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Navigating the conduciveness of the internal work environment for creativity and innovation

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Authors:
Mariette Coetzee[1]
Geraldine Leach[2]

Affiliations:
[1]Department of Human Resource Management, College of Economic and Management Sciences, University of South Africa, Pretoria, South Africa

[2]Department of Human Resources Management, Faculty of Administration: Human Resources Management, University of South Africa, Pretoria, South Africa

Corresponding author:
Mariette Coetzee,
coetzm@unisa.ac.za

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Orientation: Employee-driven innovation (EDI) and creativity are critical for organisational performance. However, organisations' innovative ability depends on conducive work environments that promote and support innovative behaviours.

Research purpose: To identify factors critical to a conducive work environment for promoting employee innovation and creativity.

Motivation for the study: The lack of EDI and creativity is forcing organisations to review the conduciveness of work environments for innovation.

Research design, approach and method: A quantitative, cross-sectional research approach was employed to collect and analyse data from 4206 permanent academic and administrative employees of all ethnicities and genders at the institution. Exploratory factor analysis (EFA) was used to determine work environment factors influencing employee innovation and creativity.

Main findings: The EFA identified a five-construct factor model for the internal work environment: culture, mechanism, opportunity, risk-taking tolerance and dedication. The measurement scale is reliable and valid for measuring the internal work environment linked to EDI and creativity at an open-distance higher education institution.

Practical/managerial implications: Educational institutions may use the measurement instrument to assess the conduciveness of the internal environment and develop strategies to promote EDI and creativity.

Contributions/value-add: This study shows that innovation and creativity are not the result of individual characteristics only but depend largely on the conduciveness of the work environment.

Keywords: employee-driven innovation; internal work environment; organisational innovation culture; innovation mechanisms; innovation opportunities; risk-taking tolerance; open-distance higher education.

Introduction

Organisations increasingly face turbulence and ever-changing customer needs, highlighting the impracticality of relying on fixed procedures and practices. Adjusting to deal with unexpected situations and exploiting new opportunities necessitate innovation. Abun et al. (2023) state that no innovation means no transformation or development. Innovation undoubtedly contributes to organisational success (Renkema, Meijerink & Bondarouk 2021). However, for innovation to occur, learning is essential. Conditions for participating in workplace learning that stimulates employee-driven innovation (EDI) are part of a complex process in which individual factors and the workplace environment interact and are reciprocally negotiated, utilising adaptive and innovative learning (Bjornali & Storen 2012; Lemmetty & Billet 2023; Lidman, Gustavsson & Eriksson 2023). Significant investments and workplace programmes have encouraged employees to innovate, but unfortunately, numerous organisational barriers prevent employees from engaging in EDI. According to Echebiri, Amundsen and Engen (2020) and Lidman et al. (2023), organisational barriers include risk aversion, bureaucracy, organisational silos, rigid budgets and poor leadership.

Holmquist and Johanssen (2019) and Lemmetty and Billet (2023) believe that innovation should address three criteria: create value for the organisation, improve operations and improve work–life quality. The question of how the internal work environment will facilitate innovation thus becomes essential.

Aim of the study

The research aimed to identify internal work environment factors linked to EDI and creativity at a higher education institution.

Literature review

Employee-driven innovation and creativity

Great innovations do not always originate in an executive's office or a laboratory but often involve employees searching for solutions to work-related problems. Employee-driven innovation should thus be managed as a bottom-up resource in improving organisational performance.

Employee-driven innovation involves initiating a new idea, process or product by an individual or a group of employees (Echebiri et al. 2020). The search for ideas, idea development and implementation are all part of EDI. This means that employees should be empowered to participate, make decisions, exercise autonomy, use their initiative and take responsibility. Bjornali and Storen (2012) believe that EDI becomes an entrepreneurial activity that exploits opportunities as they arise in organisations. Employees regularly face work challenges and learn from daily trial and error to develop innovation in a problem-solving fashion. Their experience and knowledge are thus critical sources of creative ideas. Furthermore, the employee's network of relationships provides inspiration, support, resources and information to help them develop and realise new ideas. Unfortunately, employees' creative potential is often overlooked (Holmquist & Johansson 2019). Management support is a key factor that could ensure that creativity is acknowledged and utilised. Echebiri et al. (2020) identified an employee's network of relationships as a source of inspiration, resources, information and support that promotes creativity.

Regarding Kanter's structural empowerment theory, four empowerment structures are necessary for EDI: information, resources, support and opportunity (Echebiri et al. 2020). Without these empowerment structures, employees must rely on the organisational structure to make changes. Organisational structures are often rigid and unresponsive to changes, hence hampering the generation of ideas and successful innovation.

