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The impact of self-efficacy on performance (An empirical study on business faculty members in Jordanian universities)

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ABSTRACT

The study seeks to identify the impact of self-efficacy on the performance of faculty members, and, if there are any differences in the impact of self-efficacy on the performance of faculty members due to demographic factors (age, income, and academic rank). Self-efficacy has been studied in a unique, different way as it's linked with teaching in business schools using different variables collected from previous studies. The population of the study is considered to be full professors, associate professors, assistant professors, and master's degree holders who teach in business schools in different Jordanian public and private universities in Amman. Likert five point scale was applied in asking the questionnaire questions and measuring the study variables. Simple and Hierarchal Regression were used to find the impact of the independent and moderate variables on the dependent variable and the differences. The findings showed a good impact of self-efficacy on the performance of faculty members. Self-efficacy has proven to have a noticeable impact on how Jordanian academics perform in their teaching process in all the variables except for the emotional cues variable. The recommendation showed that academics have to be more self-efficacious so that they would enhance the interactional educational process, and have to be more organized, better interactions and build good rapport with students to improve the teaching performance, and to practice coping with difficulties such as stress and anxiety and not letting these emotional variables affect their teaching performance.

1. Introduction

Faculty members in any university represent the key facilitators of academic learning. Each university or college takes into consideration that it should hire an academic staff that possesses competencies in their performance that undoubtedly will be reflected on the students' learning and knowledge acquisition. The factor that its impact is going to be measured in this research is self-efficacy in an attempt to demonstrate the convergence of various variables that may constitute as predictors of the performance of faculty members.

The literature explaining the effects of self-efficacy on teaching performance is established on the grounds of the social cognitive theory (Bandura, 2001). Bandura (2001) concluded that the evidence across studies is consistent in showing that "perceived self-efficacy" contributes significantly to the level of motivation and performance accomplishments.

1.1. Statement of the problem

The problem of the week performance of some faculty members has been noticed by observation in the last period of time, in which in some universities we found out that some faculty members are better in teaching and delivering value to the students than others which is apparent in the students' rush to register and take a subject with a specific doctor or faculty member. An important factor affecting it is self-efficacy, which is the research topic. This study seeks to answer the following questions –

- What is the impact of self-efficacy on the performance of faculty members?
- Are there any differences in the impact of self-efficacy on the performance of faculty members due to demographic factors (age, income and academic rank)?

1.2. Purpose of the study

The purpose of this study is to identify the impact of self-efficacy

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on the performance of faculty members, and, if there are any differences in the impact of self-efficacy on the performance of faculty members due to demographic factors (age, income, and academic rank).

1.3. Importance of the study

This study will be valuable for managers and decision makers inside universities and educational institutions when they recruit and train their faculty members and to hire the best staff that would give the best outcome which will be absolutely apparent on the students' education and behavior. Students who care about their learning process want their teachers or professors to deliver the best value in the best way, and one of the most important factors for a faculty member to be productive is to possess a high level of self-efficacy which will be proven throughout this research (see Fig. 1).

1.4. Model of the study

1.5. Research hypotheses

Arising from the above statement of the problem and literature review, the following main and sub hypotheses were formulated.

HO1 **There is no statistical significant impact of Self-Efficacy on the Performance of Faculty Members**.

HO11 There is no statistical significant impact of Past Experience on the Performance of Faculty Members.
HO12 There is no statistical significant impact of Vicarious Experience on the Performance of Faculty Members.
HO13 There is no statistical significant impact of Verbal Persuasion on the Performance of Faculty Members.
HO14 There is no statistical significant impact of Emotional Cues on the Performance of Faculty Members.

HO2 **There are no differences in the statistical significant impact of Self-Efficacy on the Performance of Faculty Members due to demographic factors (Age, Income, and Academic Rank)**.

HO21 There are no differences in the statistical significant impact of Self-Efficacy on the Performance of Faculty Members due to demographic factor (Age).
HO22 There are no differences in the statistical significant impact of Self-Efficacy on the Performance of Faculty Members due to demographic factor (Income).
HO23 There are no differences in the statistical significant impact of Self-Efficacy on the Performance of Faculty Members due to demographic factor (Academic Rank).

1.6. Procedural definitions of terms

Past Experience is the academic's experience that raised him/her, wither its good or bad, it will make an effect on their current performance and on their way of delivering knowledge.

