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Using The Passionate Teaching Model for Enhancing English Majors' some Deep Learning Competencies

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ABSTRACT

The present study aimed at investigating the effect of using the passionate teaching model on the development of EFL University students' some deep learning competences. The study adopted the experimental design, using one experimental group and one control group. Participants of the study were first year EFL university students, Ismailia city, in the academic year 2021/2022. Then, they were randomly assigned into two groups, experimental and control. The experimental group received training through the passionate teaching model, at the same time, the control group continued to study the content using the regular method. To determine the necessary deep learning competences for the first year EFL university students, checklist was designed and the necessary deep learning competences were approved by the jury members. Based on these deep learning competences, deep learning competences test was developed. The passionate teaching model was developed by the researcher to teach the deep learning competences. Results indicated that there was a statistically significant difference between the mean scores of the experimental group (taught through the passionate teaching model) and the control group (taught traditionally) on the posttest in the overall deep learning competence. Results also revealed that there was a statistically significant difference between the mean scores of the experimental group in the pre- and the posttest in the overall deep learning competences favoring the post scores. It was concluded that the passionate teaching model was effective in enhancing some deep learning competences.

Key words: passionate teaching model – deep learning competences

مستخلص البحث باللغة العربية:

تعد كفايات التعلم العميق في اللغة الانجليزية بمثابة الدعامة التي تعزز مهارات اللغة. فكفايات التعلم العميق هي عمل منظم حيث يقوم الطالب بسرد المعلومات وفقا للترتيب المنطقي للاحداث, يعرف التعلم العميق على أنه شكل من اشكال اللغة التي تعتمد على المهارة في توضيح المفاهيم و المناقشات الموجودة في النص لاكتشاف الرسائل التي يريد الكاتب أن يعرفها القارئ.

و يعد الهدف من التعلم العميق في اللغة الانجليزية هو تزويد المتعلمين بالمعرفة حول أساسيات و قواعد اللغة الانجليزية , هذا و يعتبر تدريس التعلم العميق في المستويات المتقدمة مربكا لمعلمي اللغة الانجليزية طالما ظل بعيدا عن الكفاءة و الفاعلية نظرا لاتباع المعلمين عموما خطط تدريسية تقليدية بالاضافة الى قصور في كفايات التعلم العميق .

و من الضروري ان نأخذ في الاعتبار أن كلا من الدقة و الطلاقة يتوقفان على الاخر. و في تدريس التعلم العميق لطلاب اللغة الانجليزية كلغة اجنبية , ربما يشعر المعلم بالاحباط عندما يدرس التحدث و يطلب من طلابه التحدث عن انفسهم فانهم عادة ما يقعون في اخطاء لغوية. ايضا كشفت الكثير من الدراسات و الابحاث التي تناولت تدريس كفايات التعلم العميق في اللغة الانجليزية عن استمرار المزيد من مشكلات تدريس كفايات التعلم العميق لدى كل من المعلمين و المتعلمين .

لذا ينبغي أن يشمل تدريس كفايات التعلم العميق في اللغة الانجليزية على طريقة التدريس المثير للشغف حيث التركيز على المضمون و المحتوى.

و لهذا يهدف البحث الحالي الى التحقق من أثر استخدام نموذج التدريس المثير للشغف لتنمية بعض كفايات التعلم العميق لدى طلاب شعبة اللغة الانجليزية.

الكلمات المفتاحية: التدريس المثير للشغف - كفايات التعلم العميق

Introduction:

Research in the education domain has noted the importance of work-based passion and has repeatedly highlighted how passion influences positive work outcomes. However, little attention has been given to investigating whether one's passion can be transferred to others. Using two theoretical lenses – crossover theory (CT) and emotional contagion theory (ECT). In psychological research, a theoretical framework is increasingly being applied that advances attitudes, emotions, behaviors, and beliefs of one individual can be transmitted to others; this is known as emotional contagion. Emotional contagion theory (ECT) is one of the leading psychological theories which posit that people can "catch" the positive actions and emotions of others during their social interactions. This is known as a trickledown effect, where one's actions can provoke similar responses in others. Empirical research by Cordon, in the context of management, reported the transference of an entrepreneur's passion to employees via emotional contagion. The study by Li et al,2017. in the same context suggests that emotional contagion facilitates the transmission of a leader's work passion to their subordinates. In the context of brand management, the study by Gilal et al,2019. confirmed that the brand passion of parents can be transferred to children via the mediation of emotional contagion. Based on the findings of the above-cited studies and the theoretical notion of ECT, we suggest that the mediation of emotional contagion may facilitate the association between a teacher's work passion and a student's passion. Therefore, we propose emotional contagion as a mediating variable to investigate whether a teacher's work passion can be translated into a student's work passion via emotional contagion.

