24**	0.31**	0.36**	0.36**	0.26**	0.33**	-						1	7	4.90	0.84
O8	0.39**	0.37**	0.41**	0.27**	0.46**	0.39**	0.21**	-					1	7	4.70	0.54
H9	0.27**	0.38**	0.34**	0.29**	0.30**	0.26**	0.39**	0.27**	-				1	7	4.96	1.01
O10	0.21**	0.12*	0.17**	0.22**	0.28**	0.31**	0.17**	0.24**	0.14*	-			1	7	4.01	0.41
H11	0.23**	0.35**	0.28**	0.24**	0.23**	0.24**	0.37**	0.31**	0.24**	0.28**	-		1	7	4.82	0.59
H12	0.28**	0.38**	0.29**	0.33**	0.28**	0.26**	0.34**	0.32**	0.22**	0.34**	0.36**	-	1	7	4.23	0.26

Notes. n=474 **p < .01 *p < .05

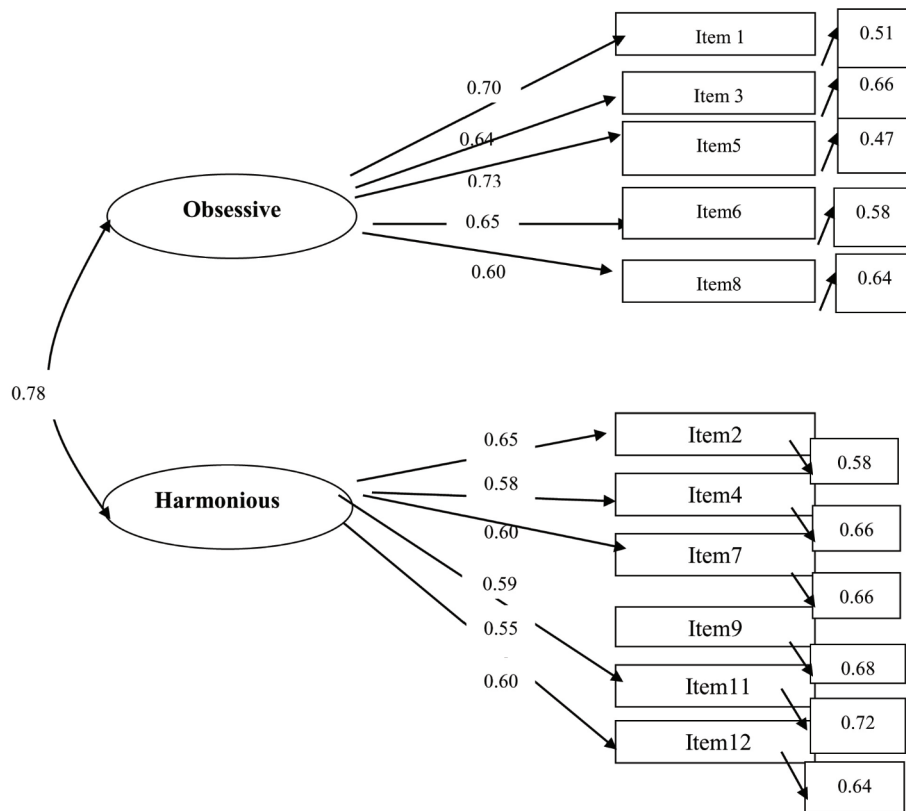


Figure 1: Confirmatory factor analysis for the Arabic version of passion scale

In the present study, the data were screened for non-normality, and no problematic trend was detected. To ensure univariate normality, it suggested cut-off of absolute values of 3.0 and 8.0 for skewness and kurtosis, respectively. Univariate skewness ranged from 0.88 to 1.36, and univariate kurtosis ranged from -0.94 to 1.78, indicating that the responses were relatively normally distributed (Kline, 2005). In addition, relative multivariate kurtosis as reported by the output from LISREL 8.7 (Jöreskog & Sörbom, 1996) equaled 1.58. We then tested the CFA for the Arabic version of passion scale which composed of 11 items. It composed of two subscales, harmonious 6 items and obsessive 5 items. Results of CFA revealed a satisfactory fit to the data in terms of χ^2/df ratio, GFI, NFI, RMR, and RMSEA. The $\chi^2 = 176.10$, $df = 57$, $p = 0.01$; Normed Fit Index (NFI) = 0.96, Comparative Fit Index (CFI) = 0.95, Root-Mean-Square Error of Approximation (RMSEA) = 0.05 [0.03; 0.08], Goodness-of-Fit Index (GFI) = 0.97, Adjusted Goodness-of-Fit Index (AGFI) = 0.95, Root Mean Square Residual (RMR) = 0.05. The Goodness of Fit was acceptable in terms of χ^2/df ratio, GFI, NFI, RMR, and RMSEA. More recently, similar results have been obtained through different activities and languages (Marsh et al., 2013). Authors concluded that the Arabic version passion scale had both good internal reliability and factor structure as well as the original version.

Study 2

Method

Participants

The structural validity and internal reliability are not sufficient to

fully validate the psychometric properties of the scale. It is also important to test its temporal stability and relationships with other psychological constructs which is presumed to correlate with them. In accordance with the theoretical framework, we have not found indication for the temporal stability for the passion scale. The aim of study 2 is then twofold: First, we aim to verify the temporal stability of the passion scale across the time. Second, the relationships between HP, OP, emotional well-being and psychosocial well-being will be investigated. In the