



PASSION-BASED TEACHING IN CLASSROOM: AN ANALYSIS USING SEM-PLS APPROACH

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Abstract

Purpose: Passion is essential for effective and high-quality teaching. A passionate teacher is one with the updated growing knowledge inspiring the students in a classroom, by making learning excited. The objective of the study was to analyze whether the teachers were teaching out-of-field and to analyze what type of passion influences them.

Design/methodology/approach: 241 teachers working in Higher Education Institutions in Oman participate in the survey. Structural Equation Modeling was used to analyze the data.

Findings: The empirical results reveal that the teachers sometimes do out-of-field teaching. The Basic Passion qualities and Harmonious Passion qualities help to improve the Effects of Passion based learning in classroom teaching. It is also revealed that the teachers need to increase Harmonious passion rather than Obsessive passion as it might result in burnout or disengagement in the long run.

Practical Implications: The study suggested that the teachers should make emotional attachments with the students, not to criticize anyone, rather encourage them for innovation & creativity, and should allow enough time to learn by making a conducive environment.

Originality/value: The research work is of its first kind as it focuses on the impact of Passion-based teaching in the classroom using the SEM-PLS approach which has suggested means for effective teaching.

Keywords: *Passion, Basic Passion Qualities, Harmonious Passion Qualities, Obsessive Passion Qualities, Effects of Passion-Based Teaching.*

INTRODUCTION

A teacher while teaching is careful to see that no student is left unattended. In the traditional method of teaching, many students do not involve in the learning process. In Passion-Based Teaching (PBT), a teacher caters to the passions of the students thereby the classroom becomes lively and the students become overwhelmed and engage in learning voluntarily (Barirani, Marsh, & Olson, 2014). Passion is an inclination and willingness towards spending time and energy on an activity that someone believes that it is important (Carbonneau, Vallerand, Fernet, & Guay, 2008). Passion is a motivating factor – a catalyst that makes someone to learn something new with greater importance. Passion is substantial and backs up the student towards achievement and the passionate teachers can make a positive impact on student's achievement (Serin, 2017). Passion is essential for effective and high-quality teaching. A passionate teacher is one who is inquisitive with updating the growing knowledge, eager to explore new ideas related to the practical world, and try to inculcate in the minds of the students in the class (Fried, 2002). Passion is not an option but very much necessary for Higher Education (Day, 2004).

Teaching is not just transferring knowledge but to create possibilities of producing knowledge rather than to engage simply in a knowledge transfer game (Freire, 1998). As an occupation teaching is involved with a high level of feeling towards people, with morals and values. It mostly refers to the emotional responses of their work environment. It is the practitioners' reactions to both their work and the settings in which it takes place, lies their close personal identification (Nias, 1996). Based on the self-determination theory, Vallerand et al. (2003) defined two different types of passion viz. Harmonious Passion, and Obsessive Passion, based on the process of internalization in relates to one's identity. Both types of passion are independent motivational factors (Vallerand et al., 2003; Vallerand, 2010). Harmonious Passion is independent of the task undertaken but in Obsessive Passion, there exists a liking to the task. While Harmonious Passion originates from an independent internalization rooted in oneself, Obsessive Passion comes out from a controlled internalization that comes to control the person (Deci & Ryan, 2000; Ryan & Deci, 2003; Vallerand, 2012). Harmonious Passion comes from an independent internalization allowing the people to freely engage in an activity whereas Obsessive Passion emanates from a controlled internalization making the people feel an irresistible urge towards an activity (Bonneville-Roussy, Lavigne, & Vallerand, 2011; Bonneville-Roussy, Vallerand, & Bouffard, 2013; Luh & Lu, 2012).

According to the theory of passion (Vallerand et al., 2003), harmoniously passionate teaching involves a controllable role in the teacher's identity coherent with the teacher's life allowing him/her to concentrate on the teaching tasks without any



distraction while obsessive passionate teaching controls one's teaching tasks because teaching becomes out of teacher's control and occupies other tasks of teacher's life.