Context of the problem:

Conducting a deep learning competencies questionnaire in November, 2021 as a pilot study to identify the difficulties facing EFL students in the first year at Sinai institute for Specific Studies, it was found out that EFL students lacked some deep learning competencies, as critical thinking, creative thinking, communicating and collaborating. These skills help students learn, and so they are vital to success in school and beyond.

Statement of the problem

In light of the aforementioned argumentative account, it is clear that Sinai institute EFL students lack the deep learning competencies as has been revealed through the pilot study. It could also be mentioned that giving the activities of the passionate teaching model would help in achieving high standards of skill mastery for the EFL students. Accordingly, the problem under investigation in this study could thus be stated in the following main question:

How effective is a passionate teaching model for enhancing English majors' some deep learning competencies?

Questions of the study:

1. What are the deep learning competencies needed for the first year EFL students at Sinai institute?
2. To what extent do those students master these skills?
3. What is the effect of a passionate teaching model enhance English majors' some deep learning competencies?

Study hypotheses:

Hypothesis 1: A teacher's work passion relates positively to a student's work passion.

Hypothesis 2: Emotional contagion will mediate the link between a teacher's work passion and a student's work passion.

Hypothesis 3: A teacher's education (non-PhD vs. PhD) moderates the mediated effect of a teacher's work passion on a student's work passion through emotional contagion.

Significance of the study

The results of this study are hopefully expected to be useful to:

1. The EFL students: This study may improve the EFL students' deep learning competencies.
2. Teachers: This study may supply teachers of this stage with task-based activities that could improve their performance in the EFL classrooms and their students' deep learning competencies.

Delimitations of the study

This study was delimited to:

1. 226 students at Sinai institute, Ismailia city.

2. some deep learning competencies which were specified by the questionnaire results.

Review of literature:

Interest in the concept of work passion has grown in the new millennium, with a surge in the number of studies emphasizing the positive outcomes of work passion and how organizations can benefit from a passionate workforce. Work passion refers to a tendency towards an act or activity that people like, see as important, and invest significant time and energy in. Passion fuels motivation, increases wellbeing and gives meaning to individuals' lives. Academic research in the management domain has linked passion with positive work outcomes and recognized it as an inevitable component for wellbeing, growth, and entrepreneurial success. Work passion disposes individuals towards dedication to their work, which allows them to continue their work even in the face of obstacles and to achieve excellence. Work is important because it is part of a person's identity and gives meaning to their life. Research shows that although individuals' value their work, their engagement in work varies from person to person and this has important ramifications The motivational perspective of passion suggests the mechanisms through which one can identify different patterns of energy and time invested in different activities, which impact people's affection and behaviors.

An increasing number of studies guided by the theoretical notion of 'crossover' have reported the transference of passion from one individual to another in different domains of life. For example, a study conducted by Cordon reported the transference of passion from entrepreneurs to employees. In the management domain, Li et al,2017. have shown the transference of work passion from leaders to followers. Similarly, in the marketing domain, Gilal et al, 2019. have reported the transference of brand passion from parents to children. Despite the fact that these studies provide an insight into passion transference, the potential for discovering whether a teacher's work passion can be transferred to a student

remains largely untapped. Academic research in the educational context suggested that around 80% of adolescents in schools get passion from situational contexts and that what teachers do in the classroom can help students to develop their passion. On the basis of these beliefs and the theoretical notion of crossover theory, the current study aims to examine whether a teacher's work passion can be transferred to a student.

In addition to testing the mediation, the current research also aims to examine the boundary conditions for work passion transference by studying the moderating effect of the teacher's education – that is, whether a higher level of education in a teacher (i.e., non-PhD vs. PhD) can enhance or undermine the transference of work passion from teacher to student through emotional contagion. A study conducted by Jillapalli & Wilcox, 2010 in the context of human branding suggests that teachers become a source of inspiration and evoke positive emotional responses among students, becoming a lifestyle aspiration for them. Based on this, we believe that teachers who have a higher qualification (i.e., PhD) will have a more prominent influence than those holding only an MS/Master's degree (i.e., non-PhD). Therefore, we aim to explore whether a teacher's education moderates the link between a teacher's work passion and a student's passion via emotional contagion.

