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## the impact of work feedback on work engagement: evidence from the jordanian faculty members

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**Abstract:** This study examined the impact of work feedback on work engagement of faculty members at Jordanian private universities. The increased turnover and burnout among Jordanian faculty members was the reason for examining such relationship. A quantitative correlational survey design research method was used to collect data from 112 faculty members who are currently employed at Jordanian private universities utilizing Job Demands-Resources (JD-R) model and Utrecht Work Engagement Scale (UWES-9) model. Descriptive statistics and correlational frequency were used to answer the research question related to the relationship between the job resources indicators of work feedback, and work engagement. Participants were Jordanian faculty members who are involved in classroom teaching and holders of masters or doctoral degrees. The P-Value was found at a significant level of .000 for each of work feedback on the level of work engagement of faculty members. It was found that by providing work feedback practitioners at Jordanian private universities might increase their faculty members' level of work engagement and decrease turnover and burnout. Future research recommendations made were to encourage researchers to explore ways that might assist university administrators on improving their techniques and skills related to work feedback to their faculty members.

**Keywords:** Feedback; Job Resources, Work Engagement, Jordanian Universities, JD-R, UWES-9

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### INTRODUCTION

Work engagement has become an increasingly important factor for success among employees in different industries (Altunel, Kocak, & Cankir, 2015). Faculty members of private Jordanian universities are in urgent need for improving their work conditions and increasing their commitment. Job resources are identified at very low level and that is causing serious issues for both faculty members and administrators of Jordanian private universities (Taqatqa, 2017). University leaders and administrators are lacking the skills and abilities to reduce work burnout and exhaustion among Jordanian faculty members (Al-Omari, 2008; Mah'd, 2014). That is causing to high turnover and low level of job satisfaction in the academic sector of Jordan. It has been recognized that private Jordanian universities do not provide the needed job resources for the faculty members. The current level of work engagement among faculty members is identified very low and causing both, faculty members and universities, considerable loss and dissatisfaction (Abu-Nair, 2015; Jaradat, 2013; Qudais, Al-Omari, & Smadi, 2009b). The lack of focus and understanding of the importance of work engagement may lead to increasing work stress, health problems, high turnover, low productivity, and negative work environment and culture (Altunel et al., 2015; Bakker & Demerouti, 2007; Clausen & Borg, 2011; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2003; Taqatqa, 2017). The problem of this study is the lack of knowledge related to the relationship between work feedback and work engagement among faculty members of private Jordanian universities.

Work feedback, on the other hand, is a kind of job resources which is required to increase employees' productivity and work satisfaction. Work related feedback is considered as essential when employees are exhausted due to poor management and low goal achievements (Bakker & Demerouti, 2007).

Work engagement in this study is a term that refers to faculty members' need for competence through learning from their superiors and receiving work performance related feedback (Bakker & Demerouti, 2007). Work engagement in this study is identified as an indicator of performance for faculty members that contributes to job satisfaction, work burnout, stress at work, turnover, and relationship between faculty members and management (Airila, Hakonen, Punakallio, Lusa, & Luukkonen, 2012; Bledow, Schmitt, Frese, & Kühnel, 2011).

The purpose of this quantitative correlational study is to examine the relationship between work feedback and work engagement among faculty members at Jordanian private universities. This relationship has not been

investigated or established and private Jordanian universities are in urgent need to identify the significance of such relationship (Al-Omari, 2008).

Work feedback is measured according to the Job-Demand Resources model developed by Bakker and Demerouti (2007) and includes three exploratory variables which are work feedback related to work objectives, work quality, and work results. Work engagement is measured in this study according to the Utrecht Work Engagement Scale (UWES) model by Schaufeli, Bakker, and Salanova (2006).

The goal of this study is to understand the impact of work feedback on work engagement. This impact may enhance work conditions of faculty members and increase their work engagement by providing the needed work feedback (Schaufeli & Bakker, 2003). By finding the relationship between work feedback and work engagement university leaders may reach to the proven fact that feedback is critical for their faculty members. Once university leaders improve their work feedback skills, turnover and dissatisfaction among faculty members may be reduced. It will also improve work environment and increase work efficiency in private Jordanian universities.

This study will answer the research question of "To what extent, if any, is work feedback related to work engagement of faculty members in Jordanian private universities?". The study is well structured by presenting an extensive literature review related to the topic then followed by conceptual framework, methodology, results, discussion and conclusion, and limitation and practical implications. To collect data, an online survey was established and distributed to 610 faculty members who are working in private Jordanian universities. The survey questionnaires are based on the model of JD-R to measure participants' work feedback and UWES model to measure their work engagement. The collected data was analyzed using SPSS 19 to conduct and validity reliability tests, data distribution normality, and simple regression analysis.

The study is unique because it is the first to investigate the impact of work feedback on work engagement of faculty members at Jordanian private universities. The study might contribute to the global models of the JD-R and UWES-9 and their practical implications in different countries. The intended benefit of the study is to establish grounds for improving work engagement and performance of faculty members in Jordanian private universities. An added advantage is to clarify to university leaders the importance of work feedback which might contribute to achieving their tasks and objectives related to faculty members' performance.