Autonomy is equally important in facilitating employee creativity as part of psychological empowerment. Not only does autonomy contribute to employees' self-efficacy, but it also positively affects the generation of innovative ideas.

As a bottom-up process, EDI involves employees sharing their experiences and knowledge in addressing problems as opposed to expecting top management to identify them. According to Das et al. (2018), top-down innovations receive more attention and resources from top management than bottom-up-supported innovations.

Oeij, Rus and Pot (eds. 2017) emphasised the importance of an innovative learning environment within the organisation to promote innovative behaviour. Organisations can stimulate creativity by presenting teams with ideas and allowing employees to challenge ideas and suggest solutions. This will, however, only succeed in an environment where employees are allowed to voice their ideas without fear of being punished for making mistakes. The ultimate aim should be to generate ideas that can be channelled into innovative business projects.

Innovation does involve risks, and organisations often shy away from making changes for fear of not achieving the desired outcomes. Although managers realise innovation is imperative, the focus is often on instant returns instead of long-term prosperity. Concerning the benefits and risks linked to innovation, organisations should balance the benefits and risks associated with moderate and radical innovation to survive in the long term (Lin et al. 2013). A lack of financial resources involves a lack of funding at the organisational level and insufficient external financing from investors (Das et al. 2018; Hueske & Guenther 2015). According to Liu, Ge and Peng (2016), managers will avoid change to preserve their positions and power and maintain organisational stability. Employees often resist innovation because of attitude issues, an unsupportive innovation culture, rigid organisational structures, persistence in supporting the status quo and risk-aversion traits (Claudino et al. 2017). Implementing changes depends on employees' skills, knowledge, attitudes and diverse experiences. Without having the required expertise, employees will not be able to make a meaningful contribution in terms of innovative ideas or the implementation of the innovation.

Internal work environment

Organisational-level Human Resource Management practices relate to the innovation performance of organisations and individual employees. According to Renkema et al. (2021), structural formalisation, which involves work processes, rules, procedures, policy manuals and job descriptions, often affects innovation negatively. Ideas often remain just ideas because of ineffective implementation or the unwillingness of managers to implement them. Innovation is the outcome of deliberate management and not a random event. Holmquist and Johannson (2019) state that management support, autonomy, collaboration and organisational norms are essential for EDI. In their study on the effect of a learning culture and supportive work environment on organisational performance, Tripathi and Kalia (2022) determined that learning agility and a supportive work environment significantly and positively influence organisational innovation and performance. Miao and Ji (2020) identified two major factors that influence the involvement of employees in innovation capability development: managers' lack of firm-specific expertise and the short tenure of managers. Employees are the creators of innovative ideas, but they rely on management to relinquish control and adopt a bottom-up approach to exploit innovative ideas. Yeh and Huan (2017) state that a manager's leadership style can hamper or inspire employees' creativity.

Amundsen and Engen (2020) emphasised contextual and organisational barriers that limit the participation of employees in innovation activities. Padzik-Wolos (2022) reported on innovation risk, as not all innovations will create economic value. For this reason, management often chooses not to adopt EDI because of short-term pressures, which do not afford them the luxury of investing in innovation projects with extended payback periods (Miao & Ji 2020).

A study by Zhang et al. (2023) categorised organisational culture factors impacting innovation into collectivism, power distance and psychological safety. Collectivism refers to employees working as a unit, and power distance refers to how much employees are influenced by power relations. A culture of collectivism and low-power distance is essential for innovation to flourish.

Workforce diversity creates opportunities for diverse input and plays a significant role in EDI. According to Bagraim et al. (2016), a diverse workforce attains higher performance than a homogeneous workforce because of soliciting input from people with different experiences, perspectives and educational backgrounds. Employees who learn from one another are more willing to adapt to change, which increases organisational competitiveness and effectiveness (Saxena 2014). Organisational survival, success and competitiveness rely on an organisation embracing diversity (Shaban 2016).

Dekoulou and Trivellas (2017) state that an organisation's structure determines its daily operations and guides cooperation and communication among employees, departments and managers. An organisational structure that thus inhibits the flow of information and knowledge hinders cooperation and new knowledge generation (Dekoulou & Trivellas 2017). Research confirms that organisational structures influence workplace innovation (Marín-Idárraga & Cuartas 2016).

The innovative culture of an organisation plays a decisive role in motivating employees to use creativity when searching for solutions to work-related problems. Lindland and Billington (2016) identified the following work environment factors essential for innovative behaviour:

- Trust and low-power relationships
- Risk-taking tolerance
- Challenging work
- Acceptance of failed innovative efforts
- Flexible processes and structures
- Employee independence and authority

Shahin (2017) emphasised the significance of open and transparent communication between management and employees in promoting innovation. Communication about the objectives of the organisation and how employees can contribute to achieving the objectives indicates to employees that innovation is valued and encouraged (Soken & Barnes 2014).

