

## Nexus between idiosyncratic deals and work engagement via psychological empowerment: A PLS-SEM approach

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### ABSTRACT

Idiosyncratic deals have been used by many organizations to achieve desirable employees' behavior and work-related positive outcomes. Drawing upon the social exchange theory, this study aims at investigating the connections between idiosyncratic deals and work engagement. Besides, this study also scrutinizes the mediating role of psychological empowerment in the relationship between idiosyncratic deals and work engagement. This study applied smart PLS-SEM v.3.2 for the data analysis to ascertain the relationship between the study variables. Using an online survey, data are collected from 310 academicians working in the public higher education institutions of Pakistan. The finding of this study shows a significant positive relationship between idiosyncratic deals and work engagement. Furthermore, finding of the study also divulges that psychological empowerment mediates the relationship between idiosyncratic deals and work engagement. Hence the management and the policy makers in the public higher education institutions should focus on the provision of idiosyncratic deals based on the personal and professional needs of academicians to strengthen their feeling of psychological empowerment which subsequently results in fostering their engagement at work.

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## 1. Introduction

Over the years, the 'work engagement' concept has gained a great deal of attention from scholars and the management practitioners (Lee & Ok, 2016; Bakker & Albrecht, 2018). This is because work engagement results in employees, teams, and organizational work-related positive outcomes (Kim et al., 2017; Bailey et al., 2017; Bakker & Albrecht, 2018). Even though significant progress has been made to clarifying and defining the engagement concept over a while (Albrecht et al., 2015), hitherto, the scholars and practitioners are probing the predictors and outcomes of employees' engagement (Abro, 2018). Yet, the need exists to understand the fundamental aspects of the 'engagement' concept and its working mechanism. Schaufeli et al. (2002) defined 'work engagement' as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74). Where, *vigor* means the feeling of energy, mental resilience, and persistence of employees. *Dedication* refers to the level of employees' involvement at their job, the sense of significance, challenge, and the pride they experience at their work. While, *absorption* means when employees feel fully engrossed at work to that extent that they do not realize the passing of time at work (Bakker, Schaufeli, Leiter, & Taris, 2008). Even though the world acknowledges the significance of the 'work engagement' concept, however, it lacks in research in the higher education sector in general (Daniel, 2016; Byrne & MacDonagh, 2017; Abdulrab et al., 2018) and particularly in the context of Pakistan (Abro, 2018). This lack of focus and studies have resulted in multiple problems such as an increased level of absenteeism and turnover intention among academicians of the higher education institutions, thereby depicting their disengaged state (Sheikh et al., 2019). For