## **LITERATURE REVIEW**

### **Jordanian Faculty Members**

Al-Omari (2008) conducted a study to understand Jordanian faculty member's opinion about their university leader's ability to lead their universities in the higher education sector. The five dimensions of university leadership were used, which were international culture, strategic planning, human resources management, operation and structure, and learning. Most participants agreed on the importance of the learning dimension as the main factor that must be possessed by leaders of Jordanian universities (Al-Omari, 2008). University leaders must consider developing their universities with improving techniques to become competitive among other universities in the region (Al-Omari, 2008). The study was in agreement with the study of Zboon, Ahmad, and Zboon (2009), which found the importance of Jordanian university leaders to shift their thinking to building a knowledge economy among faculty members. In another study, Al-Omari (2007) investigated the decision-making ability of Jordanian faculty members. The formal and informal structure of academic departments was analyzed to find the need for academic leaders to provide more resources for support to their faculty members. Providing more support might lead to encouraging faculty members to participate in the decision making and increase their work engagement (Al-Omari, 2007).

According to Ihmeideh, Al-Omari, and Al-Dababneh (2010), Jordanian faculty members are facing difficulty when communicating with their students. The study collected data from both students and faculty members to evaluate the level of comfort when communication takes place between the two groups. The findings were indicative of the seniority level of students where students who spent more than two years in the university are a better communicator than junior ones when communicating with their faculty members (Ihmeideh et al., 2010). Student's grade point average (GPA) places significant emphasis on the effort of faculty members when communicating with students. Students with a GPA of more than two out of four are communicating better than others with faculty members in Jordanian universities.

According to Abu-Nair and Rahamneh (2011), Jordanian students may have different expectations from their faculty members when compared to students from other parts of the world. Jordanian students judge their faculty member's performance based on their characteristics and behaviors in the classroom. The emphasis on the importance of faculty member's behavior can be related to their level of work engagement and job satisfaction (Abu-Nair & Rahamneh, 2011). The findings are in agreement with Qablan et al.'s (2009) study, which indicated Jordanian faculty member's attitude in the classroom is in need for improvement to increase student's acceptance and academic performance. Since Jordanian students are subject to suffer from stress and dissatisfaction because of mistreatment by faculty members (Hamdan-Mansour, Puskar, & Bandak, 2009;

Hamdan-Mansour & Marmash, 2007; Jarrar, 2013a; Qaraeen, Al-Omari, & Abu-Tineh, 2007), it is important to improve faculty member's work engagement and satisfaction.

### **Work Feedback**

According to Feuerhahn, Bellingrath, and Kudielka (2013), a shortage of the needed job related feedback may lead to employee dissatisfaction and increase their absenteeism. The findings of their study show that lack of feedback can be a direct cause of emotional and health problems resulting from unmanaged pressures at work. Employee turnover rate and performance can be directly influenced by the availability of job resources and feedback needed to achieve their objectives. The study indicated employees who are not delivering their work objectives and targets are subject to depression, stress, and reduction of work engagement and strains (Feuerhahn et al., 2013). Clausen and Borg (2011) studied the impact of job demand and job feedback on employee's perception and meaning of work. The longitudinally designed study revealed feedback is accurate predictor of the work meaning to both individual and group employees (Clausen & Borg, 2011).

Altunel et al. (2015) connected the relationship between feedback and work engagement for academicians in Turkey to identify the impact of such job resource on the academicians work performance indicator of work engagement. A survey with a quantitative research design was conducted by collecting information from academicians from all cities of Turkey to reach the findings. Altunel et al. (2015) attempted to identify any causal relationship between the dependent variable of work engagement and the independent variables of job feedback.

The hypothesis of job feedback is positively related to work engagement was examined by Altunel et al. (2015). After conducting validity and reliability tests and constructing all collected data, it was concluded the job resource of feedback is directly related to work engagement as a work performance indicator (Altunel et al., 2015). The strength of this paper was its one-of-a-kind results where no previous research was conducted in the area of the relationship between job resources and work engagement of academicians in Turkey.

Mah'd (2014) examined the impact of job resource allocations in private universities in Jordan. The study is the only one found examined job resource impacts on faculty members of Jordanian educational institutions. The findings argued weak procedures are followed by private universities when providing resources and; in most cases; only non-academic staffs are involved in allocating resources for academic activities. The study was considered an indicator of urgency to further research in this area.

Based on the literature review conducted by Makikangas et al. (2010), the study found indicators of job resources are autonomy, performance feedback, social support, professional development, and coaching by the supervisor. The study found feedback has a direct and significant impact on workflow, and the lack of such job resource may result in a slower workflow. Exhaustion is an accurate predictor of the level of feedback and an indicator of the efficiency of workflow, which is in agreement with Bakker et al.'s (2007) study.

### **Job Demand Resources Model (JD-R)**

Demerouti et al. (2001) examined the impact of job demand and resources on employees' burnout and introduced the JD-R model. JD-R is based on the evidence that there is significant relationship between the provided job resources and employees' exhaustion and burnout. Bakker et al. (2003) introduced job resources as physical, psychological, social, or organizational resources. Job resources are work related situations where employees might react with physical, cognitive, or emotional expressions. The study found the JD-R model is associated with two sets of working condition, which are used when employees are exhausted due to assigning poorly designed jobs, when employees do not achieve goals threaten by low personal growth and development, and job demand is reduced due to lack of resources or presence of adequate job resources. Bakker et al. (2003) examined several hypotheses, but the main one was that job resources might lead to employee involvement and turnover. The strength of this finding is its agreement with Schaufeli et al. (2001), which related a positive correlation between job resources and job satisfaction. On the other hand, Clausen, Borg, and Burr (2014) conducted a study to investigate the impact of job demands on sickness leave by employees. After surveying more than 39,000 employees, they found if leadership within the organization is at low quality, job demand will affect long sickness leaves and staff requests for leaves will increase.