In summation, our study proposes a moderated mediation model that builds on the prior research of Gilal et al,2019. to answer three under-researched questions in the settings of management and higher education. First, this study contributes to an exploration of whether a teacher's work passion can be transferred to a student. Second, our study examines the mediation of emotional contagion in the relationship between a teacher's work passion and a student's work passion – that is, whether emotional contagion strengthens or facilitates work passion

transference. Third, we provide additional evidence with respect to work passion transference by studying the moderation of a teacher's education on the relationship between a teacher's work passion and their student's passion via emotion contagion.

Passion is a tendency towards an act or activity that people like, see as important, and invest significant time and energy in. There are two different positions that researchers take in the study of passion. According to the first position, reason stimulates acceptable thoughts, while unacceptable thoughts are caused by passion. This logic suggests that passion causes a loss of reason and control. This perspective sees individuals as slaves of their passion, with their passion controlling them. The second perspective is more positive and it depicts individuals as being more active in relation to their passion. This view suggests that when individuals are controlled by their passion, adaptive benefits will be increased over time.

Much of the research conducted in this field predominantly focuses on work performance; very limited research has been done so far on passion in education. The few available studies focusing on this area investigated the influence of passion on the student. Studies such as Ruiz-Alfonso, 2018 & León, Coleman, 2016 & Guo, Day, 2013 and Liston & Garrison 2004 suggest that passion is also important in an educational context and that it impacts the performance of both teachers and students. While the majority of research in the domain of passion follows the conceptualization of Vallerand et al, authors in the educational context have also tried to define passion. For example, Coleman & Guo, 2013 used the term "passion for learning" to describe the interest of a student in a particular domain, which, in spite of difficulties, has endured over time and is normally associated with a relative disinterest towards activities that are interesting for

other individuals. The concept of passion has been studied from a teacher's perspective by Liston & Garrison, 2004. They focused on the passion that teachers have for teaching or towards the subject they teach. Passion is defined by Liston & Garrison as the teacher's love for the task of educating people and for their students. Day defines passion as the love of teachers for the belief that teaching enables them to influence the lives of their students, and love for the subject they teach.

A growing number of researchers have focused on the effects of passion within an educational context, and they have linked passion to students' performance, deliberate practice, persistence, goal orientation, motivation to learn, resilience, and well-being. Studies have shown that as the passion of a learner increases, there is a greater tendency to remain focused on improving self-competence.

A considerable body of research guided by crossover theory has also explored whether one's passion can be transferred to others. As such, Gilal et al, 2019 in the context of brand management, reported the transference of airline brand passion from parents to children. Similarly, in a leadership context, Cardon explored whether an entrepreneur's work passion can be transferred to employees and revealed that entrepreneurial passion and the transformational leadership of an entrepreneur creates contagion that leads towards increased employee passion. In a management context, Li et al,2017. examined the relationship between a leader's work passion and their employees' work passion and suggested that when a passionate leader demonstrates his/her passion frequently and shares a positive association with work, over a period of time employees acquire this emotion and they also start to experience work passion. Based on the results of the above-cited studies and crossover theory, we believe

that in an educational context a teacher's passion can be translated to a student's passion. With this thought in mind, we predict:

A growing number of studies have demonstrated that individuals normally mimic the positive emotions (such as facial expressions, postures, gestures, speech rates, etc.) of trusted people, both consciously and unconsciously. For example, a recent publication by Li et al٢٠١٧ . viewed emotional contagion as a process through which an individual or a group of individuals influences another individual or group of individuals' behavior, attitude, and affective state through conscious or subconscious emotional mimicry.

Literature suggests that during their social encounters, people mimic or "catch" the emotions of others. Research further suggests that people copy the emotions of people with whom they are familiar more quickly and readily. Studies in a leadership context have suggested that emotional contagion relates positive effects in a leader to positive effects in their followers at work. A recent article by Moeller et al. highlighted those external agents have the scope of action in the development of passion. Particularly in an educational context, research suggests that students develop passion by observing the actions of the teacher in the classroom. Based on the results of above-cited studies and emotional contagion theory, we believe that a teacher's work passion can be transferred to a student via emotional contagion.