light of Philippe, Vallerand, and Lavigne (2009), it is also presumed that OP has not highly correlated with emotional and psychosocial well-being. For that, scores on HP and OP are presumed to be positively correlated with both of emotional well-being and psychosocial well-being. In addition to this questionnaire, at time 1, they completed Arabic version of the two following scales: there were the passion scale (PS) and the Mental Health Continuum-Short Form, (MHC-SF). The MHC-SF assessing the subjective well-being by emotional and psychosocial well-being subscales (Keyes, 2002). At time 2, they replied only the passion scale. Participants were students from same university and they aged from 18 to 24 ($M = 21.03$, $SD = 2.29$). They were from psychology department. They remaining either did not wish to participate or were not presented in the second phase of the study.

Passion Scale: The passion scale composed from only 11 item in this study. It was administered to assess the passion types between harmonious and obsessive passion. Cronbach's alpha of HP, OP and total passion score was 0.75, 0.73 and 0.76 respectively.

Mental Health Continuum-Short Form (Keyes, 2006): It composes of 14-item measure that assesses several individual and social aspects of subjective well-being, including three items that were chosen (happy, interested in life, and satisfied) to represent emotional well-being/hedonic. In addition, 11 items assess the psychosocial well-being/eudemonic. They composed of six items (one item from each of the 6 dimensions) were chosen to represent psychological well-being, and five items (one item from each of the 5 dimensions) were chosen to represent social well-being (Keyes, 2009). Participants rate the frequency of each feeling in the past month on a 6-point Likert scale (from never to every day). The Arabic version has been translated and validated with Egyptian samples (Mareï Salama-Younes, 2011). Cronbach's alpha for emotional, psychosocial well-being and total score was satisfactory. It was 0.79, .70 and 0.74 respectively.

Procedures

The collection of data was in the period from 9 January to 6 Mars 2015. The paper version was administered twice at women students to unpaid and voluntary who signed a consent form. They were 241 at time 1, and the re-test performed four to five weeks apart had to

match 237 adults between time 1 and time 2. The sample were informed about the objective of the study. Both oral and written instructions were given regarding items understanding (i.e., there was no right or wrong answer to the questions and they should freely state what they think), and they were reassured about the confidentiality of their responses. They completed the scales in about seven or eight minutes.