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the labor, intensive service sector like higher education which relies more on the commitment and engagement level of employees, this lack of studies can be counter-productive (Nazir & Islam, 2017). In the education context, students' success and the attainment of educational goals have been attributed to the engagement of academicians (González-Rico et al., 2016). Hence, further studies must be undertaken to understand the working mechanism of the 'engagement' concept within higher education settings (Abro, 2018; Raina & Khatri, 2015). To fill out this research gap, this paper probes and empirically corroborates the relationship of employees' work engagement with other variables such as idiosyncratic deals (onward I-Deals) and psychological empowerment in the higher educational context of Pakistan. This paper proposes I-Deals as an antecedent to work engagement. It also hypothesizes a direct relationship of I-Deals with work engagement as well as an indirect relationship of I-Deals with work engagement via psychological empowerment. This direct and indirect relationship works in line with Bakker and Demerouti's (2008) job-demand and resources or the JD-R model. This model postulates that the presence of both 'job resources' and 'personal resources' play a significant role in engaging employees at work. This is because both job resources and personal resources increase extrinsic and intrinsic motivation amongst employees which, as a result, enhances their engagement at work. Within this context, I-Deals are suggested as an important "job resource" (Hornung et al., 2014), while psychological empowerment is one of the personal resources (Schaufeli & Taris, 2014). Furthermore, previous studies have demonstrated that psychological empowerment (as a personal resource) played a mediating role in the relationship between job resources and work engagement (Quiñones et al., 2013; Jose & Mampilly, 2015). I-Deals are considered to bring flexibility in the working conditions of employees and are, therefore, known as "New Ways of Working" (NWW) (Demerouti et al., 2014). Rousseau et al. (2006) defined I-Deals as "voluntary and personalized agreements of a nonstandard nature negotiated between individual employees and their employers regarding terms that benefit each party" (p. 978). Rousseau et al. (2006) posited that I-Deals possess four notable features including; 1) an individual negotiation that takes place between an employee and the employer, 2) heterogeneity by nature, 3) benefiting both employee and the employer, and 4) varying scope that ranges from a single idiosyncratic work-arrangement to a completely idiosyncratic work-arrangement. The extant literature identifies three major types of I-Deals including *developmental I-Deals* (creating special opportunities for an employee to utilize and expand his/her skills through training, mentoring, and life coaching), *flexibility I-Deals* (allowing an employee to personalize his/her work schedules), and *task I-Deals* (involving a job content's customization such as workload, job duties, and responsibilities) (Hornung et al., 2008; Hornung et al., 2010; Rosen et al., 2013). Hornung et al. (2010) argued that an employee may negotiate I-Deals with his/her employer based on *what* to negotiate and *why* to negotiate. The flexibility and task I-Deals answer the first question while developmental I-Deals answer the later. The negotiation of I-Deals could either be taking place at the time of recruitment which is called as ex-ante or on the job which is also known as ex-post. In relative to ex-ante, ex-post negotiation of I-Deals is more frequently practiced and this is because an employee, being an insider, by using the information and knowledge about the organization negotiates the desired changes in his or her job, thereby leading to strengthening the employee-employer relationship in an organization (Rousseau, Hornung, & Kim, 2009; Rousseau et al., 2006).

Concerning psychological empowerment, out of different empowerment-related theories (see Thomas & Velthouse, 1990; Conger & Kanungo, 1988), Spreitzer in 1995 derived the idea of psychological empowerment. According to Spreitzer (1995), psychological empowerment represents the psychological states of an employee/subordinate as a result of empowering practices at work. Moreover, these empowering practices help developing an employee's perception about his/her job based on four dimensions such as; *competence* which refers to an employee's belief of his/her capabilities to accomplishing a task; *impact* describes the extent of influence an employee has over the outcomes of an organization; *meaning* signifies the level of significance that an employee assigns to a job and; *self-determination* represents the perception of autonomy which an employee has to make independent decisions related to his/her job. Spreitzer (1995) further argued that the extent of observed empowerment may reduce if any one of the four dimensions is absent. In alignment with this, Mubarak and Noor (2018) maintained that the presence of these four dimensions boosts the feelings of being empowered at work.

The organization of the rest of the paper is as follows; a brief literature review about the current study's constructs is provided in the following section which is followed by the developing hypotheses and the study's proposed research model. Next to that, an empirical examination is presented. Finally, this paper ends on presenting the discussion and conclusion part.

## 2. Literature Review

### 2.1 I-Deals and work engagement

Although, the volume of literature on establishing a link between I-Deals and work engagement is scant. However, a plethora of previous studies have demonstrated that I-Deals yields in positive work related attitudinal and behavioral outcomes such as organizational citizenship behaviors (OCBs), job satisfaction, organizational commitment, and task performance (e.g., Hornung, Rousseau, & Glaser, 2009; Anand, Vidyarthi, Liden, & Rousseau, 2010; Ho & Tekleab, 2013; Liu, Lee, Hui, Kwan, & Wu, 2013; Hornung, Rousseau, Weigl, Müller, & Glaser, 2014; Huo, Luo, & Tam, 2014; Ho & Tekleab, 2016; Singh & Vidyarthi, 2018). In addition, Liao, Wayne, Liden, and Meuser's (2017) study including a sample of 961 participants (both managers and their employees) chosen from the US-based 71 restaurants found I-Deals to be resulting in positive work-related outcomes including job satisfaction, employees helping behavior, and in-role performance. On the other hand, in several

