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Innovative Work Behaviour Amid Faculty Shortage: The Role of Idiosyncratic-Deals, Digital Technology and Perceived Leadership Support

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Abstract

This study conceptualizes idiosyncratic deals of Work (I-deals), Innovative Work behaviour (IWB), Digital Technology, and Perceived leadership support grounded in practices detected among private and public universities and the teaching faculty of Pakistan. The current study is based on a quantitative, cross-sectional research design in which data was collected through self-administered questionnaires from 365 faculty members of various public sector universities. The findings suggest that individualized deals and perceived managerial support for innovation foster innovative work behaviour with digitally nurtured mediated paths. This study contributes to the innovation literature by showing that in contrast to the predominantly quantitative prior studies on innovation in higher education institutions, authentic and individualized employment arrangements, technology integration, and supportive leadership are clear contributors to the creativity and innovation of the academic workforce.

Keywords: Innovative Work Behaviour, Idiosyncratic Deals, Digital Technology, Perceived Leadership Support, Higher Education, Pakistan.

Introduction

The problem of shortage of faculty has long plagued the higher education system in Pakistan, especially in private and public sector universities. In general, private university faculty members reported higher job satisfaction- especially about pay, supervision, and promotion- than public institutions (Iqbal et al., 2011). However, it is quite a challenge for the state-run universities of Pakistan to retain the well-trained teaching faculty (Aziz & Shah, 2019). The more substantial salary packages provided by private institutions compared to their public counterparts indicate the underlying reason for this disparity in job satisfaction. The stake of workplace politics is not least in public universities, where public employees have been reported to be more emotional and career-oriented, which may cause harm to employee loyalty and employee morale (Zoghi, 2002). Lecturers only present what they have to incorporate in their syllabus and do not have ample time to engage students during lectures; thereby, traditional teaching methodologies of public colleges are ineffective (Imtiaz, 2014).

Moreover, just as the financial limitations that public colleges must deal with due to restricted assets and rising operational expenditures limit public universities' capacity to acquire present-day teaching facilities and technologies, the standard of the teaching and studying surroundings

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can become affected (Kimathi & Henry, 2014). When there are not enough faculty and too few postdoctoral research fellows, the teaching and research atmosphere can be less exhilarating for the faculty members, hurting their job satisfaction and reluctance to share their knowledge. Additionally, public institutions are often bureaucratic, which stifles innovation and flexibility in curriculum development, further complicating matters for teachers in these environments. In the same manner, administrative preservation of even public universities may restrict them from engaging in technological advances that may advance the quality of education (Kimathi & Henry, 2014). Also, due to the unavailability of needed facilities in some institutions, it becomes difficult for the faculty to get serious about their job, resulting in either poor performance or low satisfaction (Egbule, 2003).

Bureaucratic public institutions might also offer less flexible and innovative curricula that better prepare teachers to meet the students where they are. Low funding and low resource allotment are some of the more significant issues in the public sector. Consequently, it has led to poorly trained executives in top management; the physical infrastructure is poor, and its use of computerized systems is somewhat limited in university libraries. Moreover, public institutions frequently use an age-old lecture-based pedagogy that has been criticized for being dull and passive (Imtiaz, 2014).