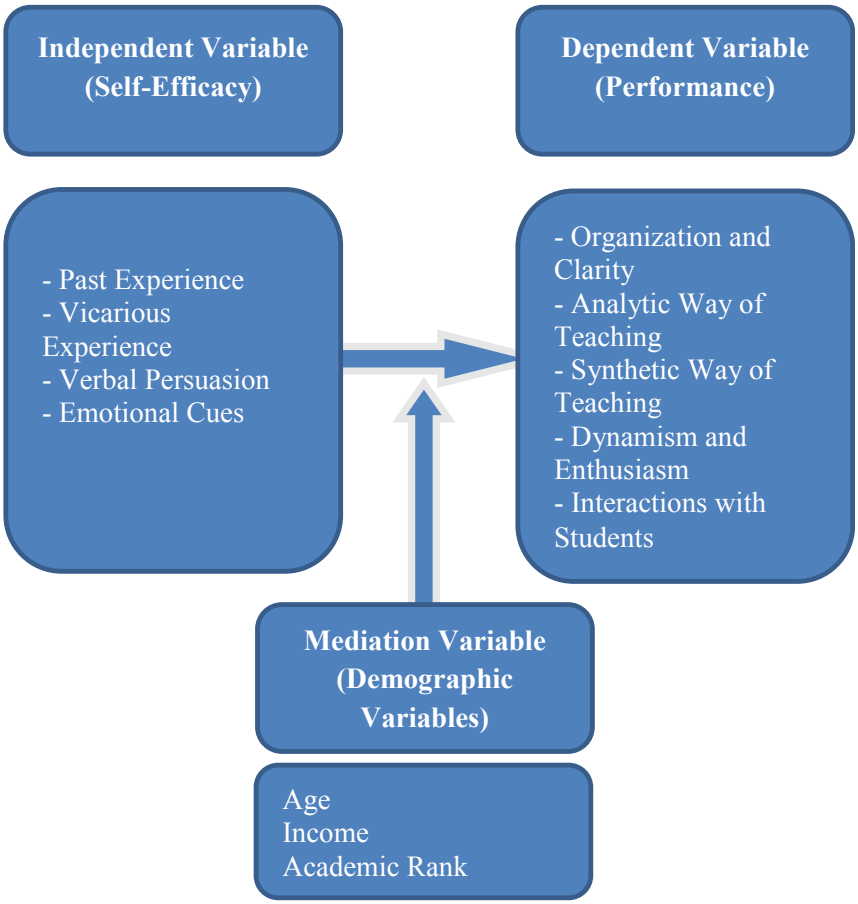

Fig. 1. Model of the study. The model is developed by the researchers based on combining the independent variable (self-efficacy) factors as taken from Bandura (2001) and the dependent variable (performance) is based on a scheme originally developed by M. Hildebrand, 1971.

Vicarious Experience is the experience that the academic gets when influenced or affected by other academics, such as when one sees another one succeed, he convince himself that he can succeed as well.

Verbal Persuasion is about having the ability to encourage or discourage a student, having the ability to convince him that he can achieve or to affect him negatively that he underestimates himself.

Emotional Cues this means the psychological states such as anger, anxiety, stress, depression, aches and pains (Bandura, 1977), that affect the performance of the academics either positively or negatively.

Organization and Clarity refers to how well the academic is organized in teaching, delivering knowledge, has good presentation skills, and if he makes the material easy to be understood.

Analytical way of teaching is where the student is responsible for the analysis of the material given to him by the academic while the *Synthetic* approach demonstrates the process of explaining the material step by step for the students.

Dynamism and Enthusiasm relates to the level of energy, excitement and joy that the academic shows to the students so that they like his lecture and the material.

Instructor–Group Interaction refers to the interaction between the instructor and group of students where the academic has to be confident and a good speaker.

Instructor–Individual Interaction refers to the direct interaction between the instructor and an individual student, for example when evaluating or giving advice about the student's performance.

2. Literature review

2.1. Self-efficacy

Albert Bandura (2001) was the first researcher to develop the concept of self-efficacy in an effort to understand and expect the human behavior. *Self-efficacy* is defined as a person's belief that she or he is capable of performing a particular task successfully (Bandura, 2001). Self-efficacy theories provide the basis for the motivation that a human possesses, his or her well-being, and personal accomplishment, because when people believe that they have the ability to achieve the results they desire, then they will gain more incentive to act or to insist on their actions in the face of difficulties and problems (Pajares, 2002).

According to the updates of Bandura's researches after on (2001), the main theory that self-efficacy theory was established on is the social cognitive theory, which views people as proactive agents in setting and organizing their actions, reasoning, motivation, and emotions" (Ede, Hwang, & Feltz, 2011). Within this social cognitive framework of human performance, self-efficacy plays an important role as the core facilitating factor for determining people's behaviors that are stimulated by their emotions such as happiness, sadness, arrogance, shame, etc. (Bandura, 2001). A strong sense of self-efficacy improves people's achievements and personal welfare; people who have high confidence in their capabilities advance to perform difficult tasks and perceive them as challenges to be accomplished perfectly rather than as threats to be avoided (Bandura, 2001).

Lunenburg (2011), has built his research on the belief that self-efficacy is defined as people's abilities to achieve specific tasks which also influences the tasks that they prefer to learn and the goals they set for themselves. In general, people tend more to learn and accomplish the tasks that they see themselves successful in, which leads to the fact that self-efficacy has a great effect on motivation, performance and learning (Lunenburg, 2011).

From the teaching perspective, teachers who possess high level of self-efficacy are better able to make perfect classroom environment, manage behaviors of their students, and apply more creative teaching techniques, (Olayiwola, 2011; Yeo, Ang, Chong, Huan, & Quek, 2008; Yilmaz, 2011). According to Ereño and Nunez (2014), teachers' competencies in the learning environment should be strongly taken into consideration; efficacy in student engagement, classroom management and good instructional strategies represented criteria for measuring the performance of good teachers. The study showed that self-efficacy and job performance have strong correlated relationship, in contrast with organizational commitment that didn't show any direct relationship with performance.

Bandura (2001), first developed four main sources of self-efficacy which were used in hundreds of self-efficacy studies until now; Past Performance (Mastery Experience), Vicarious Experience, Verbal Persuasion and Emotional Cues, which are the independent variables used in this study. Denham and Michael (1981) projected a model of teacher self-efficacy that hypothesized teacher efficacy as a link between teacher's effective teaching methods and students' achievements. Based on Bandura's studies, the model suggested that self-efficacy has two dimensions; **Efficacy Expectations**, which is defined as the teacher's confidence in following the most suitable behavior for the expected outcome successfully, And **Outcome Expectations**, which is defined as the estimation that a teacher's specific action will lead to definite results.