Along with the mediating role of emotional contagion, the current study also aims to explore the moderation of a teacher's educational level on the relationship between the teacher's work passion and emotional contagion. In other words, the effect of a teacher's work passion on a student's work passion varies with the teacher's educational level. A number of studies conducted in an educational

context suggest that the qualification of teachers is one of the critical factors that influence students' learning. The effective teaching capability of a teacher is related to his/her qualification – the more qualified a teacher is, the more effective he/she is at teaching. Moreover, there are a number of studies that suggest that students' outcomes are directly related to the teacher's qualification. Therefore, we believe that the effect of a teacher's work passion on a student's work passion via emotional contagion is particularly relevant with teachers who have a PhD degree. A study conducted by Carlson J& Gardner AL, Wilson , in a human branding context, suggests that teachers become a source of inspiration and evoke positive emotional responses among their students, ultimately becoming a lifestyle aspiration for them. Therefore, we believe that a higher level of education for the teacher – i.e., having a PhD – can more strongly inspire students to mimic the positive behaviors of their teacher.

Design of the study:

Using procedures from the extant research, we distributed 300 questionnaires to students and their teachers from different disciplines and degree programs at five public-sector universities located in the major cities of Pakistan. The subject teachers facilitated data collection. Students completed the questionnaires to provide information about demographics, emotional contagion, and their passion. Teachers completed the questionnaires to enable the researchers to assess their demographic profiles and work passion. After evaluating the returned surveys, the total number of effective matching responses was n=226, resulting in a 75.33% response rate. According to Baruch & Holton, there is no threshold for response rate in survey research; however, they recommend a response rate of 50% as acceptable on an individual level. Following these recommendations, we can infer that the response rate of 75.33% is sufficient to conduct the analysis. Of the initial

cohort of 226 teacher-student dyads, the age of teachers ranged from 25 to 55 years. Among these, 68.6% were male teachers; 61.9% had a Masters/MS degree; 46.5% had a work experience ranging from one to five years; and 53.1% were lecturers while the remaining 46.9% were professors (e.g., assistant, associate, or full professor). Similarly, the age of students ranged from 18 to 40 years. Among surveyed students, 74.3% were male, 94.7% were unmarried, and 90.3% were pursuing a bachelor's degree. The detailed demographic information of the participants is displayed in Table 1.

Table 1

Criterion	Characteristics	%
Age in years (Teachers):	25–30	33.2
	30–35	19.9
	35–40	33.2
Above 40	13.7	
Gender (Teachers):	Female	31.4
Male	68.6	
Education (Teachers):	Non-Ph.D. Faculty	61.9
Ph.D. Faculty	38.1	
Experience (Teachers):	1–5 years	46.5
	5–10 years	26.5
More than 10 years	27.0	
Job title (Teachers):	Lecturer	53.1
	Assistant Professor	26.5
	Associate Professor	10.6
Professor	9.7	

Age (Students)	18–30	97.8
	30–35	1.3
Above 40	0.9	
Gender (Students)	Female	25.7
Male	74.3	
Marital status (Students)	Married	5.3
Single, never married	94.7	
Education (Students)	Bachelor's degree	90.3
	Master's degree	8.0
	MS degree	0.9
Ph.D	0.9	

Note: Sample size (N)=226.

Instrument

Like many cross-sectional studies, we adapted all scale items from prior research, and the instrument was pretested with 15 teacher-student dyads. We asked subjects to indicate their agreement/disagreement with the series of items given using a five-point Likert-type scale ranging from 1 (totally disagree) to 5 (totally agree). To measure teachers' work passion and students' passion, we borrowed 14 items relating to each from Gilal et al. Similarly, we adapted 15 items relating to emotional contagion from Cohen et al, Doherty, and Gilal et al. The Cronbach's alpha for a teacher's work passion, a student's passion, and emotional contagion scales were 0.954, 0.935, and 0.983 respectively.

