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Research Article

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Perceived Organizational Support and Innovative Work Behavior among Teachers: Evidence from Public Schools in Kirkuk Governorate, Iraq

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Abstract: The current study aims at exploring the relationship between perceived organisational support (POS) and innovative work behaviour (IWB) of teachers in public schools in Kirkuk Governorate in Iraq. Based on the organisational support theory and the componential model of creativity and innovation, the study suggests that teachers who believe that they are supported more by the educational organisation tend to create, encourage, and implement new ideas in their professional practice. A descriptive-correlational design using quantitative, cross-sectional approach was used. The targeted population were around 40,000 public school teachers in the governorate of Kirkuk. The planned sample was 381 respondents at 95% confidence level and 5% margin of error, but 142 complete questionnaires were returned out of which 141 valid questionnaires were used for data screening. The Survey of Perceived Organisational Support (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002) was adapted to obtain a scale measuring the perceived organisational support (POS). The measure of perceived idea generation, idea promotion, and idea realisation (IWB) was an adapted version of the nine items used by Janssen (2000). The Cronbach's alphas were .930 for POS and .817 for IWB, but .613 for idea generation. The factor structure suggested by exploratory factor analysis was unidimensional for POS and less clear for IWB. The descriptive, correlational and regression results to test the hypotheses are to be fed into the SPSS output at the end and so the findings of the study are to be kept in abeyance until the results of these analyses are obtained.

Keywords: perceived organisational support; innovative work behaviour; idea generation; idea promotion; idea realisation; public school teachers; Kirkuk; Iraq.

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Introduction

Primary and secondary schools form the backbone of the educational system where the learners are given knowledge, skills and competencies that will enable them to pursue further education and participate in the labour market later in their lives. The quality of educational products in these levels, therefore, not only plays a crucial role in students' educational development but also in their human capital formation and the socio-economic development of the society they belong to. Teachers play a significant role in helping to attain these goals, as their practices and expertise in introducing and putting new ideas into effect can help to enhance teaching and learning. From this perspective, innovative work behaviour (IWB) of teachers is an important contributor to the solution of educational issues, the enhancement of school processes and the ongoing development of schools.

But this innovative behaviour of teachers is not independent from their organisational context. Instead, it could be based on how valued teachers feel, recognised for their work, and cared for in their organisation. Perceived organisational support (POS) is the perception that may facilitate employees to display higher commitment, initiative and desire to develop and implement new ideas. Thus, in the school setting, support provided by school administration and the broader educational system is a critical factor that might influence teachers to adopt innovative work behaviors.

Empirical research from the past has already given support to the relevance of organisational support in innovative behaviour in various work settings. Example, Ordu and Sarı (2022) researched the relationship between organisational support, innovative work behaviour and organisational happiness in educational institutions. Their study discussed the significance of innovative work behaviour in the mediation role of organisational support and organisational happiness, indicating that the favourable conditions of the organisation can lead to more positive outcomes for the organisation. Likewise, Wahid and Ayub (2024), in their study of teachers in higher education institutions in Pakistan, investigated how psychological capital and organisational perceived support were predictive of innovative work behaviour. Based on their findings, they concluded that perceived organisational support was a relevant predictor of the innovative behaviour of academics. Al-Taie and Khattak (2024) found positive relationships between PWS and innovative work behaviour, and between HRM practices and innovative work behaviour in another educational setting. Their results also showed that gender interacted with the relationship between perceived organisational support and innovative work behavior, suggesting that individual factors play a role in this relationship.

Other studies looking at the organisational and relational factors connected to innovative work behaviour have surfaced. Zargar et al. (2025) examined the connection between ethical leadership, work engagement, perceived organizational support and innovative work behavior among university teachers in Turkey. Their results indicated that the moderating effect of perceived organisational support in the relationship between ethical leadership and innovative work behaviour. In another organisational setting, Margaretha et al. (2025) studied the linkage between perceived organisational support and innovative work behaviour and found person–organisation fit to be a mediator. The results of their study support the notion that the employees' perceptions of organisation support are relevant to understanding innovative behaviour. Similarly, a study by Muñoz et al. (2023) of the relationship between perceived organisational support and innovative behaviour amongst employees in Spanish SMEs

revealed a positive and significant correlation between the two, mediated by affective commitment. These studies offer useful empirical insights but the results are obtained in various organisational and institutional contexts, such as in the context of business companies and HE institutions.

Other factors have also been studied in relation to teachers' innovative work behaviour, such as digital leadership, creativity, proactive personality and work engagement (Siregar et al., 2026). According to these studies, an innovative behaviour is influenced by many factors related to the organizations and individuals. However, the findings presented above indicate a need for further study of the relationship between perceived organisational support and innovative work behaviour of teachers in public primary and secondary schools. It is important to note that the results of research conducted in business organisations or higher education institutions cannot be generalized to public schools, as administrative structures, organizational conditions and the nature of teachers' professional responsibilities can vary.

The result of this research gap is especially relevant in the context of education in Iraq. The public school teacher works in a centralised education system, where organisational support is influenced by both school and Ministry of Education level administrative practices, as well as policy, decision making, resources and institutional arrangements. Therefore, teachers' views on the support they receive from the wider education system could be a key factor in their attitudes towards creating, encouraging and adopting new approaches in their classroom practice. The relationship can be explored to gain insights into the role of institutional support in fostering innovative work behavior of teachers in public schools. Thus, the aim of this study is to examine the relationship between PORS and IWB among teachers in public schools in Kirkuk Governorate, Iraq.

The aim of this study is to analyze the relationship between P.O.S. and innovative work behaviour between teachers in public schools in the governorate of Kirkuk in Iraq. In particular, it is intended to examine the perceived organizational support and innovative work behaviour perceived by the teachers and whether there is a statistically significant relationship between the two constructs. In addition, the study examines the linkage between the three dimensions of innovative work behaviour (idea generation, idea promotion, and idea realisation) and the perceived organizational support.

The objective of this study is to find out the relationship between the perceived organizational support and the innovative work behaviour of teachers in public schools in the Governorate of Kirkuk, Iraq. This goal will be accomplished by measuring the perceived organizational support and the three innovative work behaviour components: idea generation, idea promotion, and idea realisation; examining the relationship between perceived organizational support and overall innovative work behaviour; and measuring the relationship between perceived organizational support and each of the three components of innovative work behaviour: idea generation, idea promotion, and idea realisation.

Literature review

Perceived Organizational Support (POS)

With the increasingly dynamic and complex nature of the work environment, perceived organizational support (POS) is a significant organisational factor that affects employees' attitudes and behaviours. Table 6.1 describes the overall attitudes of staff towards their organization's commitment to their value, recognition, and care. Based on Eisenberger et al.

(1986)'s definition, POS involves employees' perceptions of the level of recognition their work is given within the organisation and the extent to which it values employees' wellbeing. Likewise, Oubibi and others (2022) define POS as the employees' sense that their employees are valued and appreciated, and that their social and emotional needs are taken into account. As such, POS is a general evaluation of organisational appreciation and support, not an evaluation of any individual managerial practice or source of support.

In the last few years, some empirical research on the importance of the POS has been conducted in education, specifically with respect to teachers' professional attitudes and actions in the workplace. Hsieh et al. (2022) used a sample of 730 teachers across 98 primary schools in Taiwan, and found a difference between individual teacher perceived organisational support and school level perceived organisational support. Their results revealed that individual-level POS was positively related to teachers' job engagement and organisational citizenship behaviour. Organisational support at the school level was found to positively predict job engagement and it was indirect in predicting organisational citizenship behaviour through job engagement. The study results signal the need to take into account varying support levels at the organisation level when studying teachers' experiences at work.