Innovation cannot happen in isolation and depends on the interaction between a diverse range of people and departments. Teamwork influences innovative behaviour and creativity through interaction, collaboration and cooperation among the team members (eds. Belussi & Staber 2012).

How an organisation deals with success and failure indicates the organisation's orientation towards risk and innovation. Acknowledgement and rewards serve as motivational tools to encourage employees to search for better ways of performing tasks.

Few innovative recommendations will be implemented without resources, such as information, funds and time (Horth & Buchner 2014). In addition, leaders who do not practice a leadership style that supports independence and encourages innovation will stifle employees' creativity.

Innovation has become a source of distinct competitive advantage, but without a conducive work environment, employees will be reluctant to take risks, invest in creative ideas and ultimately underperform in driving innovation.

Research method and design

Participants and setting

The empirical study occurred among 4206 employees from all ethnicities and genders within the academic and administrative environment of a South African higher education institution. A census survey was used, and 624 completed questionnaires were returned. This resulted in a response rate of 15%. A response rate of 15% is considered acceptable for external surveys, particularly when the sample is representative of the population and the sample size is sufficiently large to ensure statistical validity.

The demographic profile of the sample indicates an acceptable level of representativeness. While the proportion of African (black) employees in the sample (47.6%) was lower than in the population (63.2%), the representation of female employees was slightly higher in the sample (64.3%) compared to the population (60%). Similarly, respondents employed in administrative departments or units (60.6%) were somewhat overrepresented relative to the population proportion (48%), as were those in supervisory roles (30.4% compared to 22.6%). The proportion of respondents holding postgraduate qualifications (66.2%) exceeded that of the population (51%). Despite these variations, the sample distribution across key demographic variables broadly reflects that of the population, supporting representativeness.

Procedure

The University provided ethics clearance, and permission to conduct the study was obtained from the University Research Ethics Committee (2018_CRERC_011). The sample of employees was invited to participate through a webpage link to the questionnaire on the LimeSurvey platform. By completing the survey and clicking the 'Submit' button, participants provided voluntary consent to participate in the study. Participants were also assured that all responses

would be anonymous. After a sufficient number of completed surveys had been received, the survey was closed. The data were secured by password protection and stored in a locked location.

Measurement development considerations

After reviewing the literature on the role of the internal environment on EDI in a higher education institution in South Africa, it was evident that no existing questionnaire would address this study's aims. As a result, a questionnaire called the *Internal Work Environment Questionnaire* was developed. The questionnaire items were generated based on a review of relevant literature and aligned with the study's objectives. Thereafter, the draft questionnaire was submitted to a panel of three subject matter experts – two academics specialising in Human Resource Management and one senior Human Resource practitioner. The experts reviewed each item for relevance to the research objectives, clarity and wording, and appropriateness for the study. After receiving feedback from the experts, the questionnaire was finalised by adding, deleting and refining items as recommended. The final questionnaire was then subjected to pilot testing before proceeding with the full-fledged study (Leedy & Ormrod 2015).

The questionnaire made use of a Likert-type scale (1 = strongly disagree; 6 = strongly agree). To ensure the reliability of the measuring instrument, Cronbach's alpha coefficient (developed by Cronbach in 1951) was used. According to Pallant (2011), a reliability coefficient of 0.7 or more is generally considered sufficient. Factors 1–5 exceeded the predetermined reliability threshold (0.70).

Measuring instrument

The Internal Work Environment Questionnaire included five factors: culture, mechanism, opportunity, risk-taking tolerance and dedication.

Culture

This factor included seven items that involved different elements, such as support for innovation, breaking down hierarchical barriers, promoting open communication, involvement and enthusiasm from all, tolerance for risk-taking, valuing knowledge and education, rewarding success and accepting failure. Zhang et al. (2023) highlighted the impact of cultural factors such as collectivism, power distance and psychological safety on an organisation's innovation management.

Mechanism

This factor included three items that refer to elements setting innovation in motion, participating in the innovation process and implementing systems that encourage creative actions. A culture of individualism, as opposed to collectivism, will negatively impact group interactions and limit the creation of innovative ideas (Tian et al. 2018).

Opportunity

This factor included four items that involved actions enabling employees to pursue opportunities to change the status quo. Job characteristics such as complex and stimulating work, job autonomy and empowerment offer opportunities for employees to engage in innovative behaviour (Horth & Buchner 2014).