Bakker and Demerouti (2007) expanded the Burnout model to assume securing employee well-being, job demand, and job resources are the three factors may apply to all professions to examine employee exhaustion. According to the JD-R theory (Bakker & Demerouti, 2007; Demerouti et al., 2001), job resources are crucial for employee motivation and to enable them to cope with the job demands, increase their learning, and improve self and professional development. Moreover, the JD-R theory argued providing the needed feedback for employees might assist them in achieving their work related targets and goals and encourages employees to work meaningfully and feel responsible for work performance and outcomes. Overall, the JD-R model assumes the availability of feedback is crucial for employee's motivation, well-being, and performance. In 2014, Bakker and Demerouti improved JD-R model to consist four main variables which are autonomy, coaching, feedback, and personal development. Each variable have several indicators to measure its availability. Feedback is measures

through asking employees three questions. The three questions are “I receive sufficient information about my work objectives”, “My job offers me opportunities to find out how well I do my work”, and “I receive sufficient information about the results of my work”.

To measure job resources for a call center employees, Bakker et al. (2003) examined performance feedback, and time control. The study used the JD-R model to test the relationship between feedback and employee’s turnover and absenteeism. The study found employees who receive performance feedback, support from their colleagues, and social support are more dedicated to their work and organization.

Ryosho (2010) wrote a dissertation about the effect of feedback on job satisfaction for certified nursing assistants. The JD-R Model was used as the conceptual framework for the thesis. Multiple regression analysis was used to determine how feedback predicts job satisfaction for nursing assistants. Next, logistic regression was employed to identify the impact of such predictions on nursing assistant’s work behavior. Another binary regression was conducted to examine the effect of job satisfaction on turnover and work search behavior. The study found feedback, job resources of positive work climate, self-advancement, social support, and positive interaction are significant indicators of job satisfaction. As for work turnover and search behavior, it was found the level of job satisfaction is a strong indicator of turnover and work search behavior. The strength of this dissertation is the uniqueness of its sampled population and the usefulness of such data to several social workers and administrators. The findings are aligned with previous researcher findings related to the impact of feedback on employee’s satisfaction. However, this dissertation used secondary data, which is less reliable than primary data. The researcher should have collected data, which is specific for this study to enhance its reliability and support the findings.

### **Work Engagement**

Schaufeli and Bakker (2003) argued work engagement is the opposite of burnout at work, and engaged employees are more capable of coping with their work demands. Therefore, there is a significant relationship between work engagement and work burnout. The literature review identified work engagement as a state of mind characterized by vigor, dedication, and absorption (Schaufeli et al., 2001). Vigor is characterized by the level of employee energy at work. Dedication occurs when employees are enthusiastic to be involved with work, and absorption is when employees are fully concentrating on their work.

Schaufeli and Bakker (2003) found several techniques to measure vigor, dedication, and absorption. For vigor, measurement occurred by asking questions related to energy at work, strength while working, interest to go to work, ability to work for a long time, mental resilience at work, and preservation at work. Dedication can be measured by asking questions related to finding work meaningful, enthusiasm to work, inspiration at work, the pride of what employees do at work, and level of accepting the challenge at work. Absorption can be measured by asking questions related to employee feelings of time at work, whether they feel the time is dragging at work, the level of focus on work, happiness at work, immersion at work, level of engagement in work tasks, and attachment to work.

### **Utrecht Work Engagement Scale (UWES)**

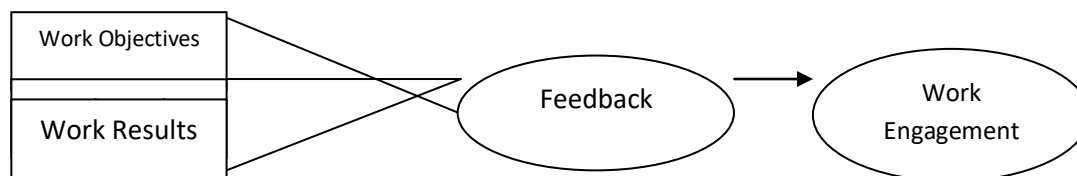
Schaufeli and Bakker (2003) introduced the UWES model to measure the level of work engagement among employees. The model consisted of 17 factors to measure the variables of vigor, dedication, and absorption. In 2006, the model was reduced to nine indicators and reintroduce as the UWES-9. The difference was by combining some factors together to measure the same variables of vigor, dedication, absorption Schaufeli et al (2006).

Rothmann and Jordaan (2006) examined the impact of job demand and job resources on work engagement of academicians in higher education institutes in South Africa. The study employed the Utrecht Work Engagement Scale (UWES) and the Job Demands-Resources Scale (JD-R). The result of the single and multiple regression analysis confirmed the three elements of job resources of growth opportunity, organizational support, and advancement predicted the work engagement of the academic staff in South Africa.

Yalabik et al. (2013) examined the role of work engagement in employee performance of commitment, job satisfaction, and outcome. The literature review related to work engagement and its impact and relationship to employee performance was presented. The study examined the role of work engagement on job satisfaction, employee performance, commitment, and intention to quit. The study employed the UWES scale to measure work engagement characterized by vigor, dedication, and absorption. To measure job satisfaction, Michigan Organizational Assessment Questionnaires were used to measure commitment by using the Allen and Meyer scale. Also, the questionnaires were used to measure intention to quit by using the Colarelli three-question scale. To analyze the data Yalabik et al. (2013) used a latent variable structure equation and chi-square test. The study found work engagement plays a mediator role and indicator of commitment, job performance, and intention to quit.