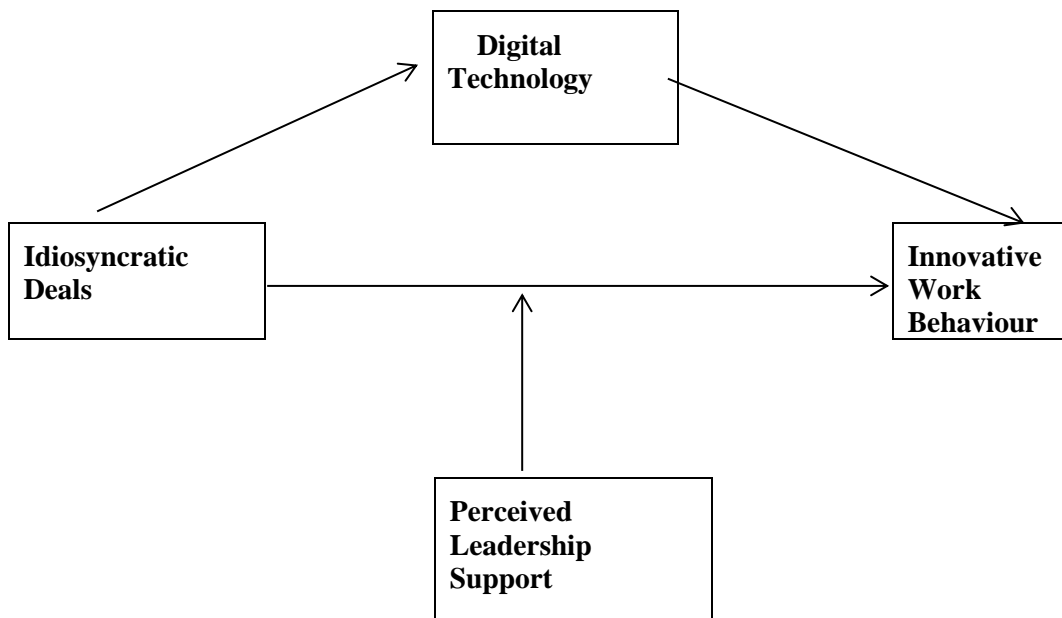
Bringing more resource base of academic faculty will not only help cope with the shortage of teachers in Pakistan but also help them to shape their institutions and develop such institutions to lead the tertiary education of Pakistan. As a fundamental human right, the state must ensure all citizens' access to education.

Research indicates that creativity and innovation are among the essential needs of the success of each organization, especially colleges of higher learning (Rehman & Iqbal, 2020) (Khan et al., 2014). The Innovative Work Behaviours of staff, who foster and implement ideas that result in Innovative Outcomes, can enhance how universities perform and strengthen their competitive edge (Amabile et al., 2005). Universities in Pakistan, both public and private, have been put to the test to contribute towards a climate of skills development and creativity through their staff (Rafiq et al., 2018). The organizational environment may suppress these behaviours because of high workloads, ill-resourced tasks, and a complicated institutional structure (Aunger et al., 2023). The more hierarchical structures traditionally prevalent in Pakistani universities can also stifle outside-the-box thinking below the higher faculty levels. That said, many institutions are doing something about these challenges: beginning to explore initiatives that motivate and reward innovation in practice among a range of their staff. Although still in a developmental phase, these initiatives are opening avenues for a more flexible and responsive academic space that is becoming more aligned with the changing context of higher education (Kathombe, 2018).

The previous studies recently highlighted the extreme significance of personalized employment arrangements, i.e., idiosyncratic deals (ideals), as a job-specific venue for nurturing the innovative job behaviour of employees (Wang et al., 2018). Ideals refer to the employee-specific arrangements of the work exchanged by individual knowledge workers with their employer (Liao et al., 2016). Using such personalized covenants, introducing more flexible and independent working conditions that foster employee growth may generate a greater willingness to engage in innovation processes (Amabile et al., 2005). When employees believe their interests and aspirations are respected, they are more inclined to go the extra mile to generate and pursue new concepts. In addition, ideals might offer a risk- and experiment-friendly climate whereby innovative work behaviour is facilitated (Rousseau et al., 2006). We suggest that

employment arrangements, as well as personalized adjustments, were set in place by the educators. Furthermore, when individuals are collectively gratified about their job attributes, they probably have anecdotal-based management help to others, attributional innovative work behaviour, and its concept to improve the system of universities. For example, as shapeshifting faculty balance portions of their job responsibility (teaching, service, and research) that they can best co-opt while choosing career paths and dreams and how many pupils they can teach under a faculty deficit and the times they work—dictating their ability to enjoy work and level of engagement and stress relief in serving student, they experience greater well-being. Thus, our analyses suggest that the faculty should offer appropriate standards to colleagues as dictated by their wants.