Risk-taking tolerance

This factor included three items that refer to the inherent risks related to making changes and how risks were tolerated by the organisation. Innovation is linked to experimentation, risk-taking and possible failure (Serdyukov 2017). Apart from recognising and rewarding innovativeness, managers should encourage employees to offer innovative ideas irrespective of the possibility of success (Casely 2016).

Dedication

This factor included three items that refer to work practices that encouraged employees to embrace creativity and innovation in their daily functions. Horth and Buchner (2014) emphasised the importance of this factor by referring to the role of managers in removing barriers to innovation and acting as role models in seeking innovative solutions.

Data analysis

This study made use of the Statistical Package for the Social Sciences (SPSS), version 22.0. Exploratory factor analysis (EFA), using principal axis factoring as an extraction method with Promax rotation, was used. The results of the Kaiser–Meyer–Olkin (KMO) and Bartlett's tests were used to determine the suitability of the data for factor analysis (Bartlett 1954; Kaiser 1974). Eigenvalues larger than 1.00 were used as the factor criterion. A cut-off score of 0.30 was used for factor loadings (Hair et al. 2019). The reliability of the internal work environment measure was assessed using a Cronbach's alpha coefficient cut-off score of 0.70 (Nunnally & Bernstein 1994). The tests confirmed that the scale items correlated adequately and that the data were suitable for factor analysis.

Correlation analysis was also conducted to validate the internal structure of the questionnaire, especially after constructs were identified through EFA. The correlation coefficients confirm whether the relationships between constructs align with theoretical expectations. Pearson's correlation analysis was conducted to examine the strength and direction of the relationships between the constructs of the Internal Work Environment.

Ethical considerations

Ethical clearance to conduct this study was obtained from the University of South Africa, UNISA College Ethics Review Committee. Written informed consent was obtained from all participants. Permission to use institutional staff members was obtained from the Research Permission Subcommittee (RPSC) of the UNISA Senate Research, Innovation, Postgraduate Degrees and Commercialisation Committee (SRIPCC). The ethical clearance number is 2018_CRERC_011(FA).

Results and discussion

Descriptive statistics

Table 1 presents the results of the descriptive statistics. The results confirm the suitability of the data for factor analysis. The value for the KMO measures of sampling adequacy was 0.895 and well above the threshold of 0.60 (Kaiser 1970). The significance level of Bartlett's test of sphericity was 0 and below the threshold of $p < 0.05$ (Bartlett 1954). The Bartlett's test of sphericity and the Kaiser–Olkin measure of sampling adequacy results indicated that factor analyses were appropriate to conduct. Item 7 did not load onto any factor and was deleted from further analysis. No further items needed to be eliminated, as all items met the reliability criteria of factor loadings above 0.30 (Veth et al. 2018), and all factors had more than two items.

Internal validity

The principal axis factor analysis revealed the presence of five factors with eigenvalues exceeding 1.0, which cumulatively explained 63.49% of the variance in the internal work environment. The factor loadings in the pattern matrix, as illustrated in Table 2, were analysed in line with the theory and labelled as follows:

- Factor 1: Culture
- Factor 2: Mechanism
- Factor 3: Opportunity
- Factor 4: Risk-taking tolerance
- Factor 5: Dedication

TABLE 1: The Kaiser–Olkin measure of sampling adequacy and Bartlett's test of sphericity.

Variable	Internal work environment
Kaiser–Meyer–Olkin measure of sampling adequacy	0.895
Bartlett's test of sphericity	
Approximate Chi-square	5914.147
df	210
Significance	0.000

Source: Adapted from Leach, G.C., 2020, 'The influence of supervisory behaviour and the internal work environment on employee-driven innovation and creativity in an open distance e-learning institution in South Africa', Master's dissertation, University of South Africa

Reliability of the factor scores

Table 3 presents the descriptive data analysis, including the identified factors' reliability coefficients, skewness, kurtosis values and correlation coefficients. Cronbach's alpha is a measure of scale reliability that assesses how well several items together measure a construct. Reliability refers to obtaining similar results, using the same instrument, to obtain the same or similar data. Reliability thus indicates the accuracy, stability and predictability of a research instrument (Kumar 2011). Cronbach's alpha coefficients are interpreted as follows: ≥0.90 indicates excellent internal consistency, 0.80–0.89 good, 0.70–0.79 acceptable, 0.60–0.69 questionable, 0.50–0.59 poor and <0.50 unacceptable (Nunnally & Bernstein 1994). A minimum threshold of 0.70 was adopted for this study, as this level indicates adequate measurement stability. All the factors had Cronbach's alpha values ranging between 0.73 and 0.87.

Dedication had the highest mean score ($M = 4.93$, SD = 0.86), and *mechanism* had the lowest ($M = 2.