Other research has shown the importance of POS for teachers' professional welfare and work-related outcomes. Oubibi et al. (2022) used data from 3147 teachers in China to conclude that POS was positively correlated with career satisfaction, work engagement and job crafting. Their results also showed that job crafting and work engagement were intervening factors between POS and career satisfaction. In the same study, Yu et al. (2024) examined 2,090 teachers from China and showed the importance of POS in the relationship between work engagement and workplace well-being, wherein the POS was found to be a mediator. Furthermore, Gou et al. (2025) tested 314 kindergarten teachers in China and concluded that POS had a positive prediction of teachers' voice behaviour and psychological capital. For teachers who were not yet established, psychological capital was found to mediate between POS and voice behavior. While voice behaviour does not equal innovative work behaviour, these results support the idea that the support of the organization can facilitate voice expressions by teachers, in the form of suggestions for work improvement.

In addition to the general professional attitudes and behaviours that teachers have, there is a growing area of research that has focused on the relationship between POS and innovative work behaviours (IWB). In a study of 200 higher education teachers in Pakistan, Wahid and Ayub (2024) concluded that POS and psychological capital had significant effects on innovative work behaviour. Their results indicate that those who feel that their organisations are more supportive are more likely to develop and apply original ideas in their place of work. In a similar study, Al-Taie and Khattak (2024) found that POS had a significant positive impact on IWB, based on the analysis of 359 academic staff members from 124 higher education institutions in the United Arab Emirates. Their study also found significant relationship between HR practices and innovative work behaviour and gender to moderate the relationship between POS and IWB.

Other studies beyond the field of education confirm that the relationship between POS and innovative behaviour is positive. A study by Muñoz et al. (2023) revealed that POS had a positive impact on the employees' innovative behaviour in Spanish small and medium-sized enterprises. They also found that the relationship was partially mediated by affective commitment, indicating that employees who feel that their organisation is concerned with their value and support are more likely to have an emotional commitment towards the organisation and to participate in innovative activities. Similarly, Margaretha et al. (2025)

found that POS positively influenced IWB in their study of personnel in various industries in Indonesia and that person–organisation fit partially mediated the relationship between POS and IWB. The results indicate that some degree of organisational support is likely to foster innovative behaviour directly as well as by aligning employees' values and expectations with the organisation.

In addition, Zargar et al (2025) studied the university teachers in Turkey to determine the moderating role of POS between ethical leadership and IWB. The results showed that the positive correlation between ethical leadership and innovative work behaviour was enhanced by the use of POS. While the study did not conclude that there is a direct effect of POS on IWB, it did give further evidence to the importance of the role that organisational support plays in establishing conditions for the facilitation of IWB.

The literature reviewed indicated that overall, POS is a factor in teachers' professional involvement, wellbeing and workplace behaviors. More specifically, some studies have investigated outcomes of the POS-IWB relationship or have focused on indirect or moderating variables, such as organisational support, instead of the direct effect of organisational support. However, most of the evidence is from higher education institutions or organisations outside of the school education sector. Thus, it is important to explore the relationship between POS and teachers' IWB in public schools in Kirkuk Governorate, Iraq, to add another level to the already developed literature.

Innovative Work Behavior

Concept of Innovative Work Behavior

Innovative Work Behavior (IWB): Refers to a deliberate work-related behavior in which an employee creates, stimulates, and/or institutionalizes new ideas that can improve work processes, practices, or outcomes. Creativity generally is directed towards generating new and useful ideas, while innovative work behavior represents a wider process of a worker's behavior that involves the generation of ideas, gaining support for the ideas, and implementing the ideas into actions in the workplace (Janssen, 2000; Liu et al., 2024).

In the educational environment, innovative work behavior can be seen in teachers who develop new ways to teach, suggest alternative solutions to the challenges in learning, actively encourage other educational staff to use teaching ideas that are useful, and bring about changes in teaching practice in their daily work. The behaviors are important for educational institutions because the improvement of the teaching and learning process cannot be achieved solely by creative idea generation, but also involves receiving the required support and implementing the ideas into education (Hassan et al., 2024; Güneş & Gülcan, 2025).

Innovative work behavior among teachers and academic staff has been explored in recent studies in a multidimensional perspective. For instance, Hassan et al. (2024) researched the innovative work behavior of academic staff in higher education institutions, and Güneş and Gülcan (2025) created and tested an innovative work behavior scale in educational institutions. In the same way, Phanniphong and Na-Nan (2025) studied the innovative work behavior measurement with an extensive scale. The results of these studies corroborate the need to consider innovative work behavior as a collection of related behavioral activities and not just the generation of ideas itself.

In this context, the present study defines innovative work behavior of teachers as deliberate

behavior of teachers to create, stimulate and apply new ideas for purposes of enhancing teaching and learning activities and making the teaching-learning environment better.

Dimensions of Innovative Work Behavior

Based on the three-stage model of innovative work behavior developed by Janssen (2000) and the study of applying this model to educational research by Hassan et al. (2024) and Güneş & Gülcan (2025), the present study adopts the three dimensions of idea generation, idea promotion, and idea realization. These dimensions are involved in the process of forming new ideas, requesting support for new ideas, and implementing new ideas into practice.

1. Idea Generation

Idea generation involves teachers' process of problem identification, identifying opportunities for improvement, and creating new and useful ideas to solve problems in teaching and learning. It can mean creating different ways of teaching, discussing new ideas for learning by students, or finding ways to enhance classroom activities and educational practices. The first step in the innovative work behavior is idea generation, which are the ideas that can be later promoted and implemented (Janssen, 2000; Hassan et al., 2024; Güneş & Gülcan, 2025).

2. Idea Promotion

Idea promotion is the activities that teachers engage in in the process of sharing their new ideas, securing support from appropriate colleagues and administrators, and recruiting others to join in the development and/or adoption of the ideas. Coming up with a creative idea is not always enough to make it better, and the teacher needs to receive adequate support from both the profession and her organization in order to progress with the idea. Idea promotion is thus the social and organizational phase of innovative work behavior, in which the ideas are translated into the needed resources and cooperation for their implementation (Janssen, 2000; Hassan et al., 2024; Phanniphong & Na-Nan, 2025).

3. Idea Realization

Realization of ideas is the act of taking up proposed ideas and turning them into work practices, procedures or solutions. For teachers, this dimension entails using innovative pedagogical approaches, trying new approaches to solve pedagogical issues, and reflecting on and adapting pedagogical approaches to increase their effectiveness. Therefore, the idea realization is the actual result of innovative work behavior and indicates whether the new ideas created and encouraged are materialized in real improvements in teaching and learning processes (Janssen, 2000; Hassan et al., 2024; Güneş & Gülcan, 2025).

The relationship between perceived organizational support and innovative work behavior is presented.The relationship between perceived organizational support and innovative work behavior is presented.

Perceived Organizational Support (POS) is employees' overall attitude about the importance of their organization's members' contribution and caring for their welfare (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). In terms of the Organizational Support Theory, an employee who feels valued by his or her organization and receives the right kind of support

will be more inclined to feel a sense of obligation and positive reciprocal attitudes toward his or her organization (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002).

In this perspective, the theory supports understanding of the need for organizational support in order to be more likely to engage in innovative work behavior. Teachers are more likely to be encouraged to create new ideas about their own teaching, share these ideas with others and try to put them into practice if their school or teaching organization recognizes their contributions, takes teachers' professional needs into account and offers a supportive work environment. In this way, organizational support could foster the various steps of the innovative work behavior process, thus reinforcing teachers' desire to take the initiative in change and subsequent implementation.