other studies, the aforementioned work-related positive outcomes have been linked with work engagement such as job satisfaction (Rai & Maheshwari, 2020; Orgambidez-Ramos & de Almeida, 2017), organizational citizenship behaviors (Liu et al., 2017; Xu, Xie, & Chung, 2019), organizational commitment (Nazir & Ul Islam, 2017; Adi & Fithriana, 2020), and task performance (Meyers et al., 2020), employees in-role task performance (Christian et al., 2011), and employees helping behavior (Tims et al., 2013; Costa et al., 2015). In the light of above findings of the previous studies, it can, therefore, be claimed that work engagement is most likely to be an expected outcome of I-Deals. Furthermore, Blau's (1964) 'Social Exchange Theory' (SET) best explains the connection between I-Deals and positive work-related outcomes (i.e., work engagement). Related to this, Cropanzano and Mitchell (2005) argued that SET is more appropriate to understand and explain the behavior of employees at the workplace. Social exchange theory emphasizes on creating an obligation between an employee and the employers as a result of a series of interactions between them (Emerson, 1976). At the workplace, the norms of reciprocity regulate these social exchanges which benefit both employees and the employers (Evans & Davis, 2005). Thus, it is likely that the provision of I-Deals will create social obligation among academicians and higher education institutions. Academicians after receiving I-Deals will repay their organization by exhibiting high levels of engagement at work. Therefore, it is hypothesized that:

**H<sub>1</sub>:** I-Deals are positively related to work engagement.

### *2.2 I-Deals and psychological empowerment*

Although the volume of literatures ascertaining the association between I-Deals and psychological empowerment is relatively scant. Nevertheless, fewer studies outlined the relationship between the variables mentioned above. For instance, the study of Wang and Long (2018), when tested among 237 employees working in Chinese high-technology organizations, found a positive significant relationship between different types of I-Deals (i.e., skills training, flexible scheduling, financial incentives, development opportunities, skills training) and psychological empowerment. Similarly, the positive correlation between I-Deals (flexibility, developmental, and task) and employees' psychological empowerment was maintained in another study conducted in china involving a sample of 277 employees (Kwon, Seo, Moon-Kyo, 2017). In general, there is a consensus among authors that I-Deals (such as flexibility, developmental, and task) could more likely bring improvement in the job in terms of job strain and workload reduction, skill acquisitions, flexibility, and that, as a result, engender the feelings of psychological empowerment among employees at the workplace (see, Hornung et al., 2014; Hornung et al., 2010). Hence, based on the above discussion, it can reasonably be concluded that the provision of I-Deals would also help enhance psychological empowerment among academicians in the higher education sector.

In view of SET's perspective, being cognizant of personal and the professional requirements, the provision of I-Deals to the academicians in the higher education sector will, under the rule of reciprocity, enhance their psychological empowerment at work. Hence, given the above discussion, the study's proposed hypothesis is as follows:

**H<sub>2</sub>:** I-Deals are positively related to psychological empowerment.

### *2.3 Psychological empowerment and work engagement*

Several studies in the past have demonstrated a significant positive relationship between psychological empowerment and work engagement in different countries (Jose & Mampilly, 2015; Macinga et al., 2015; Singh et al., 2016; Nawrin, 2016; Sharma & Garg, 2017). Also, the link between psychological empowerment and work engagement has been established in many studies in the IT sector organizations (e.g., Sandhya & Sulphay, 2019; Sharma & Singh, 2018; Monica & Krishnaveni, 2019) as well as in the cement industry (Rayan, Sebaie, & Nagwa, 2018). In the light of above empirical evidence the present study thusly examines the relationship between psychological empowerment and work engagement among academicians in the higher education sector. Furthermore, applying the SET perspective, the psychologically empowered academicians, under the rule of reciprocity, will feel obligated to exhibit engagement at work. Thus, the following hypothesis is proposed:

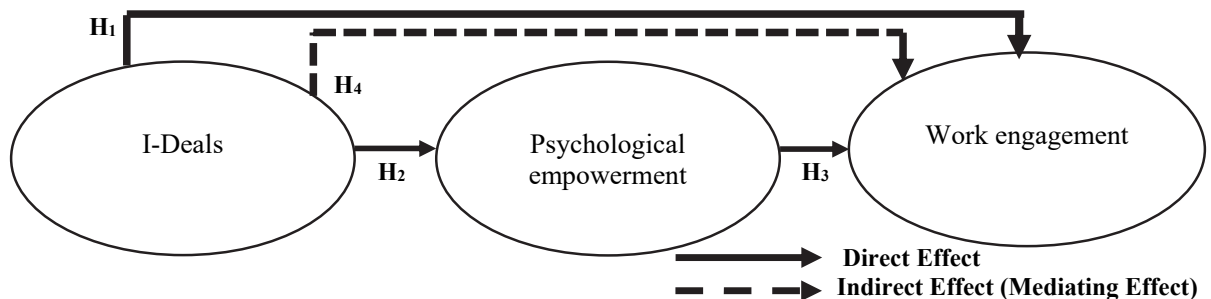
**H<sub>3</sub>:** Psychological empowerment is positively related to work engagement.

### *2.4 Mediating role of psychological empowerment*

Although the aforementioned literature suggests that the provision of I-Deals leads to positive work-related outcomes (i.e. work engagement). However, Leiter and Maslach (2010) argued that, for employees to experience engagement, organizations can just offer them opportunities to engage but the organization cannot force employees to engage at work, thereby indicating an underlying mechanism to connect opportunities (provision of I-Deals) with work engagement. Furthermore, Reissner and Pagan (2013) opined that generating employees' work engagement is far from a straight-forward process; there exists an underlying mechanism that the managers could use to engender work engagement among employees. They advocated undertaking further research to find out the underlying mechanisms. Thus, given the above arguments and a call for further research, the need to use a mediator in the relationship between I-Deals and work engagement arises here. Moreover, there are conceptual and empirical pieces of evidence available that demonstrate that psychological empowerment fosters employees' energy and dedication towards their job (Macinga et al., 2015; Abdulrab et al., 2017). Consequently, psychologically empowered

employees are more engaged (Albrecht & Andreetta, 2011; Jose & Mampilly, 2015; Nel, Stander & Latif, 2015; Ugwu et al., 2014). Previous studies have shown that employees (followers) who are psychologically empowered reciprocate their leaders by demonstrating engagement with their work (cited in Ahmad & Gao, 2018; Saks, 2006; Markos & Sridevi, 2010). In addition to above, psychological empowerment has been found as an established mediator between different job resources including social support from supervisors and the coworkers at work, skill utilization, task autonomy, and work engagement in previous studies (Quiñones et al., 2013; Jose & Mampilly, 2015). These researchers have also suggested to use psychological empowerment as a mediator between other job resources (such as I-Deals) and work engagement. In the light of above discussion, the expectation is that, while being mindful of the personal and professional requirements, the provision of I-Deals will help in enhancing the psychological empowerment, and psychologically empowered academicians subsequently are more likely to exhibit their engagement at work. Applying the social exchange perspective and giving centrality to psychological empowerment, academicians who are psychologically empowered because of the provision of I-Deals will feel benefited by their institution which in turn, will make them obligated to benefit their respective institutions back by assuring their engagement at work. Therefore, based on the above, it may be claimed that psychological empowerment is more likely to mediate the relationship between I-Deals and work engagement. Hence, this study proposes the following hypothesis:

**H<sub>4</sub>:** Psychological empowerment mediates the relationship between I-Deals and work engagement.



**Fig. 1.** The proposed method

### 3. Research method

#### 3.1 Sample and data collection

This study focused on collecting data from the academicians working in the large public sector higher education institutions of Pakistan. Data were gathered through an online survey that queried respondents regarding their assessments of I-Deals, psychological empowerment and work engagement. To a total of 650 respondents, a web link to the questionnaire was sent on their email addresses. Email addresses of the respondents were obtained from the online directory of the respective higher education institutions the respondents belonged to. After sending a request to participate in the online survey, three emails were also sent as a reminder subsequently. Additional efforts such as calling the respondents directly were made to increase the response rate. To convince the respondents to participate in the survey they were assured of keeping their identity and information confidential. It took 3 months to receive the responses on the web-based survey.