In a study conducted by Cherian and Jacob (2013), an adequate review about the previous studies of self-efficacy has proven to find that there is an impact of self-efficacy on the performance of people in the workplace. They found out that performance locus and complexity of the tasks play a vital role as well in affecting performance. Moreover, Lai and Chen (2012), studied how self-efficacy can positively affect job performance and job satisfaction, in which a person who possesses higher sense of self-efficacy can perform better than his colleagues.

In conformity with Bandura's sources of self-efficacy, Denham and Michael (1981), identified preceding conditions for self-efficacy including teaching experience (mastery experience), teacher training (vicarious experience), system variables such as personal tests, support and career ladders (social persuasion), and personal variables (emotional cues), they also stated that self-efficacy has specific effects on consequences such as professional teaching activities, professional retention, achievement outcomes, and innovation support. From Conklin's perspective (2008), another variables played important roles in the academician's sense of self-efficacy such as academic rank, age (or career age), institutional support, and departmental or interdisciplinary consensus.

2.2. Teachers/academics performance

From an educational perspective, self-efficacy can be investigated in terms of academics performance or learning outcomes, this is called the academic self-efficacy which depicts the instructor's confidence in their successful performance in academic teaching (Kuo, 2010).

Job performance is one of the most important constructs in organizational theory and human resource management. Academics and teachers' performance is an essential factor for getting the best possible outcome of students and for delivering information and knowledge accurately in a beneficial, most desirable way.

In university faculties, self-efficacy can be expressed as an instructor's confidence in performing specific sets of activities that encompass their main role functions of teaching and research (Conklin, 2008), in a study made on pharmacy college, (Conklin, 2008) stated that teaching and research self-efficacy are concepts

that have been initiated to impact productivity, so that teachers who have higher self-efficacy, have more confidence in their ability to work in research groups to brainstorm and to discuss research and teaching ideas with their colleagues, besides they have the ability to improve the low-performing students and to adjust their teaching techniques to the new learning styles.

According to Erdem and Demirel (2007), the effect of the academician on students and vice versa was measured and concluded that instructors who possess high degree of self-efficacy, perceive that they can master in their subjects better than their colleagues, they also believe they have more control towards the instructional techniques and resources they use while teaching, and can better identify the requirements that enhance their students' performance. Based on that, students whose teachers are highly efficacious tend to be more motivated and receptive in classes.

Larson (2010), indicated that specific organizational behaviors such as faculty cooperation, communication, leadership, and learning valuing are very important and valued qualities of the faculty that play a significant role in promoting its situation. Larson also denoted to the relationship between self-efficacy and learner satisfaction; it differs according to the level of education in universities; the undergraduate, the masters, and the doctorate levels. Statistically, stronger results were obtained from participants who were in the doctoral levels and this may be due more to the type of relationship between the academician and the learner noticed at the doctoral level, as opposed to the other levels, because there is a continuous mutual collaboration between the student and the supervisor throughout their program of study.

The dependent variables that are going to be measured in this study are based on Hildebrand (1971) approaches for measuring the performance of good teachers; (1) Analytic/Synthetic Approach; it relates to learning, analytical ability with emphasis on span, and conceptual understanding. (2) Organization/Clarity Approach; is about presentation skills, more subject-related than student-related, and not concerned only with verbal skills. (3) Instructor–Group Interaction Approach; considers the relationship with the class as a group, sensitivity to class response, and having skills in encouraging students' participation. (4) Instructor–Individual Student Interaction Approach; relates to mutual respect and rapport between the instructor and the individual student. (5) Dynamism/Enthusiasm Approach; relates to the contagious enthusiasm that comes with confidence, excitement for the subject, and pleasure in teaching.

Firebaugh and Harley (1995) noted that demographic variables such as age, gender, marital status, and educational qualifications have important effects on career commitment and stated that if an organization wants to succeed, it must always satisfy employees' desires to make them more committed to their work. Adio and Popoola (2010) revealed that demographic characteristics have a significant relationship with career commitment and a significant relationship between self-efficacy and career commitment, as well as between job satisfaction and career commitment in accordance with the findings of Meyer and Allen (1991).

Moreover, getting feedback from students and academic staff can be a very helpful tool in determining the current performance from different perspectives and may lead to enhancing it for reaching the desired performance. As per Kluger and DeNisi (1996) noted, feedback can result in improved performance, decreased performance, or no effect on performance, depending on the specific type of feedback provided.

2.3. Contribution of the study

Numerous studies about self-efficacy and its' influence on people's behaviors and relationships with others have been conducted before. This study is different from other studies conducted in terms of measuring the impact of independent variables (Past Experience, Vicarious Experience, Verbal persuasion and Emotional Cues) on dependent variables (Organization and Clarity, Analytic/Synthetic approach, Dynamism and Enthusiasm and Instructor–Group/Individual Interaction) that the researchers chose for the first time together. Most of the researchers have worked on Bandura's self-efficacy factors; Past Performance, Vicarious Experience, Verbal persuasion and Emotional Cues, but none of them linked these factors with the approaches of performance that the researchers used.

So it will serve as a contribution to the self-efficacy academic literature, and to look to the performance of academic members from a different perspective.

3. Methodology

3.1. Study population

The population of the study is considered to be full professors, associate professors, assistant professors, and master's degree holders who teach in business schools in different Jordanian public and private universities in Amman, which are: University of Jordan, Princess Sumaya University for Technology, Al-Ahliyya Amman University, Applied Science University, German Jordanian University, Petra University, Tafila Technical University, Balqaa Applied University, Hashemite University and Philadelphia University. They were cooperative with the researchers in filling out the questionnaire.