This relationship is also supported by the dynamism of the componential model of creativity and innovation. Amabile (2012) points to the role of individual knowledge, creative related abilities and motivation in creative performance, and Amabile and Pratt (2016) emphasize the interaction between individual and organizational factors in the development of creativity and innovation. In this view, organizational support may be viewed as a contextual condition that can be relevant and supportive for teachers to build and carry new ideas into practice through their professional knowledge and motivation.

The link between organizational support and innovative work behavior has also been studied empirically. Wahid and Ayub (2024) also found a strong positive correlation between perceived organizational support and innovative work behavior in their work conducted on Higher Education Teachers in Pakistan. In the study by Zargar et al. (2025) they used perceived organizational support in a model that examined the relationship between ethical leadership and innovative work behavior for university teachers in Türkiye and the moderating effect of perceived organizational support on this relationship. These studies serve as useful inputs for understanding the organizational support–innovation relationship, but the context in which the studies were conducted and the specification of the model should be taken into account when considering their results.

The present study develops a proposition based on Organizational Support Theory and the empirical evidence found that teachers who have high organizational support are more inclined to exhibit innovative work behavior. Perceived Organisational Support is related to the overall educational organisation (not only the school principal).Therefore, it is hypothesized that:

H1: Perceived organizational support has a positive and significant effect on teachers' innovative work behavior in public schools in Kirkuk Governorate, Iraq.

Research Methodology

Research Design

This study adopted a quantitative, cross-sectional, descriptive-correlational research design to examine the relationship between perceived organisational support (POS) and innovative work behaviour (IWB) among teachers in public schools in Kirkuk Governorate, Iraq. This design was considered appropriate for measuring the study variables and examining the relationships between them using statistical analysis. Data were collected from participants during a specific period without manipulating the study variables.

3.2 Sample and Sampling Procedure

It was determined that the initial sample size would be 381 respondents with a 95% confidence level and a 5% margin of error. Around 423 questionnaires were scheduled to be sent out, in case some questionnaires were not completed or incomplete.

The sampling plan was initially designed to be proportionate stratified sampling by educational district, but it was decided that the questionnaire would be sent electronically via Google Forms and participation would be voluntary. Therefore, the sampling methodology is termed as volunteer based electronic sampling (VBES) instead of proportionate stratified sampling.

Fourteen (142) questionnaires were returned. After data screening, 141 valid responses were left for final analysis. The sample size achieved was thus smaller than the sample size originally planned. This difference and the non-probability sampling method used is recognised as a limitation in the interpretation and extension of the results.

Research Instrument

The data were gathered via a structured questionnaire, which was divided into two sections – perceived organisational support and innovative work behaviour.

Perceived Organisational Support (POS). Eight adapted items from the Survey of Perceived Organisational Support (SPOS; Eisenberger et al., 1986) were used to measure this variable. The shortened 8 item version has been supported by Rhoades and Eisenberger (2002) who mentioned the unidimensionality and internal consistency of the scale and indicated that shorter versions were appropriate. In addition, Worley et al., (2009) found a Cronbach's alpha coefficient of .93 for this version. The items were modified to capture the context of public education, but retain their meaning.

Innovative Work Behaviour (IWB). This variable was assessed by nine items drawn from the three dimensional model suggested by Janssen (2000). The instrument measured three areas: idea generation (three items), idea promotion (three items), and idea realisation (three items). These dimensions describe how teachers come up with new ideas, find support for new ideas, and take the ideas into practice as a way of improving their work.

These were rated on a 5 point likert scale from 1 strongly disagree to 5 strongly agree.

The final questionnaire comprised just the two measurement sections with no demographic questions. Thus, the constructs in the study and the relationships among the constructs were subjected to analysis, and the lack of demographic information prevented description of participants' characteristics and the opportunity for a subgroup analysis.

Validity and Reliability

A statistical approach was used to investigate the reliability and validity of the measurement instrument. Internal consistency was determined by Cronbach's alpha with .70 or higher being considered an acceptable criterion. Split-half reliability, corrected item-total correlation and internal-consistency validity and exploratory factor analysis (EFA) were further procedures. These analyses were performed to analyze the reliability of the scales used to measure the variables of the study and the factor structure. The results will be shown in the Results section.

Data Collection Procedure

The data were gathered using the Google Forms online platform from 17 – 19 November 2026. It was an optional and anonymous survey. Participants were given background information on the aim of the study and how they would be using their responses before going to the questionnaire.

The answers were first written out in text and then subsequently transformed into numbers on a 5-point Likert scale. The numerical coding was done on the original textual responses and prior to statistical analysis, the coding was cross checked to define and correct any coding inconsistencies. Response patterns were also explored for potentially careless or insufficient effort responses, as recommended by Meade and Craig (2012).

Data Analysis

The data were analysed in the SPSS Statistics version 27 for collected data. This analysis consisted of four major steps:

1.Data screening: The data set was checked for missing values, coding inconsistencies, potential careless response patterns, and multivariate outliers.

2.The measurement instrument was evaluated for reliability and validity using Cronbach's alpha, split-half reliability, corrected item-total statistics, internal-consistency validity and exploratory factor analysis.

3.Descriptive analysis: Means and standard deviations were computed to describe the level of perceived OSS and innovative work behaviour, which consisted of the three factors of IWB. The class-interval length used for the interpretation of the arithmetic means was 0.80, which is $5 - 1 \div 5$.

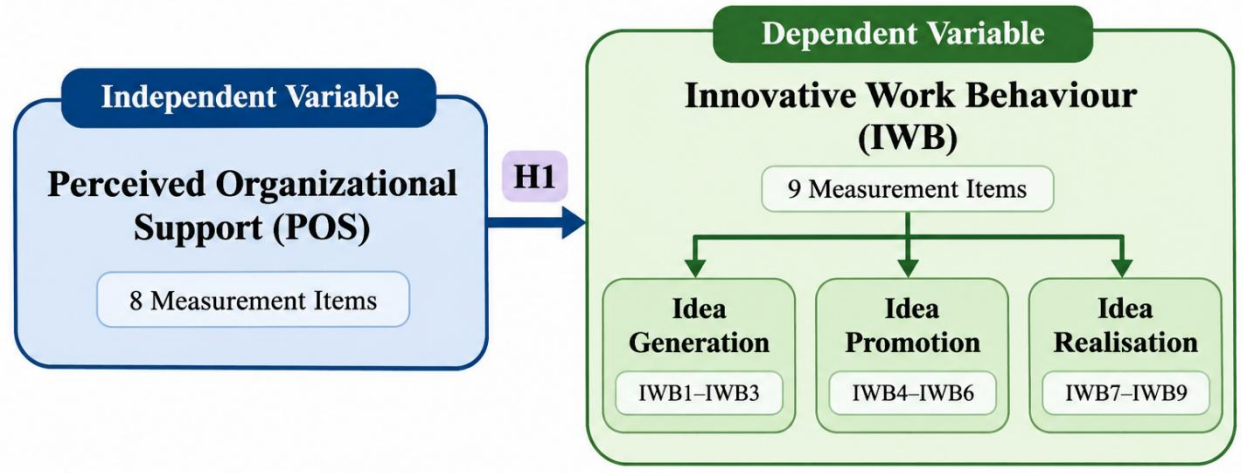
The relationships among POS and overall IWB, and among POS and the three dimensions of IWB were examined using

4. Inferential analysis: Pearson's correlation coefficient. Simple linear regression was used to analyze the predictive contribution of POS to overall IWB. 5% was used as the level of statistical significance.

Ethical Considerations

Participants were given the information about the purpose of the study and how the gathered data would be utilized and they were given the option to join the study or not. Personally identifying information was not sought, so that the identity of the respondents was protected. Data were stored safely and only used for research in academia and reported in aggregate.