University teaching is an intellectual activity that requires specialized skills and extensive disciplinary knowledge ([Devlin & Samarawickrema, 2010](#)). Of late, the pressure is increasing towards effective teaching while out-of-field teaching also co-exists. Teaching out-of-field is a term used while a teacher teaches a subject which is not his/her specialization and is becoming a common practice ([Hobbs, 2013](#)). However, there are certain Basic Passion qualities. Good teachers develop such qualities irrespective of whether they are teaching out-of-field, finding their own ways through making things more interesting to their students. Definitely, it needs more hard work, patience, and involvement. The best teachers make learning interesting, attention-grabbing, thrilling and thought-provoking. These teachers indoctrinate the basic passion qualities within themselves. Teachers with such passionate qualities enthuse students through their inspiration, **Statement of the Problem**.

Many teachers in Higher Education Institutions (HEIs) in Oman are teaching subjects that they do not like. Passion cannot be faked but the reality is that many teachers are forced to teach out-of-field ([Thompson, 2007](#)). It does not mean the courses have to be a failure though. Specialization maximizes productivity. Specialized teachers will be able to hone their skills, with less transition time performing their duty efficiently ([McDougald, 2016](#)).

About 37 percent of teachers in the beginning period of teaching are in out-of-field roles compared to 25 percent of experienced teaching, indicates that younger teachers are highly affected ([Singhal, 2017](#)). [Cruz et al. \(2017\)](#) claimed that there are many teachers teaching out-of-field still able to render sufficient knowledge to the students. In fact, the practice of out-of-field teaching leads to a negative impact on students learning ([McConney & Price, 2009](#)).

[Kreber \(2002\)](#) suggested that quality teaching requires expertise in a discipline. As [Hiebert, Gallimore, and Stigler \(2002\)](#) pointed out there is a need for the continuous growth of knowledge to improve classroom teaching and every higher education institution in Oman is striving for that. The passionate teachers inspire students particularly in the classroom, by making learning excited which makes the students inclined towards learning easily. This triggers the need to analyze the passion and its components behind the teachers' attitudes towards teaching methodology and psychology in a classroom. Thus, the purpose of the study was to analyze whether the teachers were teaching out-of-field or not, and to analyze to what extent, what type of passion influences them.

REVIEW OF LITERATURE

Teacher quality is a key variable in student experience and school achievement. Freedom, imagination, passion, and the power to act are due to passionate teaching ([Greene, 1986](#)). Acquiring new knowledge, and putting on an effort by spending more time are the essentials for passionate teaching ([Lang, 2010](#)). Passion may cause stress among the young beginner teachers as work-life imbalance might occur ([Kim, 2013](#)). Passion overpowers the identities of people to the extent that they become obsessive ([Vallerand, 2015](#)). There are five basic qualities in a passionate teacher viz. acquiring technical skills and knowledge, empathy, commitment, emotional attachment, and optimism ([Day, 2009](#)). Passionate teachers are differentiated by their seriousness in attaining the success of their students. They seriously struggle to maintain students' successful learning ([Mart, 2013](#)). However, [Mohamed \(2006\)](#) claimed that the teacher's belief and dedication to their profession makes a big difference rather than their passion. The basic characteristics of an effective teacher are patience, creativity, enthusiasm, instruction and understanding ([Levine, 2017](#)). [Smith, Hurst, and Skarbek \(2005\)](#) identified the primary constructs of effective teaching as a common set of concepts – knowledge, skills, and dispositions.

The essential characteristics of passionate teachers are new knowledge and ideas, willingness to work with youth, seriousness and commitment, tolerance, welcoming wild ideas – without criticism, creating a learning environment ([Fried, 2001](#)). A committed teacher constantly improves his teaching methodology and help others in developing their approaches ([Balci, 2013](#)). A teacher commitment is influenced by the institution one works, the students one teaches, and his/her professional knowledge base ([Elliott & Crosswell, 2001](#)).

[Rodgers \(2014\)](#) claimed that passionate learning starts with the community, not through the textbook and the best way to adopt is through informal learning – grouping and involved in projects. Passion in teaching propels persistence, impels concentration, eases engagement, and supports a student's academic performance ([Forest, Mageau, Sarrazin, & Morin, 2011](#); [Ruiz-Alfonso, Vega, & Beltran, 2018](#)).