Results and discussion

According to Cohen (1988) recommendations, correlation under 0.10 is "low", between 0.10 and 0.30 is "moderate", and under 0.50 is "high". Table 2 shows the moderate and high correlations observed. These results ensure adequate convergent validity of the passion scale. We conducted Student's t-test to check whether there was a significant difference between time 1 and 2 scores on the total score. Results show a significant difference for passion scale ($t = 1.68$; $p > 0.05$). These results can be justified by the fact that the retest was carried out just before starting the university session. The difference between time 1 and time 2 is relatively high; This may come from the presence of an adjustment desire for favourite time to complete a questionnaire.

Table 2: The correlations between HP, OP and well-being subscales

Item	HP	OP	Passion total score	Emo-MHC	PsySoc -MHC	MHC total score	M	SD
HP	—						5.76	1.34
OP	0.47**	—					5.03	1.87
Passion total score	0.76**	0.59**	—				5.02	1.49
Emo-MHC	0.63**	0.32**	0.40**	—			5.25	1.00
PsySoc-MHC	0.48**	0.34*	0.36**	0.49**	—		4.88	1.32
MHC total score	0.66**	0.34**	0.43**	0.53**	0.46**	—	5.17	1.40

Notes. n = 329 ** $p < .01$; * $p < .05$; well-being scale means are from 1 to 6 scale

Taken together, for the two passion types and total score, the results showed good correlations for the test retest reliability ($0.59 \leq r \leq 0.68$, $p < .001$). Using the data set of the second study, we concluded that temporal stability of passion scale is acceptable (Cohen, 1988). According to (Cohen, 1992), these correlations ensure moderate to high relations: They are consistent with the expected stability of the scale as supposed to be closer more trait than state. Cronbach's alpha of the scale at time 1 is 0.76 while at time 2 it is 0.78. Secondly, there is significant and positive relationship between HP, OP, emotional well-being and psychosocial well-being.

Discussion

Starting from the first study, the original passion scale is composed of 12 items. Both of HP and OP are measured by 6 items. Although there is an exploratory study, the first study confirms the structural validity and internal reliability of passion scale as bi-dimensional: HP and OP. Same result has been confirmed by many studies in different contexts and samples (Carpentier, Mageau, & Vallerand, 2012; Rousseau, Vallerand, Ratelle, Mageau, & Provencher, 2002; Seguin & Levesque et al., 2003; Young et al., 2015; Zhao, St-Louis, & Vallerand, 2015). In the Egyptian culture, passion scale is composed

of 10 items. Both of HP and OP is composed of 5 items. (Salama-Younes, 2015). In the present study, the Arabic version consists of 11 items. Item 10 has been deleted. It is concluded that cultural differences have an influence on some words or/and on item perception.

For the second study, the previous result has supported and extended the research in this field, suggesting that the two types of passion can have divergent effects on aspects of psychological well-being. HP contributes to sustained psychological well-being while obsessive passion is not expected to produce such positive effects (Vallerand, 2012b). However, the present research (Study-2) indicated a positive and significant relationship for both of HP and OP with different subjective well-being aspects.

The second study shows that high passion score led to equally significant and high levels of emotional and psychosocial well-being. However, low passion score led to significant and low level of subjective well-being. Using the same data set of the second study, the higher the passion level is for people, the happier and more satisfied they are lives. However, it is difficult to determine the directionality of causality with respect to the proposed model; namely the relationships between different subscales. Furthermore,

correlations between HP, OP, emotional/hedonic well-being and psychosocial/eudaimonic well-being supported the convergent validity of the Arabic version. Findings of Philippe et al. (2009) provided support for the hypothesis that being harmoniously passionate about an activity contributes significantly to both hedonic and eudaimonic well-being, while being obsessively passionate about an activity or having no passion at all does not contribute to subjective well-being. Results of these studies revealed a significant main effect for passion groups; harmoniously passionate people were significantly higher than obsessively passionate and non-passionate people in vitality. The passion scale emerged as bi-dimensional scale that shares measurement factors with more established emotional and psychosocial well-being scales.