Electronic informed consent was gained on the introduction page in the Google Forms questionnaire. The rationale of the study was explained and respondents were asked to indicate their willingness to participate in the study before they gave answers to the questionnaire.



H1: Perceived Organizational Support has a positive and significant relationship with Innovative Work Behaviour.

H1a: Perceived Organizational Support has a positive and significant relationship with Idea Generation.

H1b: Perceived Organizational Support has a positive and significant relationship with Idea Promotion.

H1c: Perceived Organizational Support has a positive and significant relationship with Idea Realisation.

Source: Developed by the researcher.

Results

The results are presented in this section from the electronic distribution of the questionnaire via Google Forms to public school teachers in the Kirkuk Governorate from 17-19 November 2026. The questionnaire comprises two parts: the first is adapted from the scale of Eisenberger et al. (1986) in a short form (Rhoades & Eisenberger, 2002) and it measures the PWS. The second part is adapted from Janssen (2000) and it measures the IWB through nine items spread across three dimensions: idea generation, idea promotion, and idea implementation. Text comments were scored on a five-point Likert Scale (Strongly Agree = 5; Agree = 4; Neutral = 3; Disagree = 2; Strongly Disagree = 1). The data were analysed by IBM SPSS Statistics V.27.

The length of class interval criterion adopted was 5 − 1 ÷ 5 = 0.80 which was used to interpret the arithmetic means as depicted in table 1.

Table 1. Criterion for Judging the Level of Arithmetic Means

Arithmetic Mean Range	Level	Relative Importance (%)
1.00–1.80	Very Low	20.0–36.0
1.81–2.60	Low	36.2–52.0
2.61–3.40	Moderate	52.2–68.0

3.41–4.20	High	68.2–84.0
4.21–5.00	Very High	84.2–100

Source: Prepared by the researcher.

First: Data Screening

One hundred and forty-two questionnaires were returned, none of which had missing data. The numerical coding was cross checked with the text responses prior to analysis and response patterns were analyzed for careless responses (Meade & Craig, 2012). The screening results are summarised in table 2..

Table 2. Questionnaire Data Screening Results

Procedure	**Result**	**Decision**
Received questionnaires	142	No missing values
Matching numerical coding with text responses	Matched across all cells (2,414 cells)	Spelling errors were found in some response options (items 10, 11 and 15) and coded according to their position on the scale
Alternating pattern (5-1-5-1) across all items	One questionnaire	Excluded due to inconsistent responses within the same construct
Same response to all seventeen items	6 questionnaires	Retained in the main analysis and excluded in sensitivity analysis
Multivariate outliers (Mahalanobis at 0.001)	4 questionnaires	Retained in the main analysis and excluded in sensitivity analysis
Final valid sample for analysis	141	Adopted in all subsequent analyses

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs.

The valid sample size (141 teachers) is below the sample size specified in the research methodology (381 teachers at a 95% confidence level and a 5% margin of error). The distributed questionnaire did not include demographic variables; therefore, this section does not describe the sample characteristics. At this sample size, the statistical power is 0.81 for the observed effect size in the main hypothesis and 0.99 for detecting a medium effect (f^2 = 0.15) at a significance level of 0.05 (Cohen, 1988).

Second: Reliability of the Measurement Instrument

The reliability of the instrument was measured using Cronbach's alpha for each section and dimension. Table 3 shows that the reliability coefficient was 0.930 for perceived organisational support and 0.817 for innovative work behaviour; these values are excellent and good, respectively, according to George and Mallery (2019). The idea promotion (0.755) and idea implementation (0.715) dimensions exceeded the acceptable threshold of 0.70, whereas the idea generation dimension fell below it (0.613). Scales consisting of three items are known to produce relatively low alpha coefficients; however, this value calls for caution when interpreting the results of this dimension (Hair et al., 2019).

Table 3. Cronbach's Alpha Reliability Coefficients for the Questionnaire Sections and Dimensions

Section / Dimension	**Number of Items**	**Cronbach's Alpha**	**Assessment**
Perceived	8	0.930	Excellent

organisational support			
Idea generation	3	0.613	Poor
Idea promotion	3	0.755	Acceptable
Idea implementation	3	0.715	Acceptable
Innovative work behaviour	9	0.817	Good

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs.

The split-half method confirmed this result, as shown in Table 4: the Spearman–Brown coefficient was 0.910 for the organisational support section and 0.845 for the innovative work behaviour section.

Table 4. Reliability Using the Split-Half Method

Section	**First-half items**	**First-half alpha**	**Second-half items**	**Second-half alpha**	**Correlation between halves**	**Spearman–Brown**	**Guttman**
Perceived organisational support	4	0.862	4	0.891	0.835	0.910	0.910
Innovative work behaviour	5	0.656	4	0.716	0.729	0.845	0.835

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. Spearman–Brown for the innovative work behaviour section is calculated using the unequal-length formula (5 and 4 items).

Table 5 presents the item-total statistics. The corrected correlation coefficient for all items exceeded the minimum threshold of 0.30 (Field, 2018), and removing any item did not increase the reliability of the perceived organisational support section. Item 11, "I try to find unconventional ways to accomplish educational tasks and responsibilities," was the weakest item in the innovative work behaviour section: its corrected correlation with its dimension was 0.304. Removing it would increase the reliability of the idea generation dimension from 0.613 to 0.714.

Table 5. Item Statistics: Corrected Correlation and Alpha if Item Deleted

Item	**Item wording**	**Corrected item–dimension correlation**	**Alpha if item deleted (dimension)**	**Corrected item–total correlation**	**Alpha if item deleted (overall section)**
1	The educational institution appreciates the efforts I make in my work.	0.744	0.922	0.744	0.922
2	The educational institution cares about my	0.793	0.918	0.793	0.918

	circumstances and well-being at work.				
3	The educational institution takes teachers' opinions and suggestions into consideration.	0.749	0.921	0.749	0.921
4	The educational institution recognises the importance of my contributions to improving educational work.	0.675	0.927	0.675	0.927
5	The educational institution provides the necessary support when I face difficulties in performing my work.	0.736	0.922	0.736	0.922
6	The educational institution is concerned with helping me develop my professional capabilities.	0.770	0.920	0.770	0.920
7	The educational institution treats teachers as important elements in its success.	0.792	0.918	0.792	0.918
8	The educational institution takes teachers' interests into account when	0.808	0.917	0.808	0.917

	making decisions that affect their work.				
9	I look for new methods to improve the teaching and learning process.	0.518	0.379	0.486	0.802
10	I propose new ideas to address the problems I face in my educational work.	0.476	0.449	0.499	0.801
11	I try to find unconventional ways to accomplish educational tasks and responsibilities.	0.304	0.714	0.460	0.809
12	I work to convince my colleagues of the importance of the new ideas I propose.	0.553	0.707	0.498	0.801
13	I seek support from management and colleagues to implement my new ideas.	0.578	0.680	0.467	0.804
14	I encourage my colleagues to participate in developing new educational ideas and practices.	0.627	0.622	0.581	0.790
15	I implement the new ideas that I develop in my educational work.	0.557	0.614	0.524	0.800

16	I turn new suggestions and ideas into actual procedures and practices within the school.	0.579	0.571	0.568	0.792
17	I follow up on the results of implementing new ideas and work to improve them when necessary.	0.486	0.688	0.600	0.789

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs.

Third: Validity of the Measurement Instrument

1. Internal Consistency Validity

Table 6 shows Pearson correlation coefficients between each item and the total score of its dimension, and between innovative work behaviour items and the total score of the section. All coefficients were positive and significant at the 0.01 level, ranging from 0.725 to 0.858, indicating that the items measure what they were designed to measure. The three dimensions were correlated with the total innovative work behaviour score at 0.820, 0.780, and 0.834 for idea generation, idea promotion, and idea implementation, respectively; all were significant at 0.01.