#### 3.2 Respondents' profile

In total, 310 respondents participated in the survey representing a 47.69% response rate. As the survey contained items with mandatory responses, therefore, there was no issue of missing data and all the returned questionnaires were useable for the analysis purpose. The survey consisted of 90% male and 10% female respondents. Most of the respondents were middle age, as the largest group of respondents were with the age range from 41-50 (50.3%) and 51 and above (31.9%), followed by those with the age range of 31 to 40 (17.7%). With regards to the qualification of academicians, the majority of the respondents i.e., 84.4% had a Ph.D. degree while there were 14.3% respondents with masters/M.Phil. qualification. And correspondingly, most of the respondents were assistant professors (48.7%) and professors (28.4%), which were followed by lecturers (13.9%) and associate professor (9.0%).

#### 3.3 Instrumentation

Measurement instruments were rated on a five-point for I-Deals and psychological empowerment constructs ranging from 'strongly disagree (1)' to 'strongly agree (5)', and a 7-point Likert scale for the work engagement construct ranging from never as 0 to always as 6. The I-Deals construct was assessed on the scale developed by Rosen et al. (2013) comprising three reflective dimensions such as *developmental*, *task*, and *flexibility I-Deals* with 5-items for each of the aforementioned sub-dimensions. The composite reliabilities of these latent dimensions were 0.926, 0.942, and 0.923 respectively. The psychological empowerment construct was assessed on a scale developed by Spritzer (1995) with twelve items (including 3 items for each of its four dimensions i.e., *impact*, *competence*, *meaning*, and *self-determination*). The composite reliabilities for each

of the dimension were 0.767, 0.900, 0.885, and 0.906 respectively. Finally, instrumentation for work engagement was based on a 17-item three dimensional (i.e., vigor, dedication, and absorption) ‘Utrecht Work Engagement Scale’(UWES) developed by Schaufeli and Baker (2004). *Vigor*, *dedication*, and *absorption* sub-dimensions of the scale were measured with six, five, and six items respectively. The composite score of vigor sub-dimension was 0.982, while it was 0.969 and 0.962 for absorption and the dedication sub-dimension respectively.

### 3.4 Analysis methodology

This paper used PLS-SEM to test the proposed relationships between the study variables. There are many reasons for using PLS-SEM. First, PLS-SEM is much capable of handling a variety of modeling issues without imposing restrictive assumptions (Vinzi et al., 2010). Secondly, PLS-SEM is best for mediation analysis as it lacks restrictive distribution assumptions (Carrión, Nitzl, & Roldán, 2017). Third, PLS-SEM has the flexibility to be applied to both reflective and formative measurement models, and it overcomes the limitation of multiple regression approach while yielding higher levels of statistical power with smaller sample sizes (Hair et al., 2014). Finally, PLS-SEM is useful in applying the higher-order component models (HCMs) to get more accurate solutions for the structural models which exhibit high multicollinearity. As all variables in the present study are based on higher-order constructs, therefore, the use of smart PLS-SEM is justified here. Within the scope of this paper, while I-Deals, psychological empowerment, and work engagement are all well-established and empirically tested constructs, I-Deals as a predictor of work engagement, combined with the proposed mediating effects psychological empowerment has undergone little empirical research especially in the higher education sector. Therefore, a PLS-SEM approach was employed to confirm as well as explore the interrelationships between I-Deals, psychological empowerment, work engagement.

## 4. Analyses and Results

### 4.1 Assessment of Collinearity Issue

Since data in the present study were collected using a single-source, therefore, following the recommendations of Kock and Lynn (2012) and Kock (2015), full collinearity was assessed to address the issue of ‘Common Method Bias’ (CMB). Under this method, the variance inflation factor (VIF) values for all the variables must be lesser than or equal to 3.3 for the data to be free of issue of bias from a single-source data. Table 1 indicates that the VIF values for all the variables are lesser than 3.3, hence single- source bias was not an issue with the data.