In addition, practicing the favorite activities brings some people intrinsic pleasure and joy. These people, who feel good about themselves during and after practicing their favorite activities, find these activities to be in harmony with their lifestyle. But those people, who are obsessively passionate feel an uncontrollable urge to engage in their activities, go through a conflict between their passion and other areas in their life (Vallerand et al., 2007). But, what are the processes for passion types for practicing a favorite activity and feeling the flow of energy and life satisfaction? What about the effect of selected variables such as the marital status, the couple relationships conflict, the age and the leisure activities differences on passion types and life satisfaction? For that, the first objective of the present research aims at testing the internal reliability and structure validity for the passion scale. Collected data have confirmed this hypothesis.

Study 3

Method

Participants

In the light of (Lalande et al., 2015; Rousseau & Vallerand, 2008), the goal of the third study was, however; twofold: (i) testing the mediation of vitality in the relationships between HP, OP and life satisfaction and (ii) testing the effect of marital status, couple relationships conflict, leisure activities and age differences on passion types and life satisfaction. The participants of this study were psychology students from College of Education at King Saud University, Riyadh. They aged between 17 and 29 years old (M = 23.26, SD = 5.89). Concerning the marital status, they were 226

single and 103 married. Concerning age, 104 women aged between 17-21 years, 103 aged between 22-25, and finally 20 women aged between 26 - 29. In this sample, there were only 42 women declared to frequently having couple relationships conflicts while 55 rarely experienced that. Furthermore, 232 participants did not prefer to indicate any marital couple relationships conflict. Finally, there were 281 who practiced their favorite leisure activities in groups and 102 individually.

Procedure

Collecting data started from 21 September to 14 November, 2015. Paper version was administered to women students who voluntarily participated and signed a consent form. The instruction was the same as well as in the first study. In general, participants have completed scales just before finishing their university session. They completed scales in about 10 minutes.

Passion scale: The Passion Scale is composed of two subscales of only 11 items, each assessing a precise type of passion: harmonious passion (6 item) and obsessive passion (5 item). Each item is responded to on a 7-point Likert scale ranging from 1 (do not agree) to 7 (agree).

Subjective Vitality Scale (SVS): The SVS is a short scale measuring vitality. A 5-point Likert scale was used ranging from “disagree” (1-point) to “agree” (5-point). The six item version has been used.

Satisfaction With Life Scale (SWLS): In this study, we used a respond on a 7-point Likert scale ranging from 1 (do not agree) to 7 (agree). The scale composed of only 5 item and has an excellent psychometric proprieties in previous studies with Arabic samples (Abdallah, 1998).

Statistical analysis

Descriptive data was shown for studied variables (passion types, vitality and life satisfaction). ANOVA and T-test was used to examine finding the significant differences between groups' means. Data was analyzed using (IBM-SPSS) software (v.22) and LISREL Software (v. 8.7).

Results

Positive and significant correlations among the HP, OP, SVS and SWLS was obtained. It ranged between $r = 0.38$ and 0.69 , $p < 0.01$. In a previous study, similar results was found with regard to passion and life satisfaction (Lafrenière, Vallerand, & Sedikides, 2013).

Table 3: Ccorrelations, Mean and Standard Deviations for different variables

Variable	1	2	3	4	M	SD
(1) Harmonious Passion	–				5.34	1.09
(2) Obsessive Passion	0.58**	–			5.06	1.18
(3) Subjective Vitality	0.56**	0.33**	–		5.28	1.52
(4) Satisfaction With Life Satisfaction	0.53**	0.41**	0.54**	–	5.70	1.32