Table 6. Internal Consistency Validity of Questionnaire Items

Item	**Dimension**	**Item–dimension correlation**	**Sig.**	**Item–section correlation**	**Sig.**
1	Perceived organisational support	0.804	0.000	-	-
2	Perceived organisational support	0.848	0.000	-	-
3	Perceived organisational support	0.814	0.000	-	-
4	Perceived organisational support	0.754	0.000	-	-
5	Perceived organisational support	0.803	0.000	-	-
6	Perceived organisational support	0.830	0.000	-	-
7	Perceived organisational	0.843	0.000	-	-

	support				
8	Perceived organisational support	0.858	0.000	-	-
9	Idea generation	0.791	0.000	0.616	0.000
10	Idea generation	0.755	0.000	0.621	0.000
11	Idea generation	0.725	0.000	0.620	0.000
12	Idea promotion	0.793	0.000	0.620	0.000
13	Idea promotion	0.808	0.000	0.595	0.000
14	Idea promotion	0.855	0.000	0.699	0.000
15	Idea implementation	0.780	0.000	0.619	0.000
16	Idea implementation	0.838	0.000	0.678	0.000
17	Idea implementation	0.782	0.000	0.700	0.000

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. ** Significant at 0.01. The perceived organisational support section is unidimensional; therefore, the correlation of its items with the dimension represents their correlation with the section.

2. Construct Validity (Exploratory Factor Analysis)

Exploratory factor analysis was conducted using the principal components method for each section. Table 7 shows that the KMO value was 0.938 for perceived organisational support and 0.777 for innovative work behaviour, both above the minimum threshold of 0.50 (Kaiser, 1974). Bartlett's test was significant for both sections, indicating that the data were suitable for factor analysis.

Table 7. KMO and Bartlett's Test Results

Section	**KMO**	**Approx. Chi-Square**	**df**	**Sig.**	**Number of factors (eigenvalue > 1)**	**Number of factors (parallel analysis)**	**Variance explained by first factor (%)**
Perceived organisational support	0.938	748.35	28	0.000	1	1	67.24
Innovative work behaviour	0.777	393.94	36	0.000	2	1	41.36

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. Parallel analysis according to Horn (1965), using 500 random matrices.

For perceived organisational support, one factor was extracted according to both criteria, explaining 67.24% of the total variance, with item loadings ranging from 0.747 to 0.861. This confirms the unidimensionality of the scale, consistent with its original form (Rhoades & Eisenberger, 2002). For innovative work behaviour, Table 8 presents the rotated component matrix (Varimax) with three factors.

Table 8. Rotated Component Matrix for Innovative Work Behaviour Items

Item	Theoretical dimension	Component 1	Component 2	Component 3
9	Idea generation	0.769		
10	Idea generation	0.847		
11	Idea generation			0.825
12	Idea promotion		0.729	
13	Idea promotion		0.865	
14	Idea promotion		0.745	0.426
15	Idea implementation	0.419		0.708
16	Idea implementation	0.543		0.369
17	Idea implementation	0.568	0.387	

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. Extraction method: principal components; rotation: Varimax; loadings below 0.30 were suppressed.
The idea promotion items (12–14) loaded on a distinct component, providing support for the construct validity of this dimension. Items 9 and 10 of idea generation loaded on the same component as the idea implementation items, while item 11 loaded on a third component together with item 15. This means that teachers did not clearly distinguish between the idea-generation stage and the implementation stage. This finding should be considered when interpreting the results of these two dimensions. Confirmatory factor analysis (using AMOS or an equivalent program) indicated that the four-factor model fit the data acceptably (CFI = 0.948, TLI = 0.938, RMSEA = 0.061, SRMR = 0.059) (Hu & Bentler, 1999).

3. Common Method Bias Test

Harman's single-factor test was conducted by entering all seventeen questionnaire items into an unrotated factor analysis. The first factor explained 34.96% of the total variance, which is less than 50%; therefore, there is no substantial bias resulting from collecting data on both variables from the same respondent (Podsakoff et al., 2003).

Fourth: Normality Test

Table 9 presents the results of the Kolmogorov–Smirnov and Shapiro–Wilk tests. The perceived organisational support section follows a normal distribution (Sig. greater than 0.05 in both tests), whereas the innovative work behaviour section and its dimensions do not, due to the concentration of responses around score 4. Skewness and kurtosis coefficients remained within acceptable limits for regression analysis (West et al., 1995). Since the sample size exceeds 30, the central limit theorem permits the use of parametric tests. Nevertheless, Spearman's coefficient, robust standard errors (HC3), and the bootstrap method were also used to confirm the results.

Table 9. Tests of Normality

Variable	Kolmogorov–Smirnov	df	Sig.	Shapiro–Wilk	df	Sig.	Skewness	Kurtosis
Perceived organisational support	0.076	141	0.111	0.984	141	0.069	-0.187	-0.537
Idea generation	0.254	141	0.000	0.864	141	0.001	-1.046	2.553
Idea promotion	0.268	141	0.000	0.882	141	0.001	-0.577	1.489
Idea	0.261	14	0.00	0.881	14	0.00	-0.571	2.509

implementation		1	0		1	1		
Innovative work behaviour	0.146	141	0.000	0.916	141	0.001	-0.705	3.003

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. Kolmogorov–Smirnov with Lilliefors correction.

Fifth: Descriptive Analysis of the Study Variables

The frequency distribution, arithmetic means and standard deviations of the items of perceived organisational support are presented in Table 10. The mean for the section was 2.99 (SD = 0.90, RI = 59.9%) which was not significantly different from the middle of the scale (t = -0.07, Sig. = 0.944). This indicates that neither the average teacher in the sample feels supported by the educational institution nor does he or she say he or she is not supported. The first item "The educational institution appreciates the efforts I make in my work" scored the highest with a mean of 3.30. The mean for item 3, "The educational institution takes teachers' opinions and suggestions into consideration", was 2.68, which was followed by item 2, which is related to concern for teachers' circumstances and well-being, with a mean of 2.76. This indicates that teachers feel their efforts are appreciated more than they feel their opinions are heard.

Table 10. Descriptive Analysis of Perceived Organisational Support Items

Item	**Item wording**	**Mean**	**SD**	**Relative importance (%)**	**Level**	**Rank**
1	The educational institution appreciates the efforts I make in my work.	3.30	1.01	66.0	Moderate	1
2	The educational institution cares about my circumstances and well-being at work.	2.76	1.13	55.2	Moderate	7
3	The educational institution takes teachers' opinions and suggestions into consideration.	2.68	1.12	53.6	Moderate	8
4	The educational institution	3.09	1.11	61.7	Moderate	4

	recognises the importance of my contributions to improving educational work.					
5	The educational institution provides the necessary support when I face difficulties in performing my work.	2.84	1.12	56.9	Moderate	6
6	The educational institution is concerned with helping me develop my professional capabilities.	3.16	1.12	63.3	Moderate	3
7	The educational institution treats teachers as important elements in its success.	3.23	1.04	64.7	Moderate	2
8	The educational institution takes teachers' interests into account when making decisions that affect their work.	2.89	1.10	57.9	Moderate	5
Overall indicator: perceived organisational support		2.99	0.90	59.9	Moderate	

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. N = 141.
Table 11 presents the results for the innovative work behaviour items. The section had a high level (mean = 4.01, standard deviation = 0.42, relative importance = 80.3%). Its three dimensions were all high and had similar means: idea generation (4.05), idea implementation (4.00), and idea promotion (3.99). The agreement rate for most items exceeded 80%. The highest item was item 15, "I implement the new ideas that I develop in my educational work," with a mean of 4.09; the lowest was item 16, "I turn new suggestions and ideas into actual procedures and practices within the school," with a mean of 3.92. It should be noted that this high level is based on teachers' self-assessments.