### Conceptual Framework

The literature review guided this study to employ the JD-R model developed by Bakker et al. (2003) and UWES-9 model of Schaufeli et al (2006) to investigate the impact of work feedback on work engagement of Jordanian faculty members. To measure feedback, three exploratory variables were used which are feedback of work objectives, work quality, and work results. The combined results of the three exploratory variables represent the level of work feedback received by participants. On the other hand, UWES-9 was used to measure the level of work engagement of participants. After identifying the level of work feedback and the level of work engagement, the relationship between the two variables was measured (Figure 1).



**Fig.1: Framework to test the relationship between feedback and work engagement for Jordanian faculty.**

### METHODOLOGY

This online survey was sent to Jordanian faculty members who are working in private universities in Jordan. The sample was systematic randomly selected from the Jordanian Ministry of Higher Education data base which consisted to total contact information of 824 faculty members. To assure systematic random selection, the invitation to participate in this study was sent to those who are listed in even numbers only. The participants' selection criteria were of those who hold a master's degree or higher, Jordanian nationals, and involved in teaching activities. Filtering questions were part of the first section of the survey to filter those who do not belong to the targeted population. To determine the minimum required sample size, Green (1991) formula of  $n > 50 + 8m$  was used to conclude to a minimum required sample size of 74 participants ( $n > 50 + 8(3) = 74$ ). The valid responses received, after filtering all responses, was a total of 112 valid responses.

The data collection instrument was an online survey that contained three sections. The first section contained five questions and was designed to collect demographic information and to filter participants according to the selection criteria. The second section contained three questions and employed the JR-D model of Bakker and Demerouti (2014) to measure the level of work feedback received by faculty members from their superiors. The third section contained the nine questions of UWES-9 model Schaufeli et al. (2006) to identify the level of work engagement among faculty member. The online survey was built on Survey Monkey website and the data was received as raw data in Excel sheet. The survey was sent by an email that contained link to the survey, information related to the study scope, consent, researcher's contact information, and privacy and ethical consideration. Once a participant agreed to participate in the survey by clicking on the link, the participant was redirected to Survey Monkey website link of the survey. All questions were written in both Arabic and English languages and answered using a 4-point Likert Scale ranging from "0" for "Strongly Disagree" to "3" for "Strongly Agree". The answers then were combines for each participant with factor loading analysis to measure the independent and dependent variables.

This research is a quantitative, correlational research design because it is the most appropriate design to identify the correlation between two variables (Muijs, 2010). The collected data was used to measure the level of work feedback received by faculty members and their level of work engagement. After identifying those levels, regression analysis was used to identify the relationship between the two variables (Babbie, 2010).

To assure internal validity of the impact of the independent variable (work feedback) on the dependent variable (work engagement), consistency of controlled variables of population and sample criteria and the questions of 4-point Likert Scale, which are based on proven ground theories of JD-R and UWES-9 models. To assure the consistency of external validity the study adopted systematic random selection of participants. The total population of Jordanian faculty members is estimated by the Jordanian Ministry of Higher Education at 824 faculty member and the entire population was provided the opportunity to participate in this study. Criterion validity was used in this study to assure measuring the predicted relationship between work feedback and work engagement (Litwin, 1995). The lowest considered coefficient  $\alpha$  of .60 was adopted as the lower acceptable limit (Aljbour, 2011) and factor loading was used with consistency level of .30 or higher assured internal consistency (Hair, Black, Babin, Anderson, & Tatham, 2006).

### **Reliability**

The survey instrument of this study contains questions to measure the same information from all participants at all the times. The consistency of data collection confirms the reliability of data, which in return, supports the validity of the research outcomes (Hinton, 1993).

The internal consistency reliability of data was tested using Cronbach's  $\alpha$ . Since the questions were provided to participants in one set format, Cronbach's  $\alpha$  was able to measure the consistency of participants' responses. The lower acceptable limit of Cronbach's  $\alpha$  for this study is .60 since this study is exploratory in nature and a result ranging between .60 and .92 can be acceptable (Hair et al., 2006). The large number of participants, random sampling, and a total number of questions in the survey reduced the chance of error related to internal reliability.

### **Data Collection**

The researcher created an English-language survey then translated a copy of the survey to the Arabic language. The outcome consisted of two identical surveys with a difference in the language used. The two surveys were posted online on one template. Participants had the choice to select the language that they prefer. The researcher used a third party company, Survey Monkey, to gather data and reported it to the researcher in one Excel spreadsheet that contained the responses to both languages surveys. The "Letter of Permission to use Site" to use Survey Monkey software for this research was obtained by contacting the Company and requesting their permission to use their software for this study.

The first page of the survey included Informed Consent content that explained to the participants the purpose of the study, reasons for participation, survey procedures, benefits of participating for respondents, risk of participation, costs of participation, contact information for the researcher, explanation of voluntary participation, assurance of confidentiality, and participant consent and agreement to participate. It was clearly stated that "By clicking on Start Survey you agree to the terms and conditions."

The researcher then stored the Excel spreadsheets in a password-protected file to assure security and confidentiality of the data. The data will be stored for five years, and the researcher will then destroy the data.

The dependent variable of work engagement was measured and considered as an indicator of faculty members' level of work engagement. Nine questions of work engagement according to the UWES-9 model developed by Schaufeli et al. (2006) were employed. The 4-point Likert scale indicated the level of work engagement with anchors from Strongly Disagree (0) to Strongly Agree (3).

After preparing the online survey and posting it online, the researcher started distributing the survey link to participants and invited them to participate in the survey. The following steps were followed to capture data in an organized manner:

Step 1: An invitation email was sent to 610 faculty members to invite them to participate in the survey. The invitation email contained an introduction to the research topic and a link that faculty members clicked on and redirected to the online survey.