3.2. Study sample

The convenient sample that was used consisted of business faculty members in Jordanian universities in Jordan, according to (Sekaran & Bougie, 2009) the researchers distributed (384) questionnaires over the sample, the responses number was (248), two questionnaires were disregarded due to inaccurate answers, which means that (246) questionnaire only were used for statistical analysis which is (64%) of the total number of questionnaires.

3.3. Measurement scale and instruments

Likert five point scale was applied in asking the questionnaire and measuring the study variables which are organized as strongly disagree to strongly agree and which takes the weight of (1–5), questionnaires were distributed both manually and online using Google Drive Forms.

The current study used a different scale to measure the main variables (independent and dependent variables), scales used to measure the study constructs were drawn from the valuable literature, and are outlined in the following Table 1:

3.4. Validity of the study

The validity for the questionnaire was evaluated by four members of the marketing department from Jordanian universities, and some of the questions were modified or deleted.

3.5. Reliability of the study

The study reliability was calculated by using test pre-test method, in which the researcher applies the study tool on a sample of 25 faculty members of the sample, after three weeks the same sample was tested again, the stability degree was 92% by

Table 1
Supported literature for measurement scale.

Variables	Supported literature	Variable measurement
Independent variable		
Past Experience	Larson, L. (2010); Bandura, A (2001)	Measured by questions 1–8 In the questionnaire
Vicarious Experience	Bandura, A (2001)	Measured by questions 9–12 In the questionnaire
Verbal Persuasion	Conklin, M. (2008); Bandura, A (2001)	Measured by questions 13–22 In the questionnaire
Emotional Cues	Larson, L. (2010); Bandura, A (2001)	Measured by questions 23–27 In the questionnaire
Dependent variable		
Organization and Clarity	Conklin, M. H. (2008); Hildebrand, M. (1971).	Measured by questions 28–34 In the questionnaire
Analytical way of teaching	Hildebrand, M. (1971).	Measured by questions 35–36 In the questionnaire
Synthetic way of teaching	Hildebrand, M. (1971).	Measured by questions 37–38 In the questionnaire
Dynamism and enthusiasm	Conklin, M. H. (2008); Hildebrand, M. (1971).	Measured by questions 39–42 In the questionnaire
Interactions with students	Kuo, Y. (2010); Hildebrand, M. (1971).	Measured by questions 43–52 In the questionnaire

using stability test; Cronbach's alpha technique was used for this purpose, and it's value for all of the domains was (0.872), while the value for self-efficacy was (0.786), and the value for performance was (0.907) which is over than 60%, the acceptable value, as shown in Table 2:

3.6. Data analysis tools

A) **The tools used for describing and diagnosing the study variables**:
- **Frequency**: used to review the study sample answers.
- **Percentages**: shows the proportion of answers for a particular variant of the total answers.
- **Mean**: displays the average answers to a particular variable.
- **Standard Deviation**: shows the degree of dispersion of the answer from its' mean.

B) **Tools used to test the hypotheses**:
- **Simple Regression:** used to find the impact of the independent variable on the dependent variable.
- **Hierarchal Regression:** used to find the impact of the independent variable on the dependent variable, due to demographic factors.

4. Study results

4.1. Study sample characteristics

According to the demographic study variables, the following tables show the summary of the results:

Table 3 shows that the majority of the respondents' ages were between 25 and 45 years old.

Table 4 shows that 48.8% of the respondents get 1500–2000 JD as monthly income.

Table 5 shows that the majority of the respondents (51.2%) are ranked as Assistant Professors.

4.2. Description of study variables

The researchers computed the mean and standard deviation of the study independent and dependent variables as shown in Table 6 below:

Table 6 shows that the means for the study main domains were (4.0205) for self-efficacy and (4.229) for performance. The performance of faculty members got the highest mean (4.229) with a standard deviation of (0.43183), and for Self-Efficacy was (4.0205) and standard deviation (0.32682). This is based on the degree of agreement formula which shows that 3.67–≤5 is high, 2.34–≤3.66 is Moderate, and 2.33–≤1.00 is Low, in which both of them got a (high) degree of agreement.

The researchers also computed the means and standard deviations for the independent and dependent variables as shown in Tables 7 and 8 below:

From Table 7, the means for the variables ranged from (3.1) to (4.3) referring to a high degree of agreement for past experience, vicarious experience, and verbal persuasion, and moderate degree of agreement for emotional cues. The Past Experience variable got the highest mean (4.3) with standard deviation of (0.38320), and

Table 2
Reliability analysis for the study domains.

The domain	Cronbach's alpha
Over all Variables	0.872
Self-efficacy	0.786
Performance	0.907

Source: This table was developed by the researchers based on SPSS analysis.

Table 3
Demographic characteristics – Age.

Age	Frequency	Percent
25–<35 years	75	30.5
35–<45 years	75	30.5
45–<55 years	51	20.7
55–<65 years	39	15.9
65 and above years	6	2.4
Total	**246**	**100.0**

Table 4
Demographic characteristics – Income.

Income	Frequency	Percent
500–<1000 JD	12	4.9
1000–<1500 JD	39	15.9
1500–<2000 JD	120	48.8
2000–<2500 JD	39	15.9
2500–<3000 JD	12	4.9
3000 and above JD	24	9.8
Total	**246**	**100.0**

Table 5
Demographic characteristic – Academic rank.