Notes: n= 329 **p < .01; All means are on a 1 to 7 scale

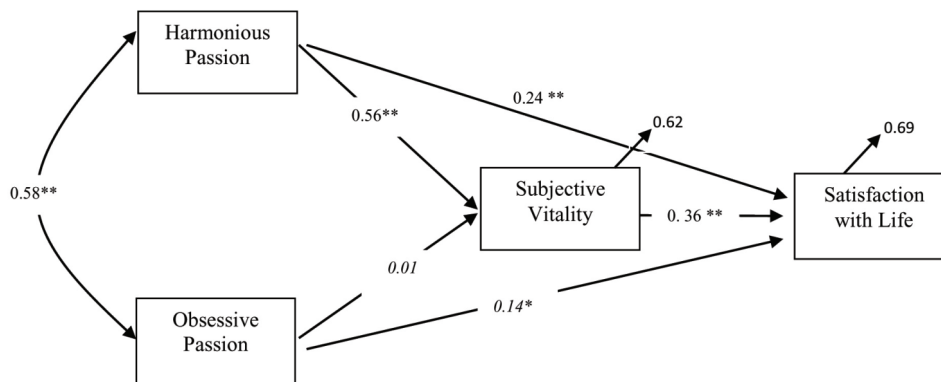


Figure 2: Path analysis model of the relations between harmonious, obsessive passion, subjective vitality and life satisfaction. Standardized path coefficients are presented. Significant direct and indirect effect paths are shown for harmonious passion, subjective vitality and life satisfaction. Only one no significant and negative effect path is shown for obsessive and vitality. However, the values of the path coefficients are those of the full mediating model, including the direct effects of the independent variables to the outcome variables. ** $p < .01$.

The hypothesis stated that subjective vitality should mediate the relation between HP, OP and life satisfaction. We used the correlation matrix for the path analysis and maximum likelihood as a method to estimate and scores standardized. All the path analyses conducted in the present research were performed with SIMPLIS project. The present model was composed of two exogenous variables HP, OP and two endogenous variables, subjective vitality and life satisfaction. The paths were drawn according to the hypothesis presented above.

Results of the path analysis revealed a satisfactory fit model of data in terms of χ^2/df ratio, GFI, NFI, RMR, and RMSEA. The model saturated and fit the data. The χ^2 ($df=0$, $N=329$), $p=0.00$, Normed Fit Index (NFI) = 1.00, Comparative Fit Index (CFI) = 1.00, Root-Mean-Square Error of Approximation (RMSEA) = 0.00, Goodness-of-Fit Index (GFI) = 1.00, Adjusted Goodness-of-Fit Index (GFI) = 1.00, Root Mean Square Residual (RMR) = 0.00. As shown in Figure 2, all estimated paths were significant and positive at $p=0.01$, except for the path between OP and subjective vitality that were negative and significant = -0.11. In addition, we tested the effect of selected variables (family status, couple relationships conflict, age and leisure activities) on passion types and on life satisfaction.

We tested the effect of selected variables (i.e., marital status, couple relationships conflict, age and physical activities) on passion types and on life satisfaction. For testing the effect of marital status (single vs. married), According to t. test result, it was indicated that marital status had significant effect only on HP ($F=6.26$; $p=0.001$). Results indicated that there were significant differences ($p=0.01$) between married ($M=40.50$, $SD=5.93$) vs single ($M=31.97$, $SD=5.64$) in HP. It seemed to represent what happens inside the Saudian society about restriction of married woman. Noted that a small size of divorced women ($n=6$) included in single women sample. However, marital status had no significant effect on neither OP ($F=1.11$; $p=0.33$) nor life satisfaction ($F=0.55$; $p=0.58$). Concerning the couple relationships conflict, (frequent vs. moderate vs. rare), one-way ANOVA indicated that couple conflict had no significant effect neither on HP ($F=1.47$; $p=0.23$) nor OP ($F=0.25$; $p=0.78$). and nor life satisfaction ($F=1.84$; $p=0.16$). Concerning age, (17-21 vs. 22-25 vs. 26-29), ANOVA indicated that age had no significant effect on HP ($F=1.22$; $p=0.29$; $\eta^2=0.14$), OP ($F=1.09$; $p=0.34$; $\eta^2=0.09$).