Employees respond with favourable or unfavourable behaviour based on the initiating act (including ideals), which we refer to as reciprocating behaviour (Eisenberger et al., 1987). Social exchange theory (SET) posits that, in reaction to positive initiating behaviours, targets are more likely to respond with warmth-reciprocating behaviours and/or less likely to respond with hostility-reciprocating behaviours. We thus advocate the model in Figure 1 [2] based on social exchange theory (SET). Another area is found out where successful integration of digital technology has been critical in enabling work practice and collaboration in higher education. As digital platforms and tools enabled new collaborative practices, faster and easier data access and sharing, and new research and teaching practices, faculty established required ones (Haroon, 2023). Furthermore, leadership and the university administration's support may significantly influence the innovative work behaviours of academic staff (Kasalak et al., 2022). This kind of knowledge-oriented leadership includes clean and the sharing and promotion of new ideas, which helps organizations, be brisker in terms of the approach towards innovation.



Conceptual Framework Figure 1

Literature Review

Idiosyncratic Deals and Innovative Work Behaviour:

In Pakistan's higher education institutions, such as universities, little attention has been paid to the idea of tailored work pacts or individually negotiated work schedules. In these customized talks staff and enterprises may sit down individually, shaping special working conditions that vary from the standard operating procedures (Shams et al. 2021).

The customisation of labour agreement strategies in Pakistani universities imitates how the other sectors operate. Employers and employees collaborate to reach mutually beneficial pacts that differ from customary corporate terms on every line, embodying flexibility between work (Mackintosh & McDermott, 2023). These adaptations can provide different duty arrangements, flexible schedules or individually designed training programmes (Rousseau et al 2006). By providing customised negotiations Pakistani universities can demonstrate their concern for worker welfare and advancement, which may lead to increased job satisfaction, organisational commitment and overall performance. In the competitive environment of Pakistani university divisions, full of talent wars and intense struggle, individualized negotiation is particularly important (Liao et al., 2016).

In discussions surrounding personalized negotiations, experts hold different opinions. From one perspective, it is a distributive process, with staff feeling better when receiving preferential treatment than colleagues. Another point of view views it as a relational, integrative approach to strengthening ties between employees and bosses by satisfying workers' relational needs (Mackintosh & McDermott, 2023).

From earlier studies it is known that this sort of i-deal leads to employees engaging in innovative behaviour at work for the following reasons. The first reason is that i-deals bring about structures that provide workers with more freedom, flexibility and control over their work, all consistent with employees' motivational preconditions for creativity (Rousseau et al., 2006). Second, negotiating i-deals may convey to employees that the organization appreciates their particular skills and contributions, which are predecessors to perceived organizational support and commitment from the employee (Rousseau et al., 2009; Liao et al., 2016). So, these employees would in turn take care to act similarly innovatively for the sake of their organizations (Huu, 2023). From this we propose our next hypothesis.

Hypothesis H1: Idiosyncratic deals are positively related to innovative work behaviour.

Digital Technology as Mediator:

With the increasing digitization of the world, the effects of digital technologies on university faculty are becoming more recognizable in Pakistan. As digital technology has been speeding up developments in education, like in every other aspect of life (Butt, 2020), Many are beginning to think that the digital technology used in both teaching and learning can bring convenience. According to Haroon (Haroon and Bravo: 2022: 24), Digital Literacies (Bravo et al., 2021) are at global skills framework. These are, first of all, 21st, 21st-century core capabilities demanded by all industries and occupations in the next era: effective communication skills, collaboration capability, and analytical thinking skills can ensure success in further development efforts. Those are significant advantages especially to the university professors with a critical responsibility for the next generation. One of the most important advantages of digital technology in education is that faculty members can use audio-visual aids. By using these tools,

teachers get to explain complex ideas clearly and vividly too often-unexplored, aspects of the subject become apparent.