Income	Frequency	Percent
Instructor	42	17.1
Assistant Professor	126	51.2
Associate Professor	48	19.5
Full Professor	30	12.2
Total	**246**	**100.0**

Table 6
Means and standard deviations for the study main domains.

Variable	Mean	Std. Deviation	Degree of agreement
Self-Efficacy	4.0205	0.32682	High
Performance	4.2296	0.43183	High

Source: This table was developed based on the SPSS analysis.

the Emotional Cues variable got the lowest mean (3.1) with a standard deviation of (0.61033).

Table 8 shows that the means for the dependent variables ranged from (3.3) to (4.4) referring to a high degree, in which the Organization & Clarity variable got the highest mean (4.4) with standard deviation of (0.46827), and the Analytic Way of Teaching variable got the lowest mean (3.3) with a standard deviation of (0.94717). The degree of agreement was high for all the variables except for Analytic Way of Teaching, it was moderate.

4.3. Testing the study hypotheses

The researchers tested the study hypotheses and answered the questions in light of the previously mentioned ones.

4.4. Testing the first main hypotheses

HO1 **There is no statistical significant impact of Self-Efficacy on the Performance of Faculty Members.**

To test this hypothesis the researchers made a simple linear regression to measure the impact, as shown in Table 9 below: after computing simple regression, the results show that the strength of the relation between the variables of self-efficacy and faculty members' performance in Jordanian universities was (B = 27.5%) while (R = 20.7%) and the coefficient of determination (R^2) showed that the explained difference percentage in the faculty members' performance because of the impact of self-efficacy in universities in Jordan is (0.043), which is acceptable percentage, which means that (4.3%) of the total differences in faculty members' performance in Jordanian universities is determined through self-efficacy variables. This indicates that regression is good explaining the impact of Self-Efficacy on Faculty Members' Performance.

The results of the simple regression analysis showed that there is statistical significant impact of Self-Efficacy on Faculty Members' Performance (B = 27.5%) and (R = 20.7%) at level of significance (0.001) which is less than 0.05. According to that, the researchers reject the null hypothesis and accept the alternative hypothesis which means that there is statistical significant impact of self-efficacy on the performance of faculty members.

HO11 **There is no statistical significant impact of Past Experience on the Performance of Faculty Members.**

To test this hypothesis, the researchers computed the simple linear regression, as shown in the following table: Simple regression was performed and the results in Table 10 show that the strength of the impact of past experience of self-efficacy on the performance of faculty members in Jordan was (B = 18.4%) while (R = 16.2%) and the coefficient of determination (R^2) shows that the explained difference percentage in the performance of faculty members because of the impact of past experience in educational universities in Jordan is (0.026), which is acceptable percentage, meaning that (2.6%) of the total differences in performance of faculty members for self-efficacy is determined through the past experience of faculty member in teaching. This indicates that regression is good explaining the impact of past experience on the performance.

The result of the simple regression analysis showed that there is a statistical significant impact of past experience on performance of faculty members (B = 18.4%) and (R = 16.2%) at level of significance (0.012) which is less than 0.05. Accordingly the researchers reject the null hypothesis and accept the alternative hypothesis which means that there is statistical significant impact of past experience on the performance of faculty members.

Table 7
Means and standard deviations for the independent variables.

Self-efficacy variables	Mean	Std. Deviation	Degree of agreement	Rank
Past Experience	4.3491	0.38320	High	1
Vicarious Experience	4.1402	0.059474	High	4
Verbal Persuasion	4.1451	0.47958	High	2
Emotional Cues	3.1427	0.61033	Moderate	3

Source: This table was developed based on the SPSS analysis.

HO12 **There is no statistical significant impact of Vicarious Experience on the Performance of Faculty Members.**

To test this hypothesis, the researchers computed the simple linear regression, as shown in the following table: Simple regression was performed and the results in Table 11 show that the strength of the impact of vicarious experience of self-efficacy on the performance of faculty members in Jordan was (B = 4.1%) while (R = 14.5%) and the coefficient of determination (R^2) shows that the explained difference percentage in the performance of faculty members because of the impact of vicarious experience in educational universities in Jordan is (0.021), which is acceptable percentage, meaning that (2.1%) of the total differences in performance of faculty members for self-efficacy is determined through the vicarious experience of faculty members in teaching. This indicates that regression is explaining the impact of vicarious experience on the performance of faculty members.

The result of the simple regression analysis showed also that there is an impact of vicarious experience on performance of faculty members (B = 4.1%) and (R = 14.5%) at level of significance (0.024) which is less than 0.05. Accordingly the researchers reject the null hypothesis and accept the alternative hypothesis which means that there is statistical significant impact of vicarious experience on the performance of faculty members.

HO13 **There is no statistical significant impact of Verbal Persuasion on the Performance of Faculty Members.**

To test this hypothesis, the researchers computed the simple linear regression, as shown in the following table: Simple regression was performed and the results in Table 12 show that the strength of the impact of verbal persuasion of self-efficacy on the performance of faculty members in Jordan was (B = 13.7%) while (R = 14.4%) and the coefficient of determination (R^2) shows that the explained difference percentage in the performance of faculty members because of the impact of verbal persuasion in educational universities in Jordan is (0.021), which is acceptable percentage, meaning that (2.1%) of the total differences in performance of faculty members for self-efficacy is determined through the verbal persuasion of faculty members in teaching. This indicates that regression is good explaining the impact of verbal persuasion on the performance of faculty members.

The result of the simple regression analysis showed that there is positive impact of verbal persuasion on performance of faculty members (B = 13.7%) and (R = 14.4%) at level of significance (0.025). Accordingly the researchers reject the null hypothesis and

Table 8
Means and standard deviations for the Dependent variables.