Table 11. Descriptive Analysis of Innovative Work Behaviour Items

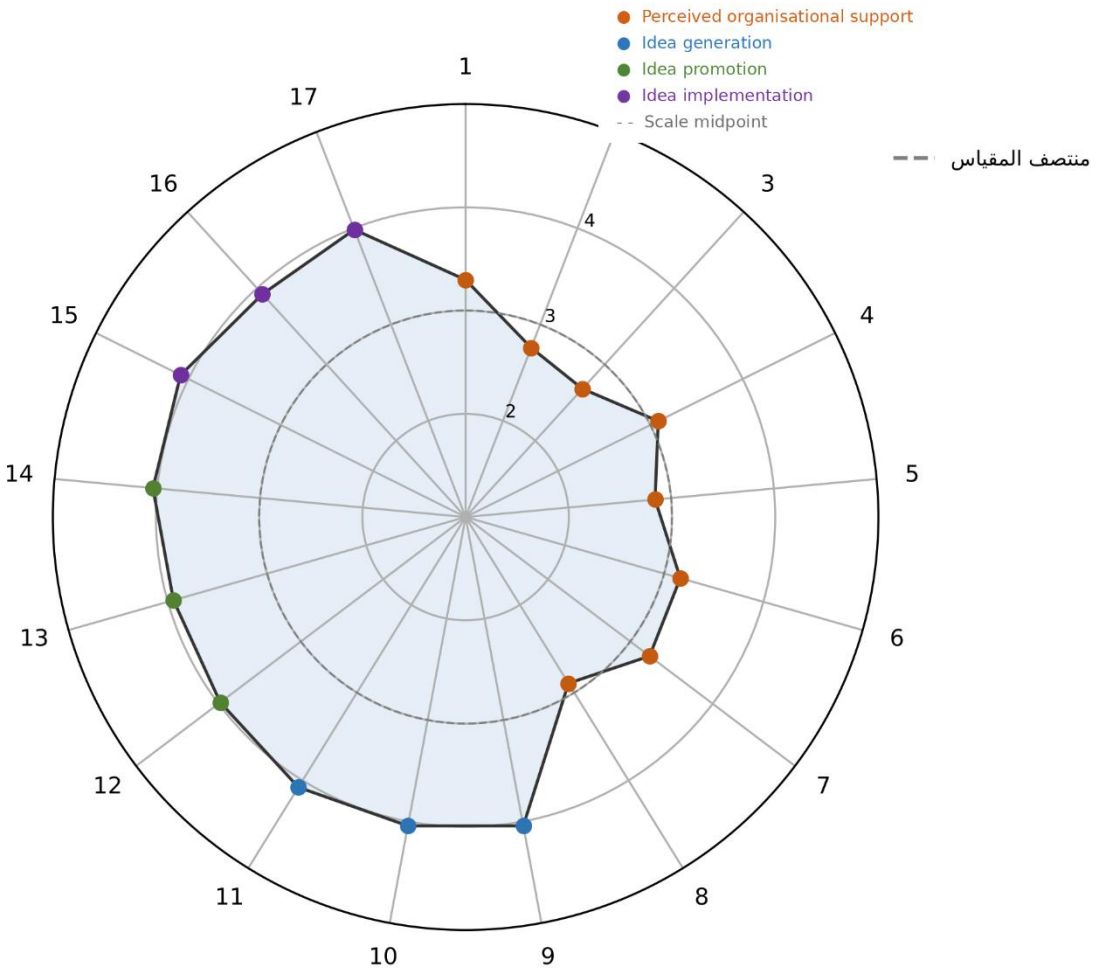
Item	**Item wording**	**Mean**	**SD**	**Relative importance (%)**	**Level**	**Rank**
9	I look for new methods to improve the teaching and learning process.	4.04	0.67	80.9	High	2
10	I propose new ideas to address the problems I face in my educational work.	4.04	0.64	80.9	High	2
11	I try to find unconventional ways to accomplish educational tasks and responsibilities.	4.08	0.81	81.6	High	1
Idea generation overall		4.05	0.54	81.1	High	
12	I work to convince my colleagues of the importance of the new ideas I propose.	3.98	0.64	79.6	High	2
13	I seek support from management and colleagues to implement my new ideas.	3.94	0.64	78.9	High	3
14	I encourage	4.04	0.72	80.9	High	1

	my colleagues to participate in developing new educational ideas and practices.					
Idea promotion overall		3.99	0.55	79.8	High	
15	I implement the new ideas that I develop in my educational work.	4.09	0.51	81.7	High	1
16	I turn new suggestions and ideas into actual procedures and practices within the school.	3.92	0.64	78.4	High	3
17	I follow up on the results of implementing new ideas and work to improve them when necessary.	3.99	0.62	79.7	High	2
Idea implementation overall		4.00	0.48	80.0	High	

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. N = 141.

Figure 1 illustrates the gap between the two sections at the item level: perceived organisational support items are located around the midpoint of the scale, whereas all innovative work behaviour items are close to score 4. Table 12 summarises the ranking of the sections and dimensions.

Figure 1. Radar Chart of the Mean Scores of Questionnaire Items



Source: Prepared by the researcher based on the results of Tables 10 and 11. Items 1–8: perceived organisational support; 9–11: idea generation; 12–14: idea promotion; 15–17: idea implementation.

Table 12. Summary of Descriptive Levels of the Study Sections and Dimensions

Section / Dimension	**Mean**	**SD**	**Relative importance (%)**	**Level**	**t (compared with 3)**	**Sig.**
Perceived organisational support	2.99	0.90	59.9	Moderate	-0.07	0.944
Idea generation	4.05	0.54	81.1	High	23.38	0.000
Idea implementation	4.00	0.48	80.0	High	24.91	0.000
Idea promotion	3.99	0.55	79.8	High	21.51	0.000
Innovative work behaviour	4.01	0.42	80.3	High	28.62	0.000

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. One-sample t-test with a test value of 3; df = 140.

Sixth: Testing the Study Hypotheses

The study hypotheses were formulated in null form based on research hypothesis H1 and the third research question concerning the dimensions of innovative work behaviour, as follows:

Main Hypothesis 1 (H01): There is no statistically significant correlation at the 0.05 level between perceived organisational support and innovative work behaviour. It has the following

sub-hypotheses: (H01-1) idea generation; (H01-2) idea promotion; and (H01-3) idea implementation.

Main Hypothesis 2 (H02): Perceived organisational support has no statistically significant effect at the 0.05 level on innovative work behaviour. It has the following sub-hypotheses: (H02-1) idea generation; (H02-2) idea promotion; and (H02-3) idea implementation.

1. Testing the Correlation Hypothesis (H01)

Table 13 presents the correlation coefficients between perceived organisational support and innovative work behaviour and its dimensions. Pearson's correlation coefficient between the two variables was 0.233, significant at 0.01. According to Cohen's (1988) criterion, this is a weak positive correlation. Spearman's coefficient was close to it (0.219). Therefore, the first main null hypothesis is rejected and the alternative hypothesis is accepted: there is a statistically significant positive correlation between perceived organisational support and innovative work behaviour.

At the dimension level, organisational support was significantly correlated only with idea promotion (r = 0.326, Sig. = 0.000); therefore, sub-hypothesis H01-2 is rejected. Its correlation with idea generation (r = 0.128, Sig. = 0.131) and idea implementation (r = 0.102, Sig. = 0.229) was not significant; therefore, sub-hypotheses H01-1 and H01-3 are accepted.