Step 2: The introduction page of the survey included the Informed Consent content information to explain the privacy, confidentiality, and terms of participating in the survey. Participants had the option to complete the survey either in English or Arabic language by placing two links in the invitation email. The researcher is fluent in both Arabic and English languages, and a translator was not needed.

Step 3: When the participant clicked on the preferred link, he or she was directed to the list of questions, which consisted of three sections. All participants were directed to the same list of questions, which are standard for all faculty members.

Step 4: Participants started answering the questions in the same order where the first section of the survey collected demographic information of the participants, the second section measured work feedback through the JD-R model, and the third section collected data related to work engagement through the UWES-9 model.

Step 5: All questions were presented as closed-ended questions with a multiple choice answer option. Participants had the option to select only one choice from the multiple answers.

Step 6: When all answers were selected, the participant saved his or her answers by clicking on a link at the bottom of the questions list that is labeled "Submit Answers." Participants must answer all questions to be able to submit their answers. When the answers were submitted, the participants were redirected to a "thank you" and confirmation page.

Step 7: When a participant submitted his or her answers, the data was stored by Survey Monkey in a data sheet. The data sheet built up every time a participant submitted answers to form the total data sheet of all participants.

Step 8: Survey Monkey tracked the number of participants on a daily basis and reported the progress to the researcher.

Step 9: Since the total number of responses was more than the minimum required number of 74 by the 30<sup>th</sup> day, the researcher ended the survey.

Step 10: When the survey was closed, Survey Monkey reported the final data sheet to the researcher in an Excel spreadsheet.

Step 11: The researcher used the first part of the survey to filter participants and eliminated responses from those who did not comply with the inclusion criteria of the sampled population.

Step 12: The final list of qualified participants was then prepared for analysis by converting answers to appropriate numerical values.

### **Research Question and Hypotheses**

RQ1: To what extent, if any, is work feedback related to work engagement of faculty members in Jordanian private universities?

H<sub>01</sub>: Work feedback is not correlated to work engagement of faculty members in Jordanian private universities.

H<sub>02</sub>: Work feedback is correlated to work engagement of faculty members in Jordanian private universities.

### **Data Analysis**

After receiving the data from the online survey, it was prepared and formatted according to SPSS requirements. Data cleaning and preparation for analysis included coding responses, testing consistency, and filtering of each participant's response. For coding responses, since all 12 questions in the second and third section of the survey were answered in a 4-point Likert Scale ranging from "Strongly Disagree" to "Strongly Agree," answers of "Strongly Disagree" were coded (0), answers of "Disagree" were coded (1), answers of "Agree" were coded (2), and answers of "Strongly Agree" were coded (3).

For testing consistency, responses of each participant were tested for internal consistency using Cronbach's  $\alpha$ , which identified the correlations between different responses from each participant. Cronbach's  $\alpha$  was selected for this data cleaning process because it identified the squared correlations between observed scores and consistencies of participants' responses where the stronger the question's interrelation is, the more consistency is assured (Afifi & Elashoff, 1996). The second step was to filter respondents according to the selection criteria specified in the sampling procedures by considering responses from participants who are Jordanian nationals, holders of a master's degree or higher, and teaching at private universities in Jordan (Beaver, 2012).

The researcher tested validity using the correlation coefficient  $\alpha$  of .60 to assure criterion validity (Aljbour 2011; Litwin, 1995). To test the internal validity of data, the researcher ran a factor loading analysis with an acceptable internal validity of .30 or above (Hair et al., 2006). To measure the consistency of participants' responses, the researcher ran Cronbach's  $\alpha$  with scores ranging between .60 and .92 considered acceptable (Hair et al., 2006).

To answer the research question, inferential statistics of the descriptive statistics and correlational frequency were used to describe the relationship between each of work feedback indicators and the dependent variable of work engagement. The dependent variable of work engagement was measured in Part 3 of the survey as an indicator of the level of faculty members work engagement at their university. Work engagement indicator is based on the UWES-9 model by Schaufeli et al. (2006), which included nine questions measuring the actual level of work engagement of the respondents.

Each of the nine questions was rated on a four-point Likert scale ranging from "0" for "Strongly Disagree" to "3" for "Strongly Agree." Respondents' answers were then summed according to coding the responses. Summing the answers produced one number for each variable that was used for the analysis. Therefore, the score range for the work engagement indicator's nine questions was from 0 to 27. Higher scores were associated with a higher level of work engagement for each respondent.

The independent variables of work feedback included three exploratory variables (feedback related to work objectives, work quality, and work results). The three independent variables are based on the JD-R model by Bakker and Demerouti (2014), which is an indicator of the availability of job resources. Part 2 of the survey was dedicated to measuring the impact of each of the three independent variables on work engagement and to answer the research question.

For feedback, three questions described in the Data Collection section were used to measure the level of availability of feedback for faculty members at their university. Each respondent's answer was summed according to the coding of the responses. Summing the answers produced one number for each respondent's independent variable input for analysis and testing of the null hypotheses. Therefore, the score range for feedback for a single respondent was from 0 to 9. Higher scores were associated with more availability of feedback as a job resource. To answer the research question using all respondent inputs, a simple regression analysis with an acceptable significance level of .05 was used to describe the relation between feedback and work engagement.

A chi-square test was conducted after normalizing the data by coding all participants' responses, organizing data into an Excel spreadsheet, and categorizing questions (Westfall & Young, 1993). Since the data of this study represents two categorical variables, work feedback, and work engagement, from the same population, then the chi-square is appropriate to test the significance of variables association (Bewick, Cheek, & Ball, 2004).