Performance Variables	Mean	Std. Deviation	Degree of agreement	Rank
Organization & Clarity	4.4125	0.46827	High	1
Analytic Way of Teaching	3.3313	0.94717	Moderate	5
Synthetic Way of Teaching	4.3563	0.50847	High	2
Dynamism & Enthusiasm	4.1344	0.59012	High	4
Interaction with Students	4.3325	0.46540	High	3

Source: This table was developed based on the SPSS analysis.

Table 9
The impact of self-efficacy on performance of faculty members.

Independent Variable	B	T	Sig.
Self-Efficacy	0.275	3.291	0.001

($R = 0.207$; $R^2 = 0.043$; $F = 10.831$); * significant level at $P \leq 0.05$.
Source: This table was developed based on the SPSS analysis.

Table 10
The impact of past experience on performance of faculty members.

Independent Variable	B	T	Sig.
Past Experience	0.184	2.542	0.012

($R = 0.162$; $R^2 = 0.026$; $F = 6.464$); * significant level at $P \leq 0.05$.
Source: This table was developed based on the SPSS analysis.

Table 11
The impact of vicarious experience on performance of faculty members.

Independent Variable	B	T	Sig.
Vicarious Experience	0.041	2.271	0.024

($R = 0.145$; $R^2 = 0.021$; $F = 5.157$); * significant level at $P \leq 0.05$.
Source: This table was developed based on the SPSS analysis.

Table 12
The impact of verbal persuasion on performance of faculty members.

Independent Variable	B	T	Sig.
Verbal Persuasion	0.137	2.258	0.025

($R = 0.144$; $R^2 = 0.021$; $F = 5.099$); * significant level at $P \leq 0.05$.
Source: This table was developed based on the SPSS analysis.

accept the alternative hypothesis which means that there is a statistical significant impact of verbal persuasion on the performance of faculty members.

HO14 **There is no statistical significant impact of Emotional Cues on the Performance of Faculty Members**.

To test this hypothesis, the researchers computed the simple linear regression, as shown in the following table: Simple regression was performed and the results in Table 13 show that the strength of the impact of emotional cues of self-efficacy on the performance of faculty members in Jordan was ($B = 5.5\%$) and ($R = 7.8\%$) and the coefficient of determination (R^2) shows that the explained difference percentage in the performance of faculty members because of the impact of emotional cues in educational universities in Jordan is (0.006), which is not acceptable percentage, meaning that (0.6%) of the total differences in performance of faculty members for self-efficacy is determined through the emotional cues of faculty members in teaching. This indicates that regression is not good explaining the impact of emotional cues on the performance of faculty members.

Table 13
The impact of emotional cues on performance of faculty members.

Independent Variable	B	T	Sig.
Emotional Cues	0.055	1.210	0.228

($R = 0.078$; $R^2 = 0.006$; $F = 1.463$); * significant level at $P \leq 0.05$.
Source: This table was developed based on the SPSS analysis.

The result of the simple regression analysis showed that there is positive impact of emotional cues on performance of faculty members ($B = 5.5\%$) while ($R = 7.8\%$) at level of significance (0.228). Accordingly the researchers accept the null hypothesis and reject the alternative hypothesis which means that there is no statistical significant impact of emotional cues on the performance of faculty members.

HO2 **There are no differences in the Performance of Faculty Members due to demographic factors (Age, Income, and Academic Rank)**.

HO21 **There are no differences in the statistical significant impact of Self-Efficacy on the Performance of Faculty Members due to demographic factor (Age)**.

To test this hypothesis the researchers made a hierarchal regression to measure the impact of self-efficacy on faculty members' performance due to age. The results of the hierarchal regression analysis showed that there is statistical significant impact of self-efficacy on faculty members' performance due to Age at level of significance (0.007), according to that, the researchers reject the null hypothesis and accept the alternative hypothesis, so there are differences in the statistical significant impact of self-efficacy on the performance of faculty members due to the demographic factor (Age) (Table 14).

HO22 **There are no differences in the statistical significant impact of Self-Efficacy on the Performance of Faculty Members due to demographic factor (Income)**.

To test this hypothesis the researchers made a hierarchal regression to measure the impact, of self-efficacy on faculty members' performance due to Income. The results of the hierarchal regression analysis showed that there is no statistical significant impact of self-efficacy on faculty members' performance due to Income at level of significance (0.329). According to that, the

Table 14
The impact of self-efficacy on performance of faculty members due to age.

Demographic Variable	Sig.*
Age	0.007

* Significant level at $P \leq 0.05$.
Source: This table was developed based on the SPSS analysis.

researchers accept the null hypothesis and reject the alternative hypothesis, so there are no differences in the statistical significant impact of self-efficacy on faculty members' performance due to the demographic factor (Income) (Table 15).

HO23 **There are no differences in the statistical significant impact of Self-Efficacy on the Performance of Faculty Members due to demographic factor (Academic Rank).**

To test this hypothesis the researchers made a hierarchal regression to measure the impact of self-efficacy on faculty members' performance due to Academic Rank. The results of the hierarchal regression analysis showed that there is no statistical significant impact of self-efficacy on faculty members' performance due to academic rank at level of significance (0.881), According to that, the researchers accept the null hypothesis and reject the alternative hypothesis, so there are no differences in the statistical significant impact of self-efficacy on the performance of faculty members due to the demographic factor (Academic Rank) (Table 16).