[Schellenberg, Bailis, and Mosewich \(2016\)](#) used the dualistic model consisting of Harmonious Passion and Obsessive Passion, considering passion as a motivational construct. The independent characteristic of Harmonious Passion allows perceiving ongoing experiences of failure, frankness, and a desire to understand them precisely ([Hodgins & Knee, 2002](#); [Vallerand, 2010](#)). Harmonious Passion prophesies better experiences of concentration whereas Obsessive Passion envisages reflecting negative emotions and pain when prevented from involving in passion ([Philippe, Vallerand, Richer, Vallieres, & Bergeron, 2009](#); [Schellenberg, Bailis, & Crocker, 2013](#); [Stoeber, Harvey, Ward, & Childs, 2011](#)). Harmonious Passion would produce positive outcomes in interpersonal interaction ([Vallerand et al., 2007](#)) whereas there is a risk of teaching with

Obsessive Passion as people might be cautious of self-compassion, at risk of self-satisfied in their passion (Ferguson, Kowalski, Mack, & Sabiston, 2014; Sutherland et al., 2014). Those who are obsessively passionate are inflexible, excessively, and compulsively committed, finding it difficult to disengage (Kaufman, 2011). Obsessive Passion was related to low levels of well-being and was not related to the flow of affective commitment (Byrne, 2014).

Teachers and the students are not the only ones to experience the different effects of Harmonious and Obsessive passion on psychological well-being (Liu, Wang, & Ryan, 2015). Crespo-Hervás, Calabuig-Moreno, Prado-Gascó, Añó-Sanz, and Núñez-Pomar (2019) claimed that Harmonious Passion had direct effects on future goals, value, and satisfaction whereas Obsessive Passion had an effect only on satisfaction. The most important effects of Harmonious Passion in education are the students' well-being, goal direction, learning academic involvement, time spent, persistence, academic performance, strategy, and epistemic curiosity (Ruiz-Alfonso et al., 2018). Ruiz-Alfonso and León (2016) identified the basic features of passion for teaching as inclination, dedication, persistence, caring, positive relationships, and good emotions. Mageau et al. (2009) revealed that identification with the activity, parents' involvement in the activity valuation, and individual support propose the development of passion whether it is Harmonious or Obsessive. Robertson (2013) introduced a PBL model and claimed it to be effective when positive inter-relational conditions are established. Harmonious passion not only at the teacher's level but at the student's level is a deep strategy to learn (Ruiz-Alfonso & León, 2019).

Hypotheses

From the above literature review, the three variables viz. Basic passion qualities, Harmonious passion qualities, and Obsessive passion qualities were taken into consideration and thus the following hypotheses were framed viz.

1. Basic Passion Qualities positively influences the effects of Passion-based Teaching.
2. Harmonious Passion qualities positively influence the effects of Passion-based Teaching.
3. Obsessive Passion qualities positively influence the effects of Passion-based Teaching.

RESEARCH METHODOLOGY

To analyze and confirm the hypotheses, data were collected using a well-defined questionnaire from 241 teachers working in various Higher Education Institutions in Oman, who were selected on a random sampling basis. Smart PLS for Structural Equation Modeling (SEM) technique was used to analyze the data.

Demographic details of the respondents are given in table 1.

Table 1: Demographic details of the respondents

Characteristics	Frequency	%	
Nationality	Omani	72	29.9
	Expatriate	169	70.1
Gender	Male	211	87.6
	Female	30	12.4
Age	< 25 years	40	16.6
	25 – < 35 years	49	20.3
	35 – < 45 years	61	25.3
	> 45 years	91	37.8
Marital Status	Single	64	100.0
	Married	0	0.0
Years of Experience	< 5 years	68	28.2
	5 – < 10 years	75	31.1
	> 10 years	98	40.7
Qualification	Bachelors	38	15.8
	Masters	100	41.5
	MPhil	6	2.5
	PhD	97	40.2
Designation	Teaching Assistant	43	17.8
	Lecturer / Senior Lecturer	101	41.9
	Assistant / Associate Professor	94	39.0
	Professor	3	1.2
Institution working	Al Zahra College	3	1.2