The chi-square test can be implemented with the assumptions of sample size or independency. The sample size assumption is used when the sample size is very large and can be divided into two-by-two tables (Campbell, 2007). This is not the case for this study because the sample size is not too large. The independence assumption is used when variables are nominal and can provide details of significant differences, which is the case in this

study (Scott, Flahert, & Currall, 2013). Therefore, this study tested the level of dependency of each variable on the other, which is important before testing the correlation coefficient of the variables. Therefore, the chi-square test indicated the strength of the dependency of one variable on the other, if any.

Convergent validity of the question loading was assessed by their association to t-value. A significant value of .05 was considered as an indicator of significant correlation of convergent validity (Altunel et al., 2015).

The researcher implemented the Pearson r and eta analysis to test the significance between the independent variables of work feedback and the dependent variable of work engagement. Simple regression analysis was then used to test each of the hypotheses.

### Ethical Considerations

Several measurements were taken into consideration for this paper to ensure the highest level of ethical practices. Permissions to use the UWES-9 and JD-R models were not required to be obtained from the owners of the models since they are published on public domains. The researcher investigated all the research regulations in Jordan to avoid violation of research practices.

The researcher assured no harm to participants as a result of participating in the survey. To assure confidentiality and anonymity to participants, no space was provided in the survey to write any identification information (Polak, 2004). In the survey welcome page, the participants were informed of their privacy, safe environment.

While the instrument is designed to reduce bias (Schaufeli et al., 2006), it was expected to face participant's bias due to the previous experience of faculty members with their employers. To reduce such bias, the researcher focused solely on participant's responses to the 4-point Likert scale (Petrova, Dewing, & Camilleri, 2016).

### Results

The study used a quantitative method to identify the relationship between the independent variables of work feedback and the dependent variable of work engagement. The correlational research design was used by collecting data from one group of participants then tested the correlation between the work feedback and work engagement.

### Participant Demographics

The email list of faculty members of Jordanian private universities was obtained from the Jordanian Ministry of Higher Education to contain a total of 610 email addresses. The researcher prepared the online English and Arabic languages survey using Survey Monkey software and distributed the survey to all email addresses.

The online survey was emailed to 610 faculty members in Jordanian private universities on the 26<sup>th</sup> of July, 2017. Two weeks after sending the emails another reminder email was sent to all the email addresses again. The data collection process was ended on August 26<sup>th</sup>, 2017 to conclude to 231 completed the survey in four weeks. All responses were filtered and cleaned by removing the uncompleted surveys and taking out all the participants that did not match the criteria. To assure random selection, every sixth response was eliminated. After the data filtering process, the number of the valid responses was 112. The first part of the survey was dedicated to the demographic information and contained five questions related to age, gender, nationality, education, and work experience.

The survey had a response rate of 38% which is in agreement with Aljbour (2011) expected survey response rate of 40% in the Middle East. Table 1 presents the details of participants' demographic information. As for the age of participants, it was noted that the age of the majority of faculty members at Jordanian private universities range between 51 to 60 years old (30.4%). There were more male than female respondents (84% and 16% respectively). Most of the respondents were holders of a doctoral degree or higher (94.6%), and most of the respondents have more than 16 years of teaching experience (41%).

**Table 1: Participants Demographics in the Survey- Work Feedback to Work Engagement**

	Answer options	Response percent	Response count
Age	Less than 30	1.8%	2
	31-40	28.6%	32
	41-50	26.8%	30
	51-60	30.4%	34
	More than 60	12.5%	14



Gender	Male	83.9%	94
	Female	16.1%	18
Nationality	Jordanian	100%	112
	Non-Jordanian	0%	0
Education	Undergraduate	0.0%	0
	Masters	5.4%	6
	Doctoral	94.6%	106
Experience	0-5	23.2%	26
	6-10	21.4%	24
	11-15	14.3%	16
	16 or more	41.1%	46
	N		112

The population for the study was university professors in the Jordanian cities including faculty members from all the cities in Jordan which has private universities to include Amman, Irbid, Zarqa, Ajloun, and Jarash. The email addresses of all faculty members who are teaching at private universities in Jordan at the time of the study were obtained from the Jordanian Ministry of Higher Education, and the list contained 610 email addresses. The online survey was emailed to 610 faculty members, and after filtering the responses according to the selection criteria and applying random selection by eliminating every sixth response, 112 valid responses were taken into consideration for this study.

To test the data validity, the researcher considered testing internal validity, external validity, and construct validity. To assure internal validity, consistency of controlled variables of population and sample criteria and the questions of 4-point Likert Scale was used based on proven ground theories of JD-R and UWES-9 models.

To assure that the instrument measured the predicted and estimated relationship between work feedback and work engagement, this study used criterion validity using the correlation coefficient (Litwin, 1995). The coefficient  $\alpha$  of .60 was considered as the lower acceptable limit for this study to assure the validity of the instrument (Aljbour, 2011).

Correlation coefficient alpha was conducted to assure criterion validity between each of the independent variables and the dependant variable. Level of significance at 2-tailed correlation was found highly significant for all variables at .000 with Pearson correlation scores ranging from .482 to 1.00 (See Table 2.)

**Table 2: Coefficient Correlation for the Survey**

		Work Engagement
Feedback	Pearson Correlation	.654**
	Sig. (2-tailed)	.000
	N	112
WorkEngagement	Pearson Correlation	1**
	Sig. (2-tailed)	
	N	112

The quantitative methodology was used for this study to identify the relationship between two variables since only quantitative research design allows studying relationships. The correlational research design was used in this study when collecting the data from one group of participants and testing the correlation between the independent variable of work feedback and the dependent variable of work engagement. The exploratory variables combined represent the actual availability of work feedback for respondents and were measured by four-point Likert scale ranging from “0” for “Strongly Disagree” to “3” for “Strongly Agree.”