However, there was significant effect ($F=3.75$, $p=0.02$) on life satisfaction. Tukey HSD revealed that first age group ($M=26.21$, $SD=5.02$) was significantly higher than the second ($M=25.85$, $SD=5.53$) and the third ($M=22.85$, $SD=5.31$). For leisure activity (indoor vs outdoor), t test showed also that there was no significant effect on HP ($t=1.64$; $p=0.10$), OP ($t=0.36$; $p=0.72$) and on life satisfaction ($t=0.33$; $p=0.75$). In a meta-analytical review of passion research, findings showed that correlations were largely invariant across age and gender, but certain relationships were moderated by domain and culture (Curran, Hill, Appleton, Vallerand, & Standage, 2015). So, without knowing the direction, it is really difficult to determine the directionality of causality. In Saudi culture, findings of second study confirmed the relationships between subjective well-being aspects and flourishing. In sum cases, an individual who score high on HP, he/she score high on emotional and/or psychosocial well-being. However, individual who score high on both of emotional and psychosocial well-being, he or she feels happy and functionally flourished in his/her life and so he/she feels life satisfied (Keyes & Magyar-Moe, 2003).

Discussion

According to previous studies, results indicated that people who are passionate about a favorite activity are highly involved in it (Bureau, Vallerand, Ntoumanis, & Lafrenière, 2013). People with a high OP experienced an uncontrollable urge to partake in the activity they viewed as vital, enjoyable and important. The passion for the attractive activity came to control the person. It led to rigid persistence toward the activity and such rigid persistence might prompt a few advantages (e.g., change on the movement after some time), it might likewise bring about few costs and lead to less than optimal functioning within the confines of the passionate activity because of the lack of flexibility that it entails. Such a rigid persistence ought to prompt self-conclusion from interpersonal and intrapersonal encounters. In this way to antagonistic enthusiastic encounters, lessening the constructive full of feeling results in what would regularly be experienced (Hodgins & Knee, 2002). Consequently, individuals with HP ought to have the capacity to concentrate on the task at hand and experience positive outcomes

during (e.g., flow, positive affect, and concentration) and after task engagement (e.g., satisfaction, general positive affect). Thus, there should be little or no conflict between the individual's passionate activities and his/her other life activities. Furthermore, preventing from engaging in passionate activities, people with a harmonious passion should be able to adapt well to the situation and focus their attention and energy on other tasks that needed to be done. Finally, with HP, the person is in control of the activity and can decide when it is or it is not needed to engage in the activity. People with a harmonious passion are able to decide not to engage in the activity on a given day if needed or even to eventually terminate the relationship with the activity if they decide it has become a permanent negative factor in their life. Thus, behavioral engagement in the passionate activity can be seen as flexible.

So, results of study 3 shows that HP led to equally high levels of life satisfaction, while obsessive passion led to a highly and significant reduction in life satisfaction. In other word, the relationships between passion and life satisfaction was mediated by the subjective vitality whose role was partially in these relationships. In other word, life satisfaction could be predicted by subjective vitality, as a mediator variable, with harmonious passion. Life satisfaction could also be predicted by subjective vitality, as a mediator variable, with the obsessive passion. In addition, path analysis indicated that life satisfaction was not predicted by obsessive passion.

In sum, the present research shows that HP has an effect on life satisfaction for Saudi women. Furthermore, obsessive passion has no direct effect on the life satisfaction. Findings are identical to Vallerand's and his colleagues' results. OP did not create a positive effect, and might rather encourage negative effect, conflict with other life activities, and psychological dysfunction (Vallerand, 2012a).

Using the same data set of the second study, results indicated in general that group differences in marital status, couple relationships conflict, age and physical activities have no effects on both HP, OP and life satisfaction. In a previous study, results of these research had not similar with findings of Ruseski, Humphreys, Hallman, Wicker, and Breuer (2014) in German culture. They indicated that a U-shaped relationship produced between age and self-reported happiness and men were less happy than women. These differences would probably due to large and wide sample ($n=1238$) and for age (18 to 70 years). In addition, for many reasons, studies concerning the selected variables for Saudi women are rarely explored, so that we had not significant differences between groups.