**Table 1**

Full Collinearity test

<b>Idiosyncratic Deals</b>	<b>Psychological empowerment</b>	<b>Work engagement</b>
1.437	1.249	1.347

### 4.2 Assessment of the Measurement Mode

The measurement model was assessed by examining the convergent validity. As recommended by Hair et al. (2014), the factor loadings, composite reliability (CR), and the average variance extracted (AVE) were used to measure convergent validity. The suggested cut-off values should be 0.5, 0.5, and 0.70 for the factor loadings, AVE, and CR respectively. Due to lower loadings of the first-order constructs, one item from the impact dimension of the psychological empowerment construct (i.e., Imp1) was deleted. Similarly, item AB2 was deleted from the absorption dimension of the work engagement construct. The deleted items were removed accordingly from the respective latent variables for further analysis. In this study all three constructs i.e., I-Deals, psychological empowerment, and work engagement have been conceptualized as ‘second-order constructs’. Therefore, to model the second-order (reflective-reflective) factors in the PLS analysis, the repeated indicator approach as suggest in PLS related literature was followed. Results appearing in Table 2 indicate that the values of the measurement model exceeded the recommended cut-off values, thereby demonstrating adequate convergent validity.

**Table 2**

Convergent validity

<b>Constructs</b>	<b>Items</b>	<b>Loadings</b>	<b>AVE</b>	<b>CR</b>
I-Deals	Flexibility	0.923	0.866	0.951
	Task	0.942		
	Developmental	0.926		
Psychological empowerment	Competence	0.900	0.751	0.923
	Meaning	0.885		
	Sel- determination	0.906		
	Impact	0.767		
Work engagement	Vigor	0.982	0.943	0.980
	Absorption	0.969		
	Dedication	0.962		

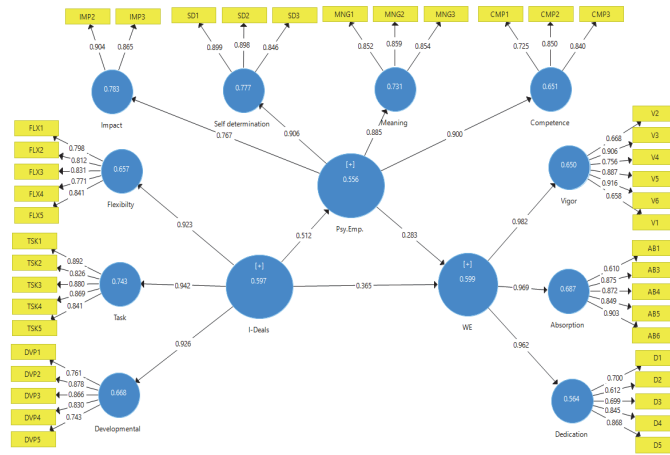


Fig. 2. The results of testing the hypotheses

After validating the convergent validity, the discriminant validity was assessed by means of the ‘HTMT’ criterion suggested by Henseler et al. (2015) and updated by Franke and Sarstedt (2019). The stricter criteria for the HTMT values is it should be  $\leq 0.85$ , however, the criterion is lenient if the HTMT values are  $\leq 0.90$ . Results appearing in Table 3 indicate that the HTMT values in the present study fall under the strict criterion (i.e.,  $HTMT \leq 0.85$ ). This can be concluded from these results that all three constructs of this study were distinct from one another. Altogether, both these validity test results have revealed that the measurement items are both reliable and valid.

**Table 3**  
Discriminant Validity (HTMT) (N=310)

Constructs	1	2	3
I-Deals	-----		
Psychological empowerment	0.512 [0.417;0.656]	-----	
Work engagement	0.519 [0.431;0.636]	0.470 [0.387;0.615]	-----

Note: Elements within parenthesis are the confidence intervals of .90 criterion of HTMT.

### 4.3 Structural Model Assessment

#### 4.3.1 Assessment of the significance of the relationship between constructs

The complete bootstrapping procedure with a recommended 5000 subsamples was followed to investigate the significance of the relationship. Ramayah et al. (2018) suggested that, to test the hypotheses between constructs, researchers should pay attention to the path coefficients that are significant. After performing the bootstrapping procedure, results were reported in Table 4.