Results

Exploratory factor analysis (EFA)

Before testing the measurement and hypothesized model, we ran EFA using the principal axis factoring method and varimax rotation on three variables (i.e., teacher's work passion, emotional contagion, and student's work passion) to extract the dimensions underlying each construct. The EFA results yielded a three-factor solution explaining 76.341% of the total variance; however, four items of teacher's work passion (i.e., TWP1, TWP3, TWP13, and TWP14), eight items of emotional contagion (i.e., EC5, CE6, EC7, EC8, EC9, EC10, EC13, EC14), and six items of student's work passion (i.e., SWP5, SWP10, SWP11, SWP12, SWP13, SWP14) were not applicable in the present research context because of a factor score of below 0.40. Thus, we dropped them from the analysis. Our EFA findings further reveal that Bartlett's test equals 6267.074: $p<0.001$ and that the Kaiser-Meyer-Olkin (KMO) value was greater than the required threshold of 0.6 (KMO =0.955). Hence, it is considered a good fit Table 2 shows the detailed EFA results.

Table 2

Factor loadings of exploratory factor analysis for the 3-factor model

Items	Teacher's Work Passion	Emotional Contagion	Student's Work Passion
TWP8	0.829		
TWP6	0.827		
TWP9	0.827		
TWP5	0.809		

TWP11	0.803		
TWP4	0.802		
TWP7	0.784		
TWP2	0.782		
TWP12	0.780		
TWP10	0.746		
EC11		0.861	
EC12		0.858	
EC3		0.846	
EC4		0.839	
EC2		0.839	
EC15		0.811	
EC1		0.810	
SWP8			0.872
SWP6			0.832
SWP7			0.807
SWP4			0.804
SWP3			0.799
SWP1			0.759
SWP2			0.746
SWP9			0.702
Eigenvalue	13.075	4.033	1.977
% of Variance	52.300	16.133	7.909
Cumulative % of Variance	52.300	68.432	76.341

Notes: K-M-O Measure of sampling adequacy =0.955; Bartlett's Test of Sphericity =6267.074: $p<0.001$.

Abbreviations: TWP, teacher's work passion; EC, emotional contagion; SWP, student's work passion.

Convergent validity

After the EFA analysis, we conducted a CFA in AMOS 24.0 to test the convergent validity. Our results suggest that the composite reliability (CR) for teacher's work passion (=0.955), emotional contagion (=0.983), and student's passion (=0.936) meet the recommended threshold. Likewise, the average variance extracted (AVE) for teacher's work passion (=0.679), emotional contagion (=0.891), and student's passion (=0.645) were also above the recommended threshold value. Thus, the findings displayed in Table 3 confirm the convergent validity of the measurement instruments.

Table 3

Reliability and validity

Dimension	Item	Standardized Factor Loading	Squared Multiple Correlations	α	CR	AVE
Teacher's Work Passion	TWP8	0.838	0.702	0.954	0.955	0.679
	TWP6	0.833	0.693			
	TWP9	0.886	0.785			
	TWP5	0.889	0.791			
	TWP11	0.832	0.693			
	TWP4	0.799	0.639			

	TWP7	0.857	0.735			
	TWP2	0.793	0.630			
	TWP5	0.755	0.571			
TWP10	0.744	0.554				
Emotional Contagion	EC11	0.949	0.900	0.983	0.983	0.891
	EC12	0.966	0.934			
	EC3	0.963	0.927			
	EC4	0.947	0.898			
	EC2	0.955	0.911			
	EC15	0.925	0.856			
EC1	0.899	0.808				
Student's Work Passion	SWP8	0.865	0.748	0.935	0.936	0.645
	SWP6	0.824	0.678			
	SWP7	0.786	0.618			
	SWP4	0.809	0.655			
	SWP3	0.806	0.650			
	SWP1	0.796	0.633			
	SWP2	0.795	0.631			
SWP9	0.742	0.550				

Abbreviations: TWP, teacher's work passion; EC, emotional contagion; SWP, student's work passion.

Discriminant validity

The discriminant validity was examined by comparing a three-factor model (Model^{A}) with a two-factor model (Model^{B}) and a one-factor model (Model^{C}). Our findings demonstrate that the three-factor model (Model^{A}), which comprised

ten items of teacher's work passion, seven items of emotional contagion, and eight items of student's work passion, revealed excellent goodness-of-fit values [χ^2 (25)=1.892; CFI=0.961; NFI=0.921; TLI=0.957; GFI=0.846; SRMR=0.053; RMSEA=0.063] compared to the other nested models, suggesting that the subjects distinguish all variables under study. Table 4 provides more detailed results.