Moreover, student participation will grow with new platforms and more creative opportunities. Online resources and videotapes may make teaching and learning more fun and meaningful than possible (Haroon, 2023). Though it has been said many times, digital technology in education has become more apparent with the COVID-19 breakout. Many institutions would convert to remote it, and often, teachers had to quickly adapt to new technologies and tools for delivering course content. However, the fast progress in digital technology has also brought difficulties for university faculty to deal with in Pakistan. For example, many prospective teachers report several obstacles to integrating digital technology into their teaching, including insufficient training, a lack or obsolescence of resources, and technical support, which was often hard to locate. If the universities want to handle these questions smoothly, they must give all instructors a fuller grasp of the digital teaching tools so that they can use them in the classroom to their best advantage. Channels for the future development of higher education further stretching and growth Digital technologies encourage knowledge exchange, collaboration, and experimentation, which are essential for innovative ways of doing things (Coun et al., 2021). These digital means, encouraging online communication and cooperation, can help the faculties to exchange ideas and feedback and work with colleagues to solve everyday problems. Moreover, the vast amount of information, methods for access, and all kinds of resources available via digital technology can open up new ways to pursue research and teaching; it can provide solutions for stalemated campus problems both at home and abroad and give new perspectives to educators (Haroon, 2023). Meanwhile, digital technology may mediate between unique deals and innovative activities. When employees are granted I-deals such as these, providing them greater digital access to resources or enabling them to use new technology quickly and efficiently for the first time, their output capacities are significantly improved at this stage by combining with other transfer I-deals. Therefore, a series of hypotheses are suggested from the literature are

Hypothesis H2: I-deals positively effects the digital technology among faculty members.

Hypothesis H3: Digital technology positively affects innovative work behaviour among faculty members.

Hypothesis H4: Digital technology mediates the relationship between the I-deals and the innovative work behaviour of faculty members.

Perceived Leadership Support as Moderator:

In recent years, we have had many conversations about leadership in educational settings. Almost limitless possibilities can only be achieved through imagination and the reflection of the future in the current moment, "Pakistan's negative perceptions or reality of the leader's problem is several, often allowing the blacksmith of the framework (Anyango, Sika, 2020) above the bars that handle to attract higher education universities. Based on their behaviour, university administrators may either enhance or hinder motivation, satisfaction, and faculty members' engagement with work (Ahmed et al., 2010). In this context, the research studied how the principals serve public universities in Pakistan. It discovered that they worried more about control of their organizations and institutional demands, which adversely affected teaching and learning processes and faculty development (Bhujel, 2021). This needs to cover the vast plethora of Pakistani universities that must effectively address these issues. Placing people in

administrative positions is not what works, as one needs a network that facilitates growing other academicians together with the department (Khan & Kiran, 2018). More qualitative research has also investigated the experiences of higher education leaders in Pakistan and identified the most significant obstacles facing these stakeholders [such as bureaucracy, inadequate funding, and competing stakeholder interests]. Despite the several obstacles, robust research by experts reflects that effective leadership can be a driving force of educational reforms in the context of Pakistani universities. For example, findings from Lahore private secondary schools regarding teacher leadership practices suggested that teachers who could view their leaders with support were more likely to respond to instructional decision-making, mentoring beginning teachers, and community involvement (Sharar & Nawab, 2020). This indicates that the most important thing about professors is that they are seen as being backed by university leadership, which we think is a core driver in providing professors authority and raising the quality of education produced.

Encouraging employee's innovative behaviour is a need that leaders in all organizations fulfil (Yang & Zhang, 2023). Leaders can create a culture of innovation by fostering learning, knowledge sharing and introducing new ideas. Idiosyncratic Deals and Innovative Work Behaviour: Multilevel Implicit Exchange between Employee and Organization Synergy with Other HR Practices. We offer perceived leadership support as a conciliatory characteristic in an academic context. Employees will be motivated to venture into innovation-based activities if they can negotiate i-deals and feel supported by university leaders in their initiatives. However, if the employees see their leaders as untrustworthy and not supportive, then i-deals can harm innovative work behaviour. Under these conditions, the flexible arrangements that have become the way of working for these workers may be meaningless to their leaders and not even promote innovative work behaviour. We proposed the hypotheses described below. H5: I-deals positively effects perceived leadership support among faculty.

Hypothesis H6: Perceived leadership support positively affects innovative work behaviour among faculty.

Hypothesis H7: Perceived leadership support moderates the relationship between the I-deals and the innovative work behaviour among faculty.