#### 4.3.2 Assessment of the effect size ( $f^2$ )

After assessing the relationship, the next step is the assessment of the level of effect size by means of Cohen's  $f^2$  (Cohen, 1988). According to a set criterion,  $f^2$  values equal to 0.0, 0.15, and 0.35 represent small, medium, and substantial effect size. Table 4 depicts the summary result of effect size. Results provided in Table 4 signify that the I-Deals construct has a large effect size on work engagement (0.508) and psychological empowerment construct (0.350). In contrast, psychological empowerment has medium to large effect size on work engagement construct (0.281). Therefore, this study concluded that the effect size  $f^2$  ranges from medium to large as per Cohen's  $f^2$  (1988) criteria.

#### 4.3.3 Assessment of Level of Predictive Relevance ( $Q^2$ )

The next step to assessing the structural equation model is to assess the predictive relevance with the  $Q^2$  value. According to Ramayah et al. (2018) the predictive accuracy of the path model can be ensured with this assessment. The blindfolding procedure can be performed to statistically obtain the value of predictive relevance ( $Q^2$ ). While assessing the predictive relevance, the rule of thumb is higher the value of  $Q^2$ , higher the predictive relevance of the path model. However, based on the Stone and Geisser  $Q^2$  predictive relevance criteria, the value  $Q^2$  of should be higher than 0 (Stone, 1974; Geisser, 1975; Hair et al., 2017). After applying the blindfolding procedure, the summary of values of  $Q^2$  are presented in Table 4, results indicate that the construct I-Deals obtained a value of 0.134 while, the psychological empowerment construct achieved a value of 0.175.

As evident from the results in Table 4 that the  $Q^2$  values are larger than 0, thereby indicating that the predictive relevance of the model is adequate.

**Table 4**

Summary of significance and relevance of relationship

Hypo-theses	Relationship	Std. Beta	Std. Error	t-value	p-value	Decision	R <sup>2</sup>	f <sup>2</sup>	Q <sup>2</sup>
H1	I-Deals → Psy.Emp	0.512	0.060	8.555	0.000**	Supported	0.261	0.354	0.134
H2	Psy.Emp. → WE	0.283	0.063	4.522	0.000**	Supported	0.219	0.281	0.175
H3	I-Deals → WE	0.510	0.053	9.596	0.000**	Supported	0.258	0.508	
H4	I-Deals → Psy.Emp. → WE	0.145	0.038	3.802	0.000*	Supported			

Note: \*\*P<0.01, \*P<0.05(based on a two-tailed test with 5000 bootstrapping)

#### 4.3.4 Mediation Analysis

Mediation signifies the indirect effect which can be valuable in ascertaining the relationship between independent variable(s) and the dependent variable(s) (Hair et al., 2016). A mediation analysis test was applied in this study to examine the role of psychological empowerment as a mediator in the relationship between I-Deals and work engagement. Preacher and Hayes (2008) suggested applying the bootstrapping procedure to assess the mediation effect. Table 4 shows results of the mediation analysis. As shown in Table 4, psychological empowerment mediates significantly between I-Deals and work engagement. Therefore, H4 is accepted. Furthermore, Table 5 depicts that both direct and indirect effects are significant and in the same direction, therefore, it can be considered as complementary type partial mediation (Hair et al., 2017; Zhao et al., 2010; Nitzl et al., 2016). Thus, this present study experiences the partial mediation of psychological empowerment between I-Deals and work engagement.

**Table 5**

Significance analysis of the direct and indirect effects

Relation-ship	Direct effect	95% Confidence Interval of the Direct Effect	t-value	Significance (p < 0.05)?	Indirect Effect	95% Confidence Interval of the Indirect Effect	t-value	Significance (p < 0.05)?	Mediation type
I-Deals → WE	0.510	[0.393-0.605]	9.596	Yes	0.145	[0.074-0.223]	3.800	yes	Partial mediation

Note: \*\*P<0.01, \*P<0.05(based on a two-tailed test with 5000 bootstrapping)