with	Arab Open University	4	1.7
	Buraimi University College	5	2.1
	College of Applied Sciences	28	11.6
	CBFS	3	1.2
	College of Technology	17	7.1
	Dhofar University	7	2.9
	German University of Technology	12	5.0
	Gulf College	10	4.1
	HCT, Muscat	13	5.4
	IMCO	8	3.3
	Mazoon University College	4	1.7
	Middle East College	13	5.4
	Modern College	7	2.9
	Oman Tourism College	3	1.2
	Sharqiyah University	6	2.5
	Sohar University	38	15.8
	SQU	12	5.0
	Sur University College	2	0.8
	University of Buraimi	2	0.8
	University of Nizwa	27	11.2
Walajat College	9	3.7	
Others	8	3.3	
Specialization	Business	74	30.7
	IS / IT	45	18.7
	Engineering	37	15.4
	Law	9	3.7
	Language Studies	29	12.0
	Sciences	30	12.4
	Technical Studies	17	7.1
Teaching your specialized subjects	Yes. Always.	91	37.8
	Yes. Sometimes.	102	42.3
	Silent	2	0.8
	No. But I am happy	46	19.1
Passionate about Teaching	Yes, Indeed.	110	45.6
	Yes, but not fully.	105	43.6
	Neutral	10	4.1
	No. Not really.	11	4.6
	No, not at all.	5	2.1

Source: Questionnaire

Table 2: Reliability Analysis of the data

	N	%
Valid Cases	241	100.0
Excluded	0	0.0

Cronbach's Alpha	N of items
.733	36 items

The data reliability and internal consistency are confirmed as the value was > 0.70 .

The present study considers factors such as Basic Passion qualities, Harmonious Passion qualities, Obsessive Passion qualities, and the effects on Passion-Based Teaching. The details of the latent variables (factors) and apparent variables (sub-factors) are given in the table. Given below:

Table 3: Details of Latent variables and Apparent variables

Factors (Latent variables)	Sub-factors (Apparent variables)
Basic Passion qualities	a1 I love teaching
	a2 Teaching is important to me
	a3 I spend a lot of time teaching
	a4 With positive hopes, I try to solve problems
	a5 I never criticize the ideas of students
	a6 I would like to work with young people
	a7 I give importance to students and committed
	a8 I empathize students with lack of knowledge/ability
	a9 I keep abreast of the growing knowledge
Harmonious Passion qualities	b1 I manage work-life balance
	b2 My teaching job reflects my qualities
	b3 Through teaching, I gain a variety of experiences
	b4 Teaching job only excites me
	b5 Teaching job is in harmony with other things of mine
	b6 I do learn from my mistakes
	b7 Teaching job is integrated into my life
	b8 I work seriously with dedication but create a witty environment
	b9 Good learning needs the use of good knowledge with emotion
Obsessive Passion qualities	c1 I have the impression that teaching job controls me
	c2 I have an obsessive feeling for my teaching job
	c3 If I could, I would only do teaching job
	c4 I reflect student's educational ideals and beliefs and motivate them towards commitment and effectiveness
	c5 I feel teaching job is so exciting
	c6 I tolerate students' meaningless behavior but expect them to acquire good behavior
	c7 I try to create a learning environment where students learn from their mistakes
	c8 I have difficulties controlling my urge for my job as a teacher
	c9 I work seriously but I express my ideas and beliefs to my students clearly
Effects of Passion based Teaching	d1 Student's behavior changes inside and outside the class
	d2 Students gain knowledge of new things of the modern worlds
	d3 Students find learning more easier
	d4 Students voluntarily involve themselves in learning
	d5 Besides respect, they very much love the teacher
	d6 The happy learning environment is created within the class
	d7 Fraternity increases by helping one another
	d8 Students organize their learning schedule due to increased interest
	d9 Student learn by their mistakes which remind like a repository in their minds

The latent variables (constructs) will be tested along with the apparent variables using the measurement model. The conceptual model is shown in figure 1.

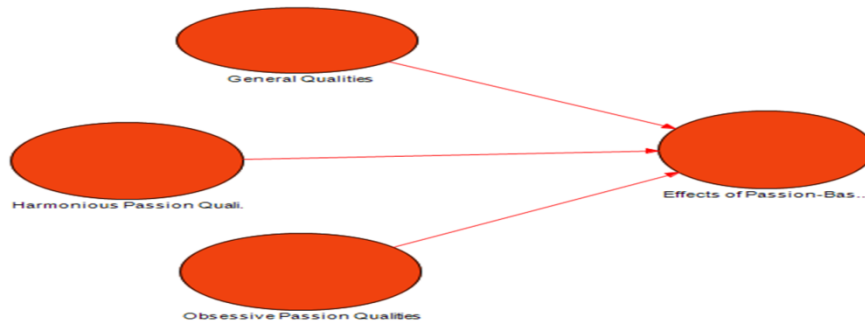


Figure 1: Conceptual Model

The structural model specifies the suppressed constructs. [Tenenhaus, Vinzi, Chatelin, and Lauro \(2005\)](#) defined that measurement model, structural model, and structural regression equation – in the order are used to measure the quality of the model.