On the other hand, sampling adequacy of Kaiser-Meyer-Olkin score of .762 has been reported which is adequate since it is higher than .500 (See Table 4.) Therefore, internal consistency level of the data is reported as adequate and internal validity is acceptable.

**Table 4 Kaiser-Meyer-Olkin Measure of Sampling Adequacy**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		762
Approx. Chi-Square	184.642	
Bartlett's Test of Sphericity	df	6
	Sig.	.000

The researcher tested the internal consistency reliability of data in this study using Cronbach's alpha. Cronbach's alpha measured the consistency of participants' responses since the questions are provided to participants in one set format. Since this study is exploratory in nature, a result ranging between 0.60 and 0.92 can be acceptable (Hair et al., 2006).

Results from the test found that the measure of two items of feedback and work engagement of Cronbach's alpha of .854 exhibited an average level of the internal consistency value. As a result, the current measure of the variables represents a high level of internally consistent. Cronbach's alpha measure is displayed in Table 5.

**Table 5 Cronbach's Alpha Measures of Internal Reliabilities**

Cronbach's Alpha	Cronbach's Alpha based on standardized items	N of items
.854	.876	2

The research methodology used for this study has been tested by several previous researchers (Berg, Wrzesniewski, & Dutton, 2010; Demerouti et al., 2001; Ferrer et al., 2013; Gladstone, 2012; Hennessey & Amabile, 1998; Schneider, Goldstein, & Smith, 1995), and its internal validity has been proven. The external validity has been established by distributing the survey to faculty members who are working in all cities in Jordan. The random selection of participants has achieved statistical significance of the data.

The dependent variable of work engagement represented the actual level of work engagement for participants and was measured by a four-point Likert scale ranging from "0" for "Strongly Disagree" to "3" for "Strongly Agree." Therefore, the nine questions have an answer score range of 0 to 27 where higher scores were associated with higher level of work engagement for each respondent.

Table 6 summarizes the mean scores of the two variables. It can be observed that the mean scores of feedback (M=6.50), are slightly higher than the mean score of work engagement (M=4.85).

**Table 6 Descriptive Statistics of Responses on the Survey**

	Mean	Std. Deviation	Std. Error Mean
Feedback	6.5000	0.98377	0.42258
Work Engagement	4.8462	1.21423	0.33677

A chi-square test was conducted for this study to test the significance of variables association. Pearson Chi-square of 188.040 was obtained, based on the analysis with three degrees of freedom. The asymptotic significance value is 0.000 which is smaller than alpha value of 0.05 (See Table 7.)

**Table 7 Chi-Square Test for all Variables**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	188.040 <sup>a</sup>	63	.000
Likelihood ratio	174.149	63	.000
Linear-by-linear association	53.207	1	.000
N of valid cases	112		

To compare the sampled data to the entire population, the one-sample t-test was used because of the population variance unknown at that time. Table 8 explains the result where the significant level of the P-Value for all of the variables is at .000 which is highly significant. Therefore, the null hypothesis is rejected, and the data is suitable for further analysis.

**Table 8 One Sample t-Value Test for All Variables**

One-Sample Test						
Test Value = 0						
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper

Work Engagement	40.276	112	.000	10.32143	9.8136	10.8292
Feedback	38.426	112	.000	5.60714	5.3180	5.8963

## DISCUSSION AND CONCLUSION

To answer the research question of “To what extent, if any, is work feedback related to work engagement of faculty members in Jordanian private universities?” three items were used to measure the level of availability of feedback for faculty members at their university. The Pearson correlation coefficient between the two variables was at .654 which is a strong positive correlation. The prediction of work engagement using feedback was found at a very high significant level of .000 which is lower than the acceptable significant level of .05 for the simple regression analysis (See Table 11).

**Table 11 Simple Regression Analysis of Feedback and Work Engagement**

Correlations			
		Work Engagement	Feedback
Pearson Correlation	Work Engagement	1.000	.654
	Feedback	.654	1.000
Sig. (1-tailed)	Work Engagement	.	.000
	Feedback	.000	.
N	Work Engagement	112	112
	Feedback	112	112

Each respondent's answers were summed according to the coding of the responses. Summing the answers produced one number for each respondent's independent variable input, and the average number of all participants for feedback was 5.61. Since the score range for feedback for a single respondent is from 0 to 9 and higher scores are associated with more availability of feedback as a job resource, the null hypothesis for feedback was rejected.

To answer the research question using all respondent inputs, a simple regression analysis with an acceptable significance level of .05 was used to describe the relation between feedback and work engagement.

To measure the association among variables, eta correlation analysis was conducted for the independent variable of work feedback and the dependent variable of work engagement. Since eta values range from .000 for no association to 1.00 for a perfect association for feedback was found at .695.

The result of correlation coefficient between work feedback and work engagement was highly significant at .654 which indicates the correlation between work feedback and work engagement is strong. The simple regression analysis among work feedback and work engagement was also found at a significant level (P-Value of .000). Since the summed result indicates to a high score of 5.61, the null hypothesis was rejected. Therefore, the answer to the research question of “To what extent, if any, is work feedback related to work engagement of faculty members in Jordanian private universities?” is that feedback is highly related and an indicator of work engagement of faculty members in Jordanian private universities. This finding is in agreement with previous studies which were performed on faculty members of universities in other countries (Barkhuizen & Rothmann, 2006; Rothmann & Jordaan, 2006; Sarti, 2014).