Methodology:

Sample and Procedure:

We conducted a questionnaire-based survey on Pakistani public and private universities to collect data from public and private universities in Pakistan. Data was again collected at two different times for the junior Faculty, like the Lecturer and assistant professor, and senior Faculty, like an associate professor and professor (Min et al., 2016, Saddique et al., 2023, Sharif et al., 2021, 2023) to minimize the common method biases. However, junior and senior Faculty collect the data for independent variables (I-deals, digital technology, Perceived leadership support) and dependent variables (innovative work behaviour). The Heads of the departments of the subordinated Faculty are the senior Faculty. The junior and the senior Faculty, however, are primarily working under the direct supervision of the university's Dean and Vice-chancellor. The sample for this study component specifically focused on selected Faculty, comprising the academic staff, the lecturers, and the professors, working once again in Pakistani universities. Out of 500 questionnaires distributed, 400 were filled by the faculty members (80% response).

Since 365 responses were considered appropriate, the effective response rate was 91.25%. The demographic characteristics had both male and female faculty members.

Measures:

Idiosyncratic deals were assessed using a 9-item scale adapted from Hornung et al. on a strongly agree to (1) strongly disagree (5) Likert scale. For example, one item assesses whether a person's strengths and abilities are similar to their job tasks. Using a 5-point Likert scale, from (1) strongly disagree to (5) strongly agree, innovative work behaviour was measured with 6 items (De Jong & Den Hartog, 2008). Digital technology (scale developed by (Wasif et al., 2012), measured based on 12 items. Perceived leadership support was measured using three items (Strauss et al., 2009) on a 5-point Likert scale [(1) strongly disagree to (5) strongly agree]. An example item for this measure is, "The faculty are actively developing and proposing ideas that might affect the unit."

Analytical Framework:

We applied the stem-and-leaf method to identify and handle outliers. KMO test Kaiser-Meyer-Olkin was used to examine item factor loading when maximum likelihood extraction, through EFA, is used as an alternative method for investigating loading on items. The reliability of the related variables was checked with the A technique of Cronbach's Alpha. According to model fit indexes, we further checked the maximum likelihood software using AMOS after a confirmatory factor analysis. We in line with the findings of Hair et al. (2010) for adjustments of this model fit statistics that include the Chi-Square/ Degree of Freedom (χ^2/df is preferable when less than 3.0), received our satisfactory root mean square residual (SRMR .90), goodness fit index (GFI >.90), incremental fit index (IFI >.90), Tucker Lewis index (TLI >0) and also Comparative fit index (CFI >0). Finally, McDonald (1999), states that when the loadings from all parcels of each latent variable are low but significant (bound, not equal to), composite reliability information is derived from Cronbach's Alpha. The minimum value for Cronbach's Alpha should be .70 according to the directions of Nunnally & Bernstein (1994). In addition, Pearson's correlation coefficients were used to check the direction of any two-variable bivariate relationship with others. Finally, structural equation modelling (SEM) was used to test for discriminant and convergent validity.

Results:

We first conducted the basics to test the assumptions of structural equation modelling were met including outlier detection, multicollinearity and normality of data. The data on the causes of the study were collected in person and any missing data were filled by the participants themselves when necessary. Hence, the dataset had no missing values. Skewness and kurtosis values were also +1 to +3, and inter variable correlation was lower than 0.70 with no multicollinearity issues (Tabachnick & Fidell, 2007). Methodologically, we tried to deal with standard method bias collecting data in dyads and/or from different sources, for example, between lecturers and professors (Podsakoff et al., 2003).

Factor Loading and Discriminant Validity:

We conducted a confirmatory factor analysis, and the KMO and Bartlett's test (Maximum Likelihood extraction) was used to test the item validity of the factor loads. KMO's item loading value is 0.907 by Henseler et al. (2015). Standardized factor load of all items were above 0.60. AVE was also higher than 0.50, showing good convergent validity (Hair, Sarstedt, Ringle, &

Gudergan, 2017). In addition to this, another indication of convergent validity is that the maximum shared variance is less of the average variance obtained for all indicators. The composite reliability and Cronbach Alpha for all variables are above 0.70, which means we have good quality in each factor. (Please Refer to Table No. 1)

Confirmatory Factor Analysis (CFA):

The CFA results are shown in (See Table No. 2), indicating good fit statistics of the model such as $\chi^2/df = .958$, with RMSEA 0.057, RMR 0.029, and CFI .958. The suggested cutoffs are in the parenthesis as per Hu and Bentler (1999), Browne and Cudeck (1992) (RMSEA. 90).