Conclusion

Over the last years, a growing body of evidence supports the notion that "passion matters" in educational settings. A Passion type that a student shows toward his academic activities is important. When students experience HP for academic activities, they are more likely to receive the many psychological and performance benefits that emerge from this type passion. In contrast, OP tends to produce negative outcomes. For many reasons, it is important to identify the factors that lead to college-student success. The dualistic model of passion (Vallerand, 2010) views passion as a solid inclination toward a self-defining activity and in which one contributes a considerable amount of time and energy (Lafrenière, St-Louis, Vallerand, & Donahue, 2012). We suggested that feeling of energy (vitality) could predict as a good indicator of life satisfaction. Objectives of this research study were to: (i) test the internal reliability, factor structure

of the HP and OP (Study 1), (ii) test the temporal stability and convergent validity of the HP and OP (Study 2), (iii) test a model that described a mediator role of subjective vitality in the relationships between HP, OP and life satisfaction and (iv) test the effect of marital status, couple conflict relationships, age and leisure activity on passion types and/or life satisfaction (Study-3).

Three samples of Saudi women have been solicited in three studies. Findings from the first study showed that the internal consistency and structure validity were acceptable. The precedent study confirmed that passion scale composes of two distinct subscales and has a good internal reliability. However, we have no idea about its stability across time. The objective of second study was to test its temporal stability and convergent validity. Findings confirmed the stability and convergent validity for HP and OP subscales. In sum, for the precedent two studies, data confirmed the whole of hypothesis. However, as an issue from previous research, Rousseau and Vallerand (2008) have tested the mediation effect of positive and negative affect on the relationships between passion and psychological well-being for old adult.

The objective of the third study was to test the mediator role of subjective vitality in the relationships between harmonious and obsessive passion and life satisfaction among Saudi women. Results confirmed the mediator role of vitality (energy) in the relationships between only HP and life satisfaction. More precisely, HP were positive predictors of vitality, which was a direct positive predictor of life satisfaction, whereas OP were not a significant predictor for vitality and a direct negative predictor of life satisfaction. In addition, the whole data did not confirm the hypothesis by which marital status, couple relationships, age and leisure activity could have an effect on HP, OP and life satisfaction. However, there were significant effects between single and married. Married women reported to have more HP than those divorced or single.

Some limitations ought to be kept in mind when we are interpreting the current findings. First, it is not easy to determine the directionality of causality with respect to the proposed model. Consequently, researchers ought to attempt to explore the effect of variables studied in the present research using experimental designs in order to clearly establish the directionality of effects. This experimental design should be in sequence of times. In the present studies, sample has been replied the three scales just after finishing their university session. Second, the sample contained a large disproportion in university level (under and post graduate). This drawback, may be, did not permit us to investigate the issue of attitude difference.

In spite of the passion types, HP and OP, that can be recognized as far as how the passion activities have been exploited in different researches. Future researches should look into this issue given that gender differences have been reported in the passion not only as a cause but as mediator variable. Passion may also affect individual's physical health, emotions and performance (Lafrenière, Vallerand, Donahue, & Lavigne, 2009; Geneviève Mageau, Vallerand, Rousseau, Ratelle, & Provencher, 2005; Vallerand et al., 2007).

In Arab culture, studies concerning the psychological factors influencing life satisfaction and/or SWB for Saudi women are still rare. There are still also few validated scales in education context (Bonnefoy, Kostka, Berthouze, & Lacour, 1996; Marei Salama-Younes, Montazeri, Ismail, & Roncin, 2009). These findings suggest that HP had an effect on life satisfaction. However, the second study had two important limitations: it relied on university

students recollection with their social situation, passion, vitality and life satisfaction. Thus, many reasons could probably lead to these results. It is possible that the economic resources, urban rivals, education level, cultural assets or marital situation biases explain these findings. The collection of data was done just after they had finished their university session. It would probably have an effect in their intellectual concentration level. A repeated measures and longitudinal study would be more beneficial in this field.

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