## 5. Summary and conclusion

This study was aimed at presenting the empirical evidence of the relationship between I-Deals and work engagement among academicians of the public sector higher education institutions. This study also examined whether psychological empowerment was able to play a mediating role in linking I-Deals and work engagement among academicians. The I-Deals construct shows a positive relationship with work engagement construct ( $\beta = 0.510$ ,  $p < 0.01$ ). Similarly, the relationship between I-Deals construct and psychological empowerment construct is also positive ( $\beta = 0.512$ ,  $p < 0.01$ ). Likewise, psychological empowerment construct is also positively related to work engagement construct ( $\beta = 0.283$ ,  $p < 0.01$ ). Furthermore, the fourth hypothesis to assess the mediating role of psychological empowerment in linking the I-Deals with work engagement shows the t-value at 3.802 ( $\beta = 0.145$ ,  $p < 0.05$ ) which supported the present study's hypothesis. Based on the findings of this study and the previous studies, taking into account the personal and professional needs of the academician in the public higher education institutions, initiating I-Deals will result in fostering work engagement. The finding of this study for hypothesis H1 is consistent with the finding of numerous studies undertaken previously in different countries and sectors (e.g., Ho & Tekleab, 2016; Singh & Vidyarthi, 2018; Liao, Wayne, Liden, & Meuser, 2017). Therefore, public higher education institutions should work on making the academicians work more meaningful through the provision of different types of I-Deals based on their personal and professional requirements. Furthermore, from the social exchange perspective, provision of I-Deals will create social obligation among academicians of the higher education institutions, academicians after receiving I-Deals will repay their organization by exhibiting high levels of engagement at work. The research finding for the second hypothesis (H2) displays a significant impact of I-Deals on psychological empowerment. This finding is in alignment with the findings of past studies conducted by Wang and Long (2018) and Kwon et al. (2017). The provision of I-Deals (such as flexibility, developmental, and task) could more likely bring improvement in the job in terms of job strain and work load reduction, skill acquisitions, flexibility, and that, as a result, engender the feelings of psychological empowerment among employees at the work place (see, Hornung et al., 2010; 2014). Furthermore, in the light of SET's perspective, the provision of I-Deals to the academicians in the higher education sector will, under the rule of reciprocity, enhance their psychological empowerment at work. The third research hypothesis (H3) of this study also divulged a significant effect of psychological empowerment on work engagement. This finding supports findings of the past studies conduct in the IT sector, cement industry, and the healthcare industry (e.g., Sandhya & Sulphay, 2019; Sharma & Garg, 2017; Sharma & Singh, 2018; Monica & Krishnaveni, 2019; Rayan, Sebaie, & Nagwa, 2018; Hashishú et al., 2018). Furthermore, considering the social exchange perspective, psychologically empowered academicians will feel obligated and are more likely to assure their engagement at work. In addition, the finding of fourth hypothesis (H4) reveals that psychological empowerment also plays a mediating role between I-Deals and work engagement. This finding is congruent with previously conducted studies (Quiñones et al., 2013; Jose & Mampilly., 2015) which found the mediating effect of psychological empowerment in the relationship between I-Deals and work engagement.

Moreover, in harmony with the social exchange perspective, an enhanced level of psychological empowerment among academicians due to the provision of I-Deals will create an obligation among them to exhibit engagement at work. Hence the progressive intervention of psychological empowerment is needed in fostering engagement among academicians in the public sector higher education institutions. The study found that the provision of I-Deals to academicians can be a significant source of enhancing their psychological empowerment which eventually results in enhancing their engagement at work. Future scholars in light of this research may replicate with respondents from a different context, sectors or by adding other work design constructs such as job crafting. Researchers are encouraged to carryout similar studies by involving respondents from other service sectors such as hospitality, telecom, and the banking sector. By using in-depth interviews and observations, further studies are recommended to be undertaken to understand the role of I-Deals and psychological empowerment in improving work engagement among academicians in the higher education sector. In conclusion, the management of higher education institutions and the policy makers are encouraged to focus on the importance of I-Deals for the academicians in the public sector higher education institutions in boosting their psychological empowerment, which subsequently result in enhancing their engagement at work.

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