RESULTS AND DISCUSSION

Measurement Model

To test the reliability of the measurement model, discriminant and convergent were validated ([Henderson, Sheetz, & Trinkle, 2012](#)). The coefficients and the values of loading were shown in figure 2 - the initial path model.

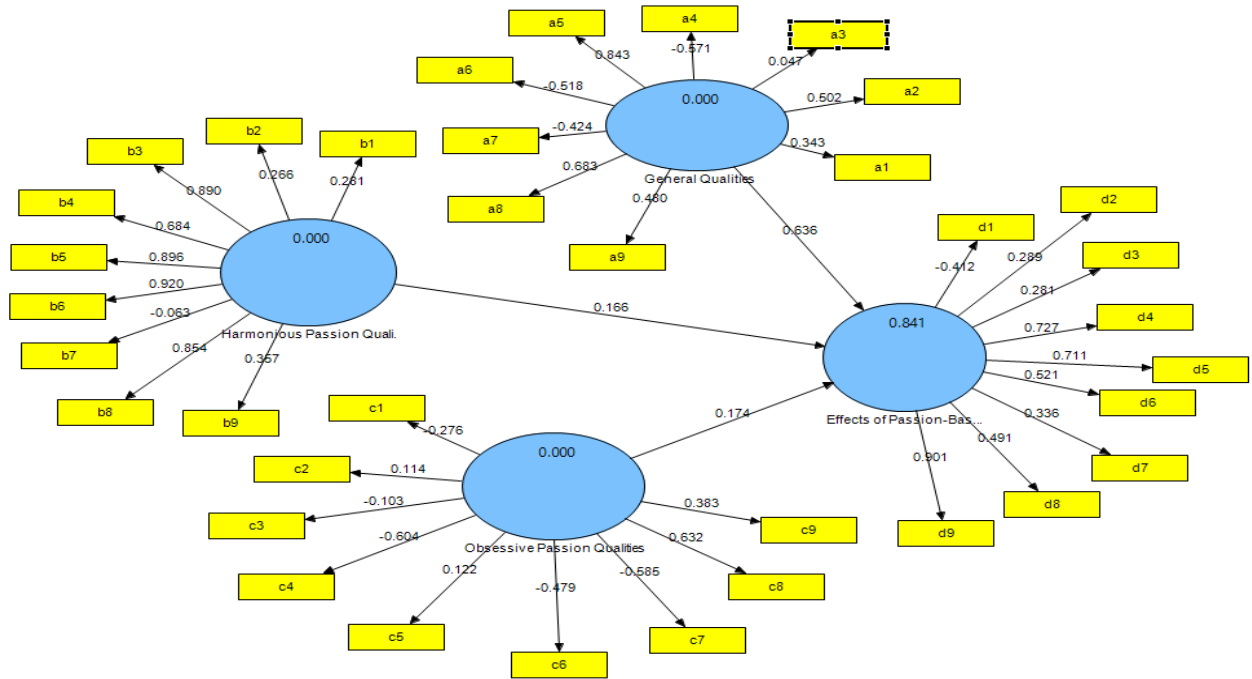


Figure 2: Initial Path Model

The reliability of the measurement model was validated by assessing the sub-factors reliability and the factor loadings. A minimum value of 0.45 can be preferable ([Comrey & Lee, 2013](#)) but for our study, the sub-factors loading above 0.50 was considered ([Hulland, 1999](#)) and those sub-factors with lesser loadings were removed and the resulting final path model is shown in figure 3.