Descriptive Statistics:

The descriptive statistics values are shown in table 2. Subsequently, a correlational analysis search for associations between I-deals and digital technology ($r = .468$, $p < .02$) and a I-deal and Innovative Work behaviour ($r = .348$, $p < .01$). Furthermore, the digital technology had a significant positive association with IWB ($r = .312$, $p < .05$). Perceived autonomy support was highly positively correlated ($r = .01$), and perceived leadership support was negatively correlated ($r = -.015$, $p < .01$). Cronbach's Alpha, AVE, and CR had acceptably high values (Table 2).

Hypotheses Testing:

In order to contribute to the conceptual framework of idiosyncratic deals leading to Innovative work behaviour, structural equation modelling AMOS path analysis was used by imputing the Factor Score from CFA by AMOS. We tested these by testing digital technology as mediator and perceived leadership support as moderator as part of hypotheses testing. These results demonstrated that the model fit the data well (RMR = 0.001, GFI = 1 and CFI = 1). Also, RMSEA was fewer than 0.08, which is good for model fitness. The hypothesized pathways, derived from the path analysis, demonstrated a statistically significant positive association between Digital Technology and Idiosyncratic deals ($\beta = .468$, $P < .05$). Digital technology positively and significantly affects innovative work behaviour ($\beta = .312$, $P < .05$). Idiosyncratic deals positively affect innovative work behaviour ($\beta = .348$, $P < .05$). On the other hand, there is one negative and significant relationship type between perceived leadership assistance and creative work behaviour ($\beta = -.015$, $P < .05$). Based on these results, we retain H1, H2 and H3. H4 is significant but the direction of the relationship is negative and it is against H4 achievement so we reject H4. Mediating hypotheses were examined using 500 bootstraps at the 90% confidence level— we determined upper and lower limits. Concerning the mediating role of digital technology between the I-deal and Innovative behaviour, the indirect effect ($b = .146$ and $p < .01$) was found to be lower than the direct effect ($b = .348$ and $p < .01$). But their values of significant and positive in relationship, so H5 is accepted (See Table No.3) and Perceived leadership support was tested as potential moderator. The interaction term of Idiosyncratic deals and perceived leadership support positively influences Innovative work behaviour ($\beta = .047$, $P < .05$), so we reject the H6. (See Table No.4).

	Digital Technology	Idiosyncratic deals	Perceived Leadership support	Innovative work behaviour
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Digital Technology	0.784			
Idiosyncratic deals	0.349	0.804		
Perceived Leadership support	-0.016	-0.027	0.828	
Innovative work behaviour	0.419	0.407	-0.032	0.823

Table 1: Reliability, Validity, and Correlation Analysis.

H. No.	Paths	Estimate	S.E.	C.R.	P	Label
H1	Digital Technology <--- Idiosyncratic Deals	.468	.061	7.697	***	H1 supported
H2	Innovative Work Behaviour <--- Digital Technology	.312	.044	7.098	***	H2 supported
H3	Innovative Work Behaviour <--- Idiosyncratic Deals	.348	.055	6.313	***	H3 supported
H4	Innovative Work Behaviour <--- Perceived Leadership Support	-.015	.034	-.445	.656	H4 not supported
Model Fitness: X ² =482.78, df=223, X ² /df= .958, RMSEA=.057, RMR=.029, GFI=.87, CFI=.958						

Table 2: Hypotheses Testing Through Regression

*<.05, **<.01, ***<.001

H. No.	Path	Total Effects	Direct Effects	Indirect Effects	Remarks
H5	ID>DT>IWB	.494**	.348**	.146**	Hypothesis supported since indirect effects are statistically significant

Table 3: Mediation Analysis:

* $<.05$, ** $<.01$, *** $<.001$

H. No.		Estimate	S.E.	C.R.	P	Remarks
H6	Interaction Idiosyncratic deals*Perceived leadership support > Innovative work behaviour	.047	.046	1.020	.308	Not Supported

Table 4: Moderation Testing:

* $<.05$, ** $<.01$, *** $<.001$

Discussion:

Pakistan's educational sector has been plagued with an ongoing shortage of teachers, which has decisively placed standard education for Pakistan on the rocks. The situation is particularly severe in public colleges where teachers either try to teach in abnormal ways that do not succeed or give up altogether. The way in which courses are held also leaves something to be desired, so the students must feel extremely bored from a teacher's standpoint (Imtiaz, 2014). We believe a comprehensive social system is required to tackle the fundamental factors. Only then will the university resolve its teaching problem Drop fields and get down to the block-and-tackling task (Nally, 2008). On the I-deals, the study advocates that while the management offers its backing to teachers for their work conditions and overall activities at any time he is required (as soon as conditions reach crisis stage), he (she) ever-so-want-a deliberate society to get in without talking. In addition, the effects of managerial employment are fraught with anxiety-thus it should be avoided by I-dealing could handle faculty. Extended meantime for faculty to work on scholarly activities; or an entire traditional benefit of support background could be reconstituted. There is a global impact on faculty due to people being ordered to stay in their rooms. (Nawaz et al., 2022). We want to confirm the non-significance here between I-deals and it does not even correlate sure enough as it should with levels of Perceived Leadership. However, our later finding was more striking. The digital technology faculty brought into play was found to be a strong positive correlation of Innovative work behaviour that was significant at 0.001. Technology was thus a control variable. Such an assumption serves as the three main findings of this report. First, it supports the theory that when I-deals come in accord with the needs of the person engaged in teaching, innovative work behaviour increases very strongly. The approach toward teaching will also change a great deal. Moreover, the head support faculty provides for teaching is a positively significant moderator of the relationship between I-deals and Innovative work behaviour; for example, when the I-deals are offered to faculty, their head support is increased, and their work behaviour tends to improve with considerable significance. Thirdly, it serves as a mediating variable of the group that is technology from faculty members between I-deals and innovative work behaviour; for instance, I-deals are provided to the teaching faculty by improving their overall sense of work attitudes, which is significant and positively affects innovative work behaviour.