Table 4

Discriminant validity

Model	Factor Loaded	X^2/df	CFI	NFI	TLI	GFI	SRMR	RMSEA
A	Three Factor	1.892	0.961	0.921	0.957	0.846	0.053	0.063
B	Two Factor	6.232	0.770	0.739	0.748	0.442	0.175	0.152
C	One Factor	9.254	0.636	0.61	0.603	0.346	0.229	0.192

Bivariate correlation

The results displayed in Table 5 show that teacher's work passion relates significantly to emotional contagion (r=0.629**) and student's work passion (r=0.352**). Likewise, correlation analysis has further revealed that emotional contagion relates significantly to the student's work passion (r=0.586**). In summation, these results fully support a significant positive association between a teacher's work passion and a student's work passion.

Table 5

Descriptive statistics and bivariate correlations

Variables	Mean	SD	Teacher's work passion	Emotional Contagion	Student's work passion
Teacher's work passion	4.347	0.96	1		
Emotional Contagion	4.273	0.94	0.629**	1	
Student's work passion	4.291	0.95	0.352**	0.586**	1

Note: **P<0.01.

Abbreviations: M, mean; SD, standard deviation.

Mediating effect: emotional contagion

The mediation of emotional contagion on the link between a teacher's work passion and a student's work passion was examined using SPSS 24.0. Model[A] in Table 6 suggests that the teacher's work passion has a statistically significant impact on the student's work passion (β=0.352***). Therefore H1 is supported by our data.

Table 6

Regression results for testing mediating of emotional contagion

Variables	Model A (Dependent variable: SWP)	Model B (Dependent variable: EC)	Model C (Dependent variable: SWP)
Constant	2.772***	1.581***	1.814***
TWP	0.352***	0.629***	−0.027^{ns}
EC	–	-	0.602***
F	31.745	146.635	58.333
R^2	0.124	0.396	0.343

Notes: Level of significance: ***p < 0.001.

Abbreviations: TWP, teacher's work passion; EC, emotional contagion; SWP, student's work passion; ns, non-significant.

In a similar vein, after we added emotional contagion into the regression models (Model^B & Model^C), the impact of the teacher's work passion on the student's passion was found to be statistically insignificant (β=−0.027, P=ns). Furthermore, Model^C revealed the strong positive influence of emotional contagion on student's passion (β=0.602***), which supports H2. Thus, it is concluded that emotional contagion completely mediates the association between a teacher's work passion and a student's work passion.

Moderating effect: teacher's education

Our Hypothesis 3, relating to the interaction effect of a teacher's education on the association between the teacher's work passion and the student's work passion via emotional contagion, was examined using the procedure suggested by

Hayes. Consistent with the hypothesis, our data revealed a statistically significant interaction effect of teacher's work passion and teacher's education on emotional contagion (β=0.453***). To further examine to what degree the transference of work passion from teachers to students via emotional contagion is relevant in teachers whose education is non-PhD compared to those who hold a PhD, we plotted the interaction effect as suggested by Aiken, West, & Reno. Our findings show that the impact of a teacher's work passion on emotional contagion is more prominent when the teacher's education is at PhD level (β=0.760***p<0.001: CI=0.641–0.878) than when it is at non-PhD level (β=0.307***p<0.001: CI=0.133–0.480). Table 7 displays detailed results.

Table 7

Results of moderation analysis

Predictor	**Beta Coefficient**	**t-value**	***p*-value**	**f**	**R^2**	
TWP	0.587	11.689	0.000	58.658	0.442	
Education	0.107	1.084	0.279			
TWP x Teacher's Education	0.453	4.239	0.000			
Teacher's education	**Conditional Effect**	**SE**	**t-value**	***p*-value**	**LLCI**	**ULCI**
Non-PhD Faculty	0.307	0.088	3.475	0.001	0.133	0.480
PhD Faculty	0.760	0.060	12.59	0.000	0.641	0.878

Abbreviations: TWP, teacher's work passion; LLCI, lower limit confidence interval; ULCI, upper limit confidence interval.

Discussion

The present study provides additional evidence with respect to passion research by testing a moderated mediation model of work passion transference from teachers to students under the theoretical lenses of crossover theory and emotional contagion theory. In particular, the present study makes three noteworthy contributions to management and education research. First, this study contributes to a growing body of passion literature by exploring whether a teacher's work passion can be translated into a student's passion. Second, our study contributes to an investigation of whether emotional contagion facilitates the transference of work passion from teachers to students – that is, whether emotional contagion plays a mediating role to facilitate the transference of passion in a higher education setting. Third, the present study provides additional evidence by examining whether the teacher's education (i.e., non-PhD. vs. PhD.) moderates the mediation effect of emotional contagion on the relationship between a teacher's work passion and a student's passion.