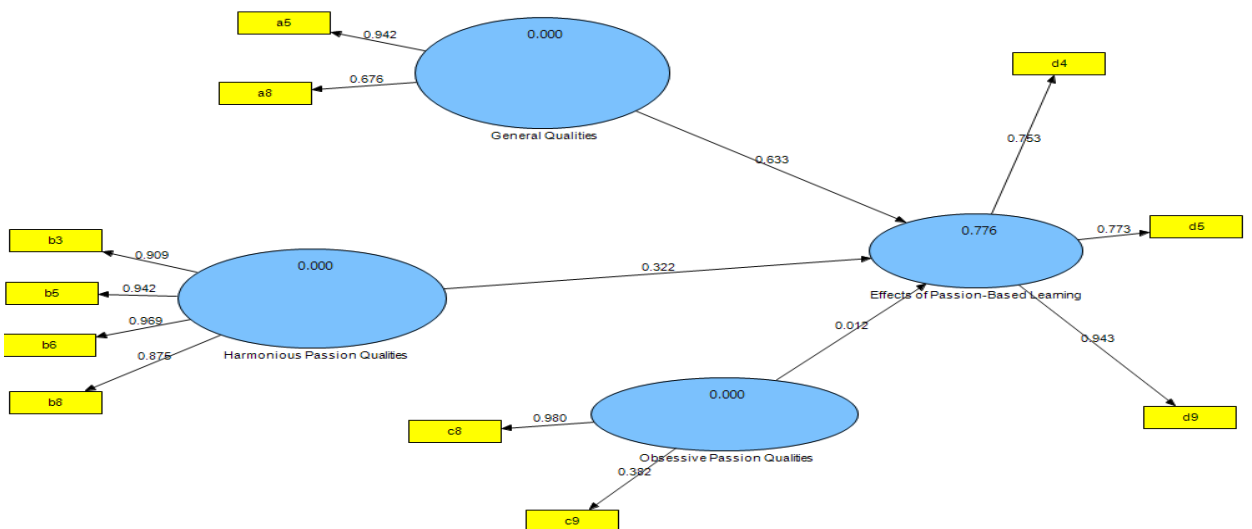


Figure 3: Final Path Model

Reliability

Construct reliability and inner consistency were adjudged using composite reliability (Hair, Sarstedt, Ringle, & Mena, 2012). As per Gefen, Straub, and Boudreau (2000), the least score for composite reliability should be 0.7 and as per Hair, Black, Babin, Anderson, and Tatham (1998) the minimum score of Cronbach's alpha should be 0.6. The factor loadings, composite reliability and Cronbach's alpha values obtained were shown in table 4. Cronbach's alpha value was above 0.755 except Obsessive Passion qualities. The composite reliability score was > 0.799 except the score of the Obsessive Passion qualities which was close to 0.70. Therefore, the model can be considered trustworthy.

Table 4: Factor loading for indicators of latent constructs

Factors and Sub-factors	Factor loading	Cronbach's alpha	Composite reliability	AVE
A Basic Passion Qualities		0.756	0.800	0.672
a5 I never criticize the ideas of students	0.942			
a8 I empathize students with lack of knowledge/ability	0.676			
B Harmonious Passion Qualities		0.943	0.959	0.855
b3 Through teaching, I gain a variety of experiences	0.909			
b5 Teaching job is in harmony with other things of mine	0.942			
b6 I do learn from my mistakes	0.969			
b8 I work seriously with dedication but create a witty environment	0.875			
C Obsessive Passion Qualities		0.317	0.674	0.553
c8 I have difficulties controlling my urge for my job as a teacher	0.980			
c9 I work seriously but I express my ideas and beliefs to my students clearly	0.382			
D Effects of Passion-Based Teaching		0.763	0.866	0.685
d4 Students voluntarily involve themselves in learning	0.753			
d5 Besides respect, they very much love the teacher	0.773			
d9 Student learn by their mistakes which remind like a repository in their minds	0.943			

Convergent Validity and Average Variance Extracted (AVE)

To assess convergent validity:

1. The outer loadings should be greater than or equal to 0.70 (Hulland, 1999) and;
2. AVE values for every latent variable should be > 0.50 (Bagozzi & Yi, 1988). 0.4 is acceptable (Fornell & Larcker, 1981) if composite reliability is > 0.6 (Huang, Wang, Wu, & Wang, 2013).

From table 4 it can be seen that the variance extracted ranged from 0.553 to 0.855, and thus the convergent validity is satisfactory.

Discriminant Validity

Discriminant validity is to ensure that a construct has the strongest relationships than any other construct in the PLS path model. AVE square root and constructs correlations in table 5 shows that the constructs Discriminant validity is satisfactory.

Structural Model Analysis

Through the path coefficient values, the relationship among the R-square value, independent variable, and dependent variable is tested. The bootstrapping test values are shown in table 6.