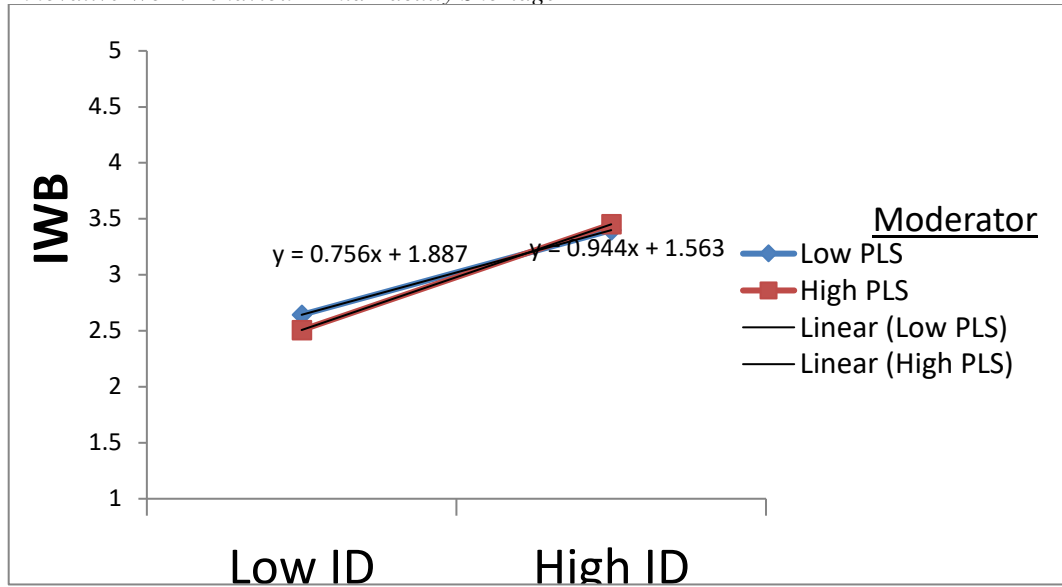


Figure 2: Perceived leadership support as Moderator between idiosyncratic deals and Innovative work behaviour. In addition, PLS as a moderator of the Idiosyncratic Deals-Innovative Work Behaviour relationship was tested in Figure 2. The moderation analysis graph shows the interaction effect of I-Deals on Innovative Work Behaviour at two caption levels of PLS (Lowest and highest PLS). Regression equations suggest runners using the two models of low or high PLS lead to a positive prediction of IWB by ID. Particular for those with low PLS, the slope of regression line (Beta=.756) indicates a moderate positive association between ID and IWB. In contrast, the steeper slope (Beta=.944) for high PLS shows a stronger positive relationship. It suggests that if the PLS is high, then in universities as a moderator of (ID on IWB is stronger) maintains some leadership support for the faculty's innovation. Moreover, less regression line smearing makes evident that PLS not only reinforces the I-Deals on IWB relationship, but also shows leadership support to always be an important precursor of innovation regardless of its intensity. It also means that I-deals are the way out of human resource constraint issue for Pakistani Universities Faculty members also continue to get rewarded for their effective innovations in academic and university research settings. A further way innovation is conducive to social well-being (Bouwma-Gearhart et al., 2021) is that it enhances the university's services in teaching. This study addresses the I-deals, digital technology, and leadership support on faculty innovation behaviour in Pakistani universities which it is increasingly testing for importance. We hold, therefore, that the results of this study suggest that providing I-deals to faculty might improve the educational quality of teaching. Additionally, these I-deals can bridge gaps in staffing shortages. Instead of putting the effort and expense into recruiting new university workers, providing I-deals to present teachers is better and more effective. Quality education may enter the door by employing this mechanism, easily solving teacher shortages if private and public educational institutions work together.

Implications, Limitations, and Recommendations:

Implications:

This also has profound implications for school systems and investors in Pakistani universities that utilize Idiosyncratic Deals (I-deals) with faculty may drive teaching innovation and

ultimately improve achievement levels. Nevertheless, the effect I-deals have on faculty innovativeness rests with leaders. This provides a lesson for university administrators: they ought to spend money on leadership training programs and not simply this but those that include mentoring leaders, faculty development courses and so forth. Moreover, when digital technology becomes an essential part of the teaching model, faculty will function more efficiently; hence, higher education in China can respond promptly to its new environment. To solve the recruitment problem, they can use digital tools and give autonomy to faculty so recruitment is not necessary for a long time. At a broader level, this research provides practical advice on human resource management in Chinese universities, demonstrating that personalized employment offers greater job satisfaction; higher work output and a more vigorous campus life. There are some limitations about this study which we should mention. These include that the study is limited to Pakistani universities, meaning its findings may not apply to other areas with different cultural and educational settings. Secondly, because the study adopts a cross-sectional design, the authors can't determine how long I-deals will continue to impact innovative work behaviour by faculty members. Using such a longitudinal approach would provide more useful information about the lasting effects of such methods. Self-reporting is also used in the study, which indicates bias (e.g., social desirability, and subjective bias). This might further reflect human cognitive tendencies and lack of accurate response. Finally, although the study indicates there is a positive correlation between I-deals and use of digital technology, it does not look into what exactly in the way of technological intervention might be able further to improve faculty innovation. Future studies, freed of these constraints, will make it easier for individuals to figure out just how members of academia are employing I-deals. The following are future directions for research based on this study. First, future research should apply longitudinal study design to explore the long-term effects of I-deals on faculty behaviours, teaching and institutional performance. This will provide better clues as to how faculty members will continue with innovative work behaviour over time. Secondly, future research should broaden its scope to explore the concept of I-deals in countries (beyond Pakistan) where they might have a cultural or institutional footprint. Comparative studies across different parts of the world and regional education systems would help answer questions about whether analogous strategies may be introduced successfully elsewhere when there is a shortage of faculty to innovate.

Conclusion:

In this study, we will explore how the I-deals and digital technology interact to increase faculty members' innovative work behaviour to raise student learning after all, at different levels. The research showed that the SET increment of I-deals significantly improved dynamic work behaviour and leadership style for faculty members, thus greatly correcting any shortcomings in their digital or electric skills. So, I-deals can improve the reward experience for employees which Universities can use in different ways depending on their manpower intentions to get to the university faculty scarcity it looks for. Our intent in conducting this research was to contribute to the literature on solving faculty shortages by considering a simple creative process for obtaining qualified teaching staff.

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