Table 13. Correlations between Perceived Organisational Support and Innovative Work Behaviour and Its Dimensions

Variable correlated with organisational support	**Pearson r**	**Sig.**	**Spearman's rho**	**95% CI**	**Decision**
Innovative work behaviour	0.233**	0.005	0.219**	[0.071, 0.384]	Reject H0
Idea generation	0.128	0.131	0.136	[-0.038, 0.287]	Accept H0
Idea promotion	0.326**	0.000	0.264**	[0.169, 0.466]	Reject H0
Idea implementation	0.102	0.229	0.107	[-0.064, 0.263]	Accept H0

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. ** Significant at 0.01 (two-tailed); N = 141. Confidence intervals calculated using Fisher's transformation.

2. Testing the Effect Hypothesis (H02)

The second main hypothesis was tested using simple linear regression analysis. Before that, the regression assumptions were examined: the Durbin–Watson value was 1.918, close to 2, indicating no autocorrelation among residuals. The largest Cook's distance value did not exceed 0.173, indicating no influential observation. The Breusch–Pagan test indicated heteroscedasticity of residuals (Sig. = 0.044); therefore, the results were confirmed using robust standard errors, HC3 (Long & Ervin, 2000). Tables 14, 15, and 16 present the regression outputs.

Table 14. Model Summary

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin–Watson**
Perceived organisational support → innovative	0.233	0.055	0.048	0.410	1.918

work behaviour					

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. Independent variable: perceived organisational support; dependent variable: innovative work behaviour.

Table 15. Regression Analysis of Variance (ANOVA)

Source of variation	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Regression	1.349	1	1.349	8.015	0.005
Residual	23.403	139	0.168		
Total	24.752	140			

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs.

Table 16. Regression Coefficients

Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**95% CI lower**	**95% CI upper**	**HC3 Sig.**
Constant	3.685	0.121		30.471	0.000	3.446	3.924	
Perceived organisational support	0.110	0.039	0.233	2.831	0.005			0.022

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. Percentile Bootstrap confidence interval (5,000 samples) for B: [0.018, 0.201].

The results show that the model is statistically significant (F = 8.01, Sig. = 0.005), explaining 5.5 % of the variance in innovative work behaviour ($R^2 = 0.055$) with the rest of the variance due to other factors not covered in the model. The regression coefficient was B = 0.110 which implies that when P.O.S increases by 1 point, the innovative work behaviour increases by 0.110 points. This effect persisted with robust standard errors (Sig. = 0.022) and the Bootstrap confidence interval did not include zero. Thus, the second major null hypothesis is rejected and the alternative hypothesis is accepted: The perceived organisational support has a statistically significant effect on the innovative work behaviour.

The regression equation is: Innovative work behaviour = 3.685 + 0.110 × perceived organisational support.

However, the effect size is small ($f^2 = 0.058$), lower than that reported in studies in higher education and the business sector (Al-Taie & Khattak, 2024; Wahid & Ayub, 2024).

Table 17 presents the simple regression results for the effect of organisational support on each dimension of innovative work behaviour. The effect was significant only for idea promotion (B = 0.198, Beta = 0.326, Sig. = 0.000), with organisational support explaining 10.6% of the variance in this dimension; therefore, sub-hypothesis H02-2 is rejected. The effect was not significant for idea generation (Sig. = 0.131) or idea implementation (Sig. = 0.229); therefore, sub-hypotheses H02-1 and H02-3 are accepted. The same results were obtained using robust standard errors and the Bootstrap method.

Table 17. Simple Regression Results for the Effect of Organisational Support on Innovative Work Behaviour Dimensions

Hypothesis	**Model / relationship**	**Constant (α)**	**B**	**Beta**	**T**	**Sig.**	**R^2**	**F**	**HC3 Sig.**	**Decision**
H02-1	Organisational support	3.826	0.076	0.128	1.519	0.131	0.016	2.307	0.256	Accept H0

	→ idea generation									
H02-2	Organisational support → idea promotion	3.395	0.198	0.326	4.061	0.000	0.106	16.493	0.001	Reject H0
H02-3	Organisational support → idea implementation	3.836	0.054	0.102	1.208	0.229	0.010	1.460	0.318	Accept H0

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. df = (1, 139). This pattern can be explained by the nature of the dimensions. Idea promotion involves convincing colleagues and seeking management support (Janssen, 2000), which is the stage in which teachers need an institutional response more than in other stages. Idea generation and experimentation in the classroom may occur independently of the level of support perceived by the teacher.

3. Sensitivity Analysis

The hypotheses were retested after excluding questionnaires with the same response to all items, and then after excluding outliers. Table 18 shows that the statistical decision did not change for any hypothesis, and that the effect size decreased slightly.

Table 18. Sensitivity Analysis of Hypothesis Results

Sample	**N**	**R (overall section)**	**R^2**	**Sig.**	**r (generation)**	**r (promotion)**	**r (implementation)**
Full sample	141	0.233**	0.055	0.005	0.128	0.326**	0.102
After excluding uniform responses	135	0.209*	0.044	0.015	0.109	0.311**	0.071
After excluding outliers	137	0.183*	0.033	0.033	0.131	0.219*	0.100

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. ** Significant at 0.01; * significant at 0.05.

4. Exploratory Analysis: Is the Relationship Linear?

The RESET test indicated that the relationship between organisational support and innovative work behaviour may not be linear (Sig. = 0.003). Teachers were divided into three equal groups according to their organisational support scores, as shown in Table 19. The mean innovative work behaviour scores were similar in the low and moderate groups and increased in the high-support group; the difference was significant (Kruskal–Wallis H = 10.70, Sig. = 0.005). A piecewise regression at the scale midpoint showed that the slope was close to zero and non-significant when support was below 3 (B = -0.065, Sig. = 0.508), and increased to 0.310 (Sig. < 0.001) when it exceeded that value, as illustrated in Figure 2. This means that

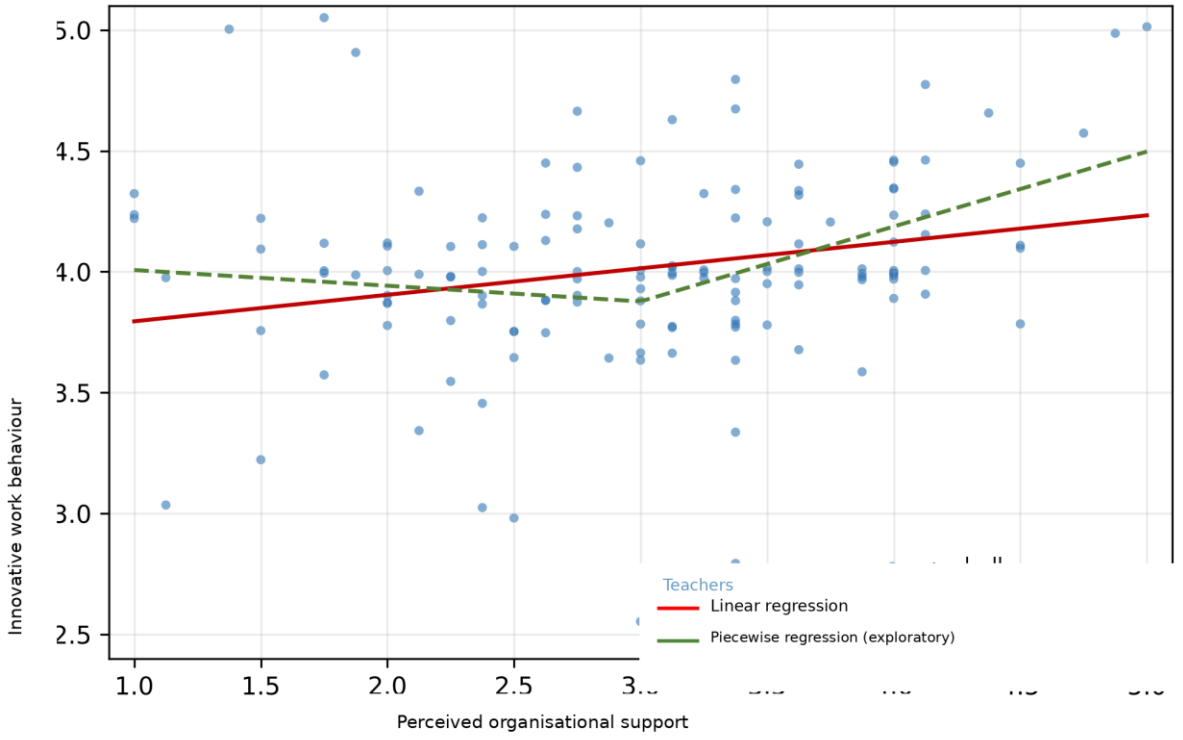
organisational support appears to have an effect only when it exceeds the neutral level. This is an exploratory finding that was not hypothesised in advance and requires confirmation using a larger sample.