Table 5: Discriminant Validity Results

	Effects of Passion-based Teaching	Basic Passion qualities	Harmonious Passion qualities	Obsessive Passion qualities
Effects of Passion-based Teaching	1			
Basic Passion qualities	0.843695	1		
Harmonious Passion qualities	0.734852	0.641626	1	
Obsessive Passion qualities	0.413375	0.343934	0.570125	1

Table 6: Path coefficients along with their Bootstrap values and T-values

Factors	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)	Supported	Significance values
Basic Passion qualities > Effects of Passion-Based Teaching	0.633	0.632	0.054	.054	11.699	Yes	p < 0.05 1.96
Harmonious passion qualities > Effects of Passion-Based Teaching	0.322	0.319	0.055	0.055	5.859	Yes	p < 0.05 1.96
Obsessive passion qualities > Effects of Passion-Based Teaching	0.012	0.020	0.024	0.024	0.514	No	---

The relationship between the Effects of Passion-Based Teaching and Basic Passion qualities was significant as t-value = 11.699 (> 1.96) i.e. Hypothesis No.1 was proved.

The relationship between the Effects of Passion-Based Teaching and Harmonious Passion qualities was significant as t-value = 5.859 (>1.96) i.e. Hypothesis No.2 was proved.

The relationship between the Effects of Passion-Based Teaching and Obsessive Passion qualities was insignificant as t-value = 0.514 (<1.96) i.e. Hypothesis. No.3 was disproved.

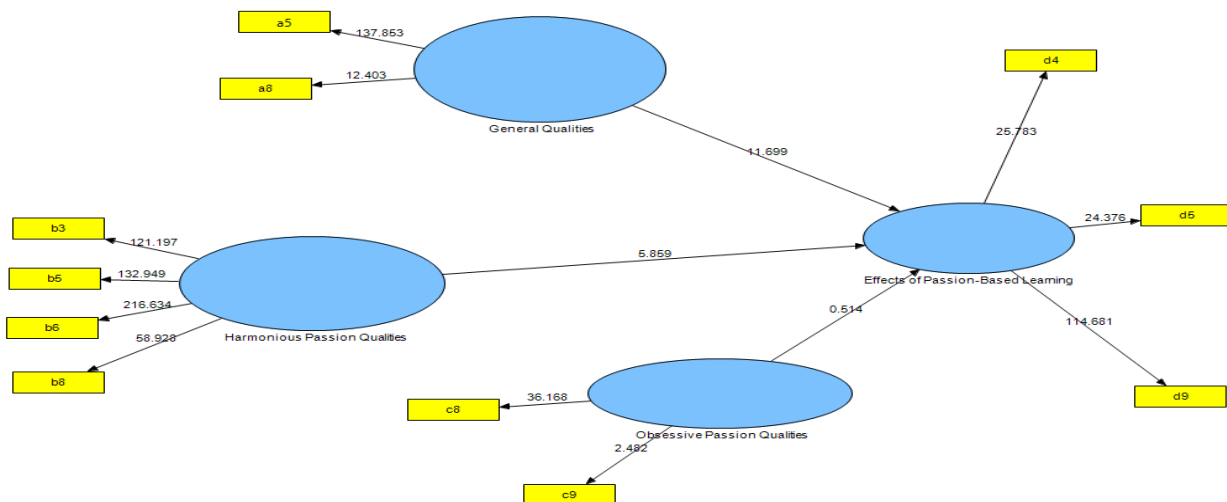


Figure 4: Bootstrapping Diagram

Assessment of Fit

Goodness-of-fit (GOF) is the overall model fit for PLS-SEM.

$$GOF = \sqrt{\text{average } R^2 * \text{average communality}} = \sqrt{0.778 \times 0.692} = 0.732$$

Table 7: Model Evaluation Results

Factors	R ²	Communality	H ²	Redundancy	F ²
Effects of Passion-Based Teaching	0.776	0.685	0.378	0.454	0.378
Basic Passion qualities		0.672	0.525		0.136
Harmonious Passion qualities		0.855	0.734		0.734
Obsessive Passion qualities		0.553	0.017		0.017
Average	0.778	0.692	0.017	0.454	0.316

Where H² is CV-communality index and F² is CV-redundancy index

In PLS, the structural model and hypothesis were tested by computing path coefficients β as PLS does not require normally distributed data. It is evaluated with R² calculation for dependent latent variables (Cohen, West, & Aiken, 2014) and AVE (Fornell & Larcker, 1981). R² measures a construct's percent variation that is explained by the model (Wixom & Watson, 2001). As the value is greater than zero, the model has predictive significance as seen in figure 5.