The intent of this study was to identify the relationship between work feedback and work engagement of faculty members at Jordanian private universities. The study found a significant relationship between providing work feedback and the level of work engagement of faculty members in Jordan. This study offers evidence that faculty members of Jordanian private universities are having a low level of work engagement, high turnover, and burnout because of the lack of job resources offered to them by their university leaders. Administrators of Jordanian private universities must offer more coaching and feedback to faculty members to increase their work commitment and engagement. Such coaching and feedback will also contribute to lowering turnover and level of dissatisfaction among faculty members.

## Limitation

The limitations of this study all exist beyond the control of the researcher. Some other limitations were identified during the implementation process of the study. The limitations of this study are categorized into three different categories they are access, bias, and participants.

As for access, the invited population email addresses were obtained from the Jordanian Ministry of Higher Education. The invitation was sent to all participants via email. However, the access to participants faced difficulties due to the fact that emails were sent during the summer vacation of universities in Jordan. This limitation emerged during the execution of the study. That has created a limitation in collecting responses within a reasonable time. The other access related limitation was that faculty members in Jordan are not used to checking emails on a regular basis, and that has caused to not being able to access all participants via email.

Bias of participants may have played a role in selecting the answers to the research questions. Since the research topic is concerned with university management support to faculty members by providing them the needed job resources, faculty members may have responded to some questions based on their perception of the employers' leadership and management style. On the other hand, employees in most cases may believe that they have a high level of work engagement when they don't. The used instrument has a high level of consistency and validity; however, bias may have played some role when asking participants to indicate their level of work engagement.

As for participants, the study investigated Jordanian faculty members of private universities. This can be considered as a limitation because it did not expand to non-Jordanian faculty members or faculty members who are working in public universities. Even though the 112 respondents fulfill the minimum required participants for this study, the number of participants can still be considered low.

### **Implications for Practice**

The problem of this study was the relationship between work feedback and work engagement of faculty members in Jordanian private universities. Faculty members of Jordanian private universities have a low level of work engagement due to the lack of job resources, which is resulting in high turnover and work dissatisfaction among faculty members (Al-Omari, 2008). Jordanian private universities are currently experiencing high turnover and low academic achievement among faculty members due to the lack of facilitation of appropriate job resources (Aamir & Buckley, 2011). The study has provided evidence of the nature of the relationship between work feedback and work engagement and contributes to making a difference for faculty members.

The purpose of this quantitative correlational study was to examine the relationship between work feedback and work engagement of faculty members in Jordanian private universities. Examining the relationship is critical to assist both academicians and universities' administrations to achieve their objectives. The impact of work feedback on work engagement of faculty members in Jordanian private universities has been identified in this study.

Practitioners who are in the field of education at Jordanian private universities might benefit from this study by concentrating on providing the needed work feedback for faculty members. To increase faculty members' work engagement level, it is important for practitioners to provide faculty members with more work feedback. That will lead to building stronger work engagement among faculty members of Jordanian private universities.

Work feedback has a significant impact on work engagement of faculty members of Jordanian private universities. This finding might assist human resources managers at Jordanian private universities in establishing an effective method of work performance feedback communication between faculty members and their superiors. Establishing strong feedback system will directly contribute to reducing turnover and increasing job satisfaction among faculty members of Jordanian private universities. In return, it is important to increase the level of work engagement of those faculty members.

### **Recommendations for Future Research**

The findings of this study assure the significance of work feedback on work engagement of faculty members of Jordanian private universities. This finding contributes to the body of knowledge by filling the gap in the literature related to the topic. However, there is still a lack of knowledge related to the impact of work feedback on work engagement for faculty members at Jordanian public universities. Future research recommendation of this study is to expand to examining the relationship between work feedback and work engagement for faculty members at Jordanian public universities. Another recommendation is to expand the research to identify techniques that practitioners may use to improve their abilities to provide better work feedback for faculty members. It is also recommended to explore the ways to develop university leaders' skills when providing feedback to faculty members.

### **Reflections**

The research process for this study was organized in certain steps and procedures. The researcher followed the steps which are appropriate for this study. The researcher was able to improve personal skills related to collecting data according to academic standards. The communication methods between the researcher and the academic community in Jordan were an eye opener of what is really happening within the community. It was harder than expected to communicate with faculty members especially because of the lack of urgency among faculty members related to supporting research.

The researcher's previous work experience in academic institutes in the Arab region was an influence on the researcher's expectations. The expected relationship between faculty members and their management of being hesitant to express the truth about the provided job resources might have caused to collecting inaccurate information from faculty members. The researcher experience of communicating with faculty members indicates to the urgent need to increase faculty member's sense of responsibility to improve their work environment.

The researcher's previous experience with universities located in the United States has raised the expectations of research outcome. The eagerness to understand Arab universities was a major encouragement factor to conduct an appropriate research that might contribute to the improvement of Jordanian faculty members' work engagement level. While the researcher's expectations were high, the research process indicated to an opportunity for Jordanian faculty members to perform according to a U.S. standard if job resources are offered to them from their university management team.

The selected literature for this study was highly objective, and researcher's bias did not play any role in selecting or eliminating any literature. The professional experience of the researcher was not an influence of these research findings, and the researcher was able to isolate personal perspectives from the research process.

The researcher's change in thinking as a result of this study was mainly related to faculty members' work engagement expectations. It was biased to the researcher that Jordanian faculty members might have low work engagement due to the low payment and income only. However, this research found that if work feedback was offered to faculty members of Jordanian private universities, then their work engagement level will improve. The manipulated variables for this study did not include any increase in income or rewarding manners. However, work engagement level for the participants indicated significant correlation with job resources.\

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