Table 16
The impact of self-efficacy on performance of faculty members due to academic rank.

Demographic Variable	Sig.*
Academic Rank	0.881

* Significant level at $P \leq 0.05$.
Source: This table was developed based on the SPSS analysis.

5. Study results & recommendations

5.1. Results discussion

This section includes the discussion of the previous results and recommendations for further researches, from the researchers' point of view and according to the study results that showed a good impact of self-efficacy on the performance of faculty members. Self-efficacy has proven to have a noticeable impact on how Jordanian academics perform in their teaching process in all the variables except for the emotional cues variable. As mentioned earlier, Hynes (2011) stated that instructors who have high level of Self-efficacy, believe that they can perform better than their colleagues in teaching and interacting with the students.

The support for the results is the information that the researchers collected and used in the earlier sections. The researchers chose a group of Jordanian universities in different cities in Jordan to collect data about the academics there. This study collected demographic information which are age, income level, and academic rank. As a summary, it showed that 61% of the respondents are between 25 and 45 years old, and that 48.8% of the respondents take 1500–2000 JD as a monthly income and showed that 51.2% which is approximately half of the sample are Assistant Professors.

Based on the study, the independent variable 'self-efficacy' has four dimensions which are: past experience, vicarious experience, verbal persuasion and emotional cues. The variable 'past experience' got the highest rank with a mean of (4.3491) because Jordanian academics feel that their previous experience in teaching is the strongest reason for improving their teaching performance and possessing a good level of self-efficacy. Then 'verbal persuasion' is considered to be the second ranked variable with a mean of (4.1451), because of having the ability to impact and control students' behaviors. After that the 'vicarious experience' variable takes the third rank with a mean of (4.1402) which means that academics can get experience and succeed when comparing themselves with other successful colleagues, and 'emotional cues' got the lowest rank with a mean of (3.1427) which means that academics consider emotional states such as anger and depression as influences for self-efficacy.

Table 15
The impact of self-efficacy on performance of faculty members due to income.

Demographic Variable	Sig.*
Income	0.329

* Significant level at $P \leq 0.05$.
Source: This table was developed based on the SPSS analysis.

The dependent variable 'performance' has five dimensions which are: organization & clarity, analytic way of teaching, synthetic way of teaching, dynamism & enthusiasm, and interaction with students. The variable 'organization & clarity' got the highest rank with a mean of (4.4125) because Jordanian academics believe that the organized way in teaching is the most important in delivering the best value to students. Then 'synthetic way of teaching' got the second rank with a mean of (4.3563) to emphasize that most of the university academics follow step-by-step approach in teaching. After that 'interaction with students' got the third rank with a mean of (4.3325) to demonstrate the importance of having confidence to interact and cooperate with students either as groups or individuals. Then 'dynamism & enthusiasm' variable got the fourth rank with a mean of (4.1344) which means that there should be sense of excitement and change from routine in teaching during the lecture, and 'Analytic way of teaching' got the lowest rank with a mean of (3.3313) which means that giving the responsibility for students to partially manage the learning process and search for information to learn is not well used by Jordanian academics.

The moderate variables (demographic variables) which are age, income and academic rank were tested to measure if there are differences in the statistical significant impact of self-efficacy on the performance of faculty members due to each demographic factor (age, income and academic rank) and concluded that age is the only factor that observes differences in the significant impact of self-efficacy on the performance of faculty members while income and academic rank didn't show any differences.

As mentioned previously, this study has a good contribution to the field as it links Bandura's dimensions of self-efficacy (2001); Past Experience, Vicarious Experience, Verbal Persuasion and Emotional Cues with Hildebrand's performance variables (1971); Organization and Clarity, Analytic Way of Teaching, Synthetic Way of Teaching, Dynamism and Enthusiasm and Interactions with Students in which these dimensions demonstrate the practical way of teaching in order to get concrete results.

The study results showed that there is a statistical significant impact according to the linear regression of self-efficacy on the performance of faculty members similar to the study of Ereño and Nunez (2014) that highlighted that self-efficacy has an observable impact on the performance of teachers. Also, this study showed that there is an impact of the three of the dimensions of self-efficacy (past experience, vicarious experience, and verbal persuasion) on the performance of faculty members. These are similar to the study of Lunenburg (2011) except for Emotional Cues that didn't show an impact on the performance of faculty members. Adio and Popoola (2010) showed that some demographic variables such as gender and age have a significant relationship with career commitment that has also a significant relationship with self-efficacy, which is somehow different to what the researchers of this study concluded, that some demographic variables showed differences in the statistical significant impact of self-efficacy on the performance of faculty members due to Age, and that Income

and Academic Rank didn't show any statistical significant impact.

When focusing on self-efficacy in the workplace, self-efficacy plays a vital role on affecting performance, as the researchers found out that self-efficacy influences faculty members' performance, similar to the findings of Cherian and Jacob (2013), and Lai and Chen (2012), they added that self-efficacy alone cannot be the determinant of the performance, factors such as locus, tasks complexity and effort can also positively affect their performance. As it's shown by the researchers from the previous results, three of the dimensions of self-efficacy which are: past experience, vicarious experience, and verbal persuasion affect the performance of faculty members, while emotional cues dimension didn't show a significant impact on it using a simple linear regression SPSS analysis. From the researchers point of view and according to the statistical data used in the research paper, the past experience dimension is the most important and influential dimension, first of all, because people's experience is very important in enhancing their skills, developing their personalities and making them more able to deal with conflicts and cope with changes which they face in their academic career. The second main hypothesis which measured the differences in the statistical significant impact of self-efficacy on the performance of faculty members due to the demographic factors (Age, Income and Academic Rank), concluded that age is the only factor that showed differences and income and academic rank didn't show any significant differences in the impact of self-efficacy on the performance of the faculty members.