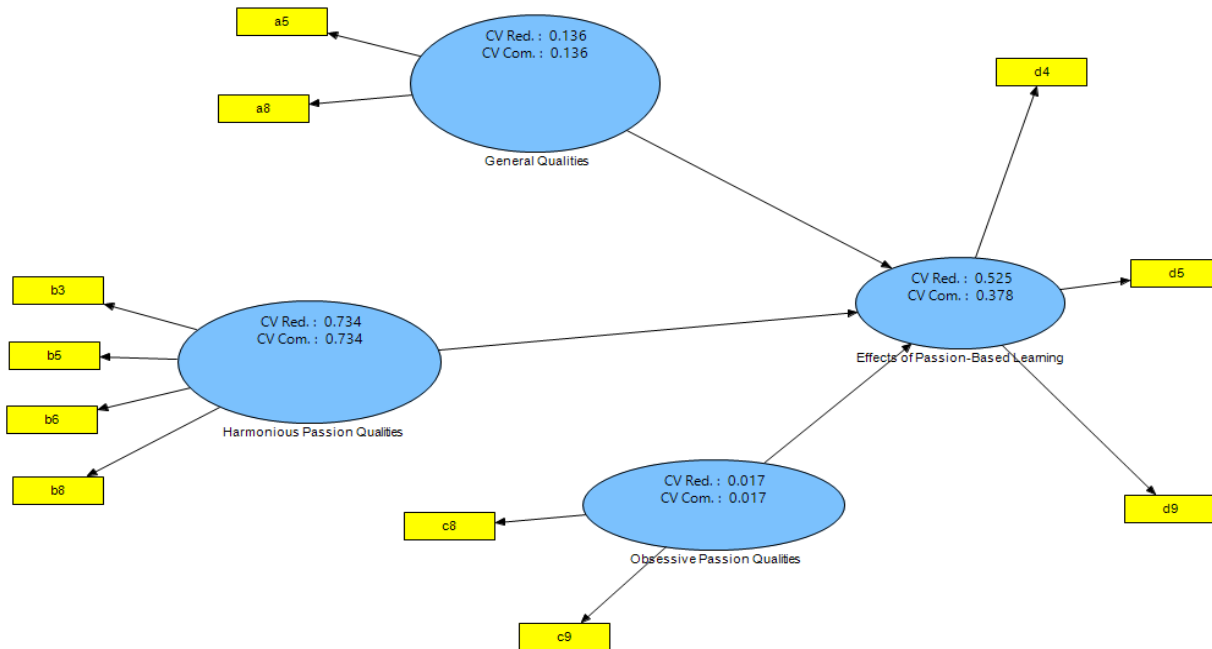


Figure 5: Blind Folding Path Diagram

CONCLUSION AND SUGGESTIONS

45.6% of the teachers responded that they were fully passionate about their teaching and 43.6% of the respondents reported that they were passionate but not fully. 37.8% of respondent teachers agreed that they were not teaching out-of-field but the majority of the teachers (42.3%) agreed that they sometimes do out-of-field teaching.

It is noted that Basic Passion Qualities and Harmonious Passion qualities had a positive influence on the Effects of Passion based Teaching. The factor Obsessive Passion qualities do not have an impact on the Effects of Passion based Teaching. The Harmonious Passion qualities along with the basic passion qualities creating a conducive atmosphere in the classroom for the students to learn. Thus passion acts as a motivating factor influencing learning and teaching positively creating excitement and action in the classroom. The teachers need to increase Harmonious Passion rather than Obsessive Passion as it might result in burnout or disengagement in the long run.

Therefore, the following suggestions are made for the teachers to bring in passion-based teaching in the classroom for which the teachers should:

1. Find out the interests of the students in the class.
2. Make emotional attachments so as to get them into the flow.
3. Not to criticize anyone, rather encourage them for innovation & creativity.
4. Allow enough time to learn on their own for which a conducive environment should be made.

DECLARATION OF INTEREST STATEMENT

All of the data were collected from the teachers working in various higher educational institutions (HEIs) in Oman. The data collected through the questionnaire reflect the opinion of the individual respondents, not of the institution he/she belongs to. The identity of the respondents was anonymous and used only for research purposes. The data can be made available by private request. Further, the author declares that there is no funding or conflict of interest in this work.

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