Consistent with our expectations, the findings relating to H1 supported a significantly positive relationship between a teacher's work passion and a student's passion in an educational setting. This can be attributed to the fact that, just as children receive brand preferences from their parents, students may also learn the work-related behavior of trusted teachers. The finding observed in this study mirrors those of prior studies that have examined the transmission of brand passion from parents to children, from leaders to employees, and from entrepreneurs to employees.

Likewise, our findings regarding the indirect influence of emotional contagion on the relationship between a teacher's work passion and a student's passion suggest

that, after adding emotional contagion as mediating variable in the model, the influence of a teacher's work passion on a student's passion is statistically insignificant, indicating that emotional contagion completely mediates the association between a teacher's work passion and a student's passion. This can be put down to the fact that individual behavior can be strengthened by other people's modeling of behavior. Our data support this theory and suggests that a teacher's work passion can be translated into a student's passion when students emulate or mimic the working behavior of their favorite teachers (i.e., emotional contagion). Therefore, a teacher can serve as a role model by showing his/her genuine interest and enjoyment in teaching and research.

Finally, our results relating to the moderating factor of a teacher's education (i.e., non-PhD vs. PhD) reveal that the effect of a teacher's work passion on emotional contagion is dependent on the teacher's education level. Specifically, our findings suggest that the effect of a teacher's work passion on a student's passion is more important when the teacher's education is at the PhD level than when it is at the non-PhD level. This could be because students are inspired by highly educated faculty members, as they have a more substantive knowledge of the subject and experiences that ultimately inspire students to work with the same passion as their teachers. The present findings seem to be consistent with those of other investigations that reported a considerable influence of teacher education on student achievements.

Recommendation of the study:

1. draw on crossover theory to explain the transference of work passion from teachers to students. Our research reveals that a teacher's work passion can be translated into their student's work passion.

2. contributes to an extension of the crossover theory framework by suggesting that, in the field of education, a teacher's work passion can be transferred to a student.
3. establish the validity of emotional contagion theory (ECT) in the area of education. ECT posits that one's behavior, attitude, and cognition can be transferred to others and that individuals tend to express/feel emotions that are similar to those of others. In line with this theoretical notion, the present research extends our understanding by linking a teacher's work passion to their student's via the mediation of emotional contagion in an education setting.
4. highlights that emotional contagion facilitates the transference of work passion from teachers to students.
5. understand the transference of work passion from teachers to students via emotional contagion, the moderating effect of the teacher's education (i.e., non-PhD. vs. PhD) was examined.
6. carried out on the influence of the teacher's gender, the teacher's age, and how the teacher dresses, no research was apparent that has explored the moderation of the teacher's education.
7. exploring the moderation of the teacher's education on the transferal of work passion from teachers to students.
8. established the importance of a teacher's work passion as a strategic tool in improving students' work passion. .

Suggestions for further researches

1- Replicating the present study on a larger sample that belongs to different governorates and universities inside Egypt.

2- A longitudinal study which will allow students ample time to adjust to this new method of instruction.

3- The effect of administering the proposed program to other skills needs to be assessed.

4- The effect of administering the proposed program to developing student's general ability.

5- Designing other programs for primary and preparatory stages and investigating their effectiveness on developing students' deep learning.

6- The gender attitudes of students towards learning and examining differences in attitudes needs to be measured.

7- Designing other programs for pre-university levels that aim at nourishing the value of tolerance in our students.

8- Designing other programs for developing students' responsibility, self-confidence, and community service.

9- Designing other programs for developing university students' critical thinking in general.

Conclusion

The present study was designed to examine work passion transference from teachers to students in the area of higher education. A systematic literature review suggested that an increasing number of researchers have emphasized how passion influences individuals' psychological states and positive work consequences. The present study tested a theoretical framework comprised of "Teacher's work passion" as the independent variable and "Teacher's education" (i.e., non-PhD vs. PhD) and "Emotional contagion" as moderating and mediating variables respectively, to capture the transference of work passion from teachers to students. Our data established that the transference of a teacher's work passion to a student via emotional contagion is more significant when the teacher's education is at PhD level than when it is at the non-PhD level. With this consideration in mind, the empirical findings in this study have opened a window of discussion and provided room for fascinating future research agendas.

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