5.2. Recommendations

1. The researchers suggest encouraging spreading awareness that academics have to be more self-efficacious so that they would enhance the interactional educational process.
2. The researchers suggest that academics have to be more organized, have better interactions and build good rapport with students to improve the teaching performance.
3. The researchers suggest academics to practice coping with difficulties such as stress and anxiety and not letting these emotional variables affect their teaching performance.

5.3. Recommendations for future research

Based on the conclusions and findings of the research, the following recommendations are made in order to give ideas for future researches for self-efficacy domain specifically in Jordan, further researches can be conducted to measure emotional cues that was the only factor that got no impact on the performance of faculty members or to measure the other self-efficacy variables which are; past experience, verbal persuasion and vicarious experience that was observed to have an impact on the performance again in other sectors such as private business sector or NGO sector, to find out if self-efficacy variables may impact differently according to the sector that people work in.

Appendix 1

Questionnaire

The impact of self-efficacy on the performance of faculty members' questionnaire

We assume that self-efficacy has a direct or indirect impact on the performance and productivity of faculty members of Jordanian universities. Through this questionnaire, we are aiming to find out if we can approve our hypotheses or the opposite of them, and to get recommendations for future research. We appreciate your concern and time to fill out this questionnaire. It should take around 15–20 min.

Your answers are completely confidential so be as frank as you wish. Please indicate the most suitable answer that fits you the most. Do not sign your name; we do not wish to know who you are. The answers will be combined into groups for reporting purposes.

Demographic Questionnaire

A. **Age**
- 25–<35 years old
- 35–<45 years old
- 45–<55 years old
- 55–<65 years old
- 65–<75 years old
- 75 years and above.

B. **Income Level**
- 500–<1000 JD
- 1000–< 1500 JD
- 1500–<2000 JD
- 2000–<2500 JD
- 2500–<3000 JD
- 3000 and More

C. **Academic Rank**
- Instructor or Lecturer (Master's degree holder)
- Assistant Professor
- Associate professor
- Full Professor

Self-Efficacy Questionnaire.

Past performance	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I can identify how my Academic cultural background have influenced the way I think					
2. I can identify how my experience has influenced the way I think					
3. My academic experience has helped me to increase my self-confidence.					
4. My academic experience has improved my teaching style.					
5. My experience has helped me to teach conflict resolution skills.					
6. My experience has helped me to manage unexpected problems.					
7. Every year of teaching, I learn something new and improve delivering value to students.					
8. My resourcefulness allows me to handle unforeseen Situations.					
Vicarious Experience					
9. I accept the fact that some faculty members would be better than me in teaching.					

(continued on next page)

(*continued*)

Past performance	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
10. Usually when I see successful faculty members, I convince myself that I can be like them.					
11. I would never be affected by a failure of any of my colleagues.					
12. I believe in the quote "if they can do it, I can do it".					
Verbal Persuasion					
13. I have the ability to encourage my students to raise their achievements.					
14. I have the ability to encourage my students to increase their self- esteem.					
15. I have the ability to encourage my students to behave properly.; I would punish him and make him underestimate himself.					
16. I have the ability to encourage my students to understand themselves.					
17. I can establish rapport with a student for individual counseling.					
18. I can get students to believe they can do well in my course.					
19. I can help my students to value learning.					
20. I can motivate students who show low interest in my course.					
21. I can improve the understanding of a student who faces difficulties in my course.					
22. I can foster student creativity.					
Emotional Cues					
23. When I'm angry or worried it quickly appears on my face.					
24. Whenever I feel stressed, I can't manage my tasks properly.					
25. Whenever I feel anxious, depressed, feeling down or hopeless my performance in the class decreases.					
26. When I feel aches or pains, trouble sleeping I can't attend and give a lecture.					
27. I can remain calm when facing difficulties because I can rely on my coping abilities.					
Organization and Clarity					
28. I set clear direction for my class.					
29. I communicate openly and honestly with my students.					
30. I provide an alternate explanation and example when students are confused.					
31. I adjust my teaching strategies to accommodate various student learning styles.					
32. I respond to difficult questions from my students.					
33. I adjust my teaching style to the proper level of my students.					
34. I employ a variety of effective student learning assessment strategies.					
Analytic way of teaching					
35. I give my students the learning material, then they have the responsibility of analyzing it.					
36. I follow the self-study approach with my students.					
Synthetic way of teaching					
37. I explain the material step by step to my students.					
38. I measure my students' comprehension of what I have taught them.					
Dynamism and Enthusiasm					
39. I try to use new encouraging learning ways to improve my students' performance.					
40. My class is lively, and there is a sense of enthusiasm.					
41. I can manage my class, where we can open exciting discussions.					
42. I can manage my class, where my students can play course related games.					
Interactions with Students					
43. I had numerous interactions with the students during class.					
44. I regularly post some questions for students to discuss on the discussion board.					
45. I reply on my students' questions in a timely fashion.					
46. I give enough feedback for my students when needed.					
47. I reply to my students' questions through different means such as email, discussion board, instant messaging tools, etc.					
48. I show respect for all learners.					
49. I acknowledge differences in learning styles.					
50. I give support to my students when and where needed.					
51. I treat people fairly, without favoritism.					
52. I support the learning environment, place a premium on collaboration, cooperation, and contributing to other's success.					

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