Table 19. Mean Scores of Innovative Work Behaviour by Perceived Organisational Support Groups

Support group	**N**	**Mean organisational support**	**Mean innovative work behaviour**	**Idea generation**	**Idea promotion**	**Idea implementation**
Low	51	2.03	3.92	3.98	3.82	3.97
Moderate	45	3.10	3.96	4.00	4.01	3.88
High	45	3.99	4.17	4.19	4.16	4.15

Source: Prepared by the researcher based on IBM SPSS Statistics V.27 outputs. Groups based on tertiles (RANK / NTILES(3)).

Figure 2. Relationship between Perceived Organisational Support and Innovative Work Behaviour



Source: Prepared by the researcher. Solid line: linear regression (R^2 = 0.055); dashed line: piecewise regression at score 3 (exploratory); N = 141.

5. Summary of Hypothesis Testing Results

Table 20 summarises the statistical decision for all hypotheses.

Table 20. Summary of Hypothesis Testing Results

Hypothesis	**Content**	**Result**	**Statistical decision**
H01	Relationship between organisational support and	A weak significant positive relationship exists	Reject H0

	innovative work behaviour		
H01-1	Relationship with idea generation	No significant relationship	Accept H0
H01-2	Relationship with idea promotion	A significant positive relationship exists	Reject H0
H01-3	Relationship with idea implementation	No significant relationship	Accept H0
H02	Effect of organisational support on innovative work behaviour	A significant effect exists (R^2 = 0.055)	Reject H0
H02-1	Effect on idea generation	No significant effect	Accept H0
H02-2	Effect on idea promotion	A significant effect exists (R^2 = 0.106)	Reject H0
H02-3	Effect on idea implementation	No significant effect	Accept H0

Source: Prepared by the researcher.

Discussion

The integrated study is a theoretical and methodological framework that considers studying the use of POS and IWB in the context of public school teachers in Kirkuk Governorate. The theoretical review shows that POS is a relevant organisational condition which can stimulate teachers to produce, promote and implement ideas. The theory of organisational support for creativity and the componential model of creativity and innovation imply that the more supportive the organisational conditions, the more willing the teachers are to invest their knowledge and motivation in innovative practices.

The measurement component showed high alpha values with .930 and .817 for the POS and IWB, respectively. Split-half reliability was also high (.910 and .845) and the internal-consistency validity coefficients for all items were positive and significant. In the current sample, these results showed that the adapted Arabic versions of the POS and IWB scales were reliable.

Three measurement problems, however, need to be addressed. The first thing is that the idea generation dimension did not have a high alpha of .613. The alpha is low for this dimension, which could be due in part to the length of the scale, but this should be interpreted with caution (Hair et al., 2019). The least successful item was #11, "I try to find unconventional ways to accomplish educational tasks and responsibilities," which had a corrected item–dimension correlation of .304 and would raise the alpha of the dimension to .714 if it was removed. This item should be either revised or replaced in future studies.

Second, the exploratory factor analysis of IWB produced inconsistent evidence: the eigenvalue criterion suggested two factors, whereas parallel analysis suggested one. This means that the three-dimensional structure proposed by Janssen (2000) was not strongly reproduced in the present data. Two interpretations are possible. On the one hand, the small sample (141) may

have limited the stability of the factor solution. On the other hand, the teachers in this context may not distinguish sharply between generating, promoting, and realising ideas, perhaps because centralised administrative structures constrain the later stages of the innovation process. Future research should use confirmatory factor analysis with a larger sample to test the three-dimensional model more rigorously.

Third, the achieved sample of 141 valid responses was considerably smaller than the planned sample of 381. Although statistical power was adequate for the observed main effect and for a medium effect, the smaller sample limits the precision of estimates and the generalisability of findings. The absence of demographic variables also prevents subgroup analysis and sample description.

Once the correlation and regression analyses are completed, the discussion should compare the findings with those of Wahid and Ayub (2024), Al-Taie and Khattak (2024), Muñoz et al. (2023), Margaretha et al. (2025), and Zargar et al. (2025). If H1 is supported, the result will be consistent with organisational support theory and with prior evidence that POS is positively associated with IWB. If H1a–H1c produce differential results, this will suggest that organisational support matters more for some stages of the innovation process than for others.

Limitations and Future Research

Several limitations should be acknowledged.

Sample size and representativeness. The actual number of samples (141) was less than the number of samples originally planned (381). The sample's electronic, volunteer nature also renders it as not representative of all public school teachers in the Kirkuk Governorate.
Lack of demographic measures. Demographic items were not included in the questionnaire, thus no sample description and no categorization of the sample could be achieved.
Low reliability on generating ideas. The idea generation dimension was (alpha = .613) less than the .70 recommended level.
IWB has a factor structure that is not clear. The three dimensional structure of IWB was not well supported by exploratory factor analysis.
Self report data and cross sectional design. The cross-sectional design precludes causal inferences and common method bias is a potential limitation of using self-reports.
Contextual scope. The study only applies to the public schools of Kirkuk Governorate, may not be generalised to other governorates, private schools or other educational levels.
Future studies should apply larger and more representative samples, use demographic and school-level variables, enhance the idea generation measure, apply confirmatory factor analysis, and apply longitudinal and multi-source designs. In addition to individual-level POS, multilevel modelling could be used to explore school-level support.
Conclusion and Recommendations
The present study is a combination of theory and application of research in the field of (POS and IWB) in public school teachers in the governorate of Kirkuk in Iraq. The theoretical review provides the basis for anticipating a positive relationship between POS and teachers' innovative work behaviour. Practical

component confirms the instrument has good reliability for the POS and overall IWB, and needs further measurement development for the idea generation dimension, and needs verification in future samples for factor structure of IWB. Final conclusions for H1, H1a, H1b and H1c will await completion of correlation/ regression analyses. Based on the theoretical framework and the measurement results, the following recommendations are given:

To school leaders: increase visible support of organisation: acknowledge teachers' contributions, consult teachers on decisions which impact their work, offer professional development opportunities etc.

For the Ministry of Education: To establish policies to acknowledge teachers' creativity and minimise administrative hurdles to innovating ideas.

Future researchers: Larger samples, more demographic, reword the IWB items, and confirmatory factor analysis to test the three-dimensional structure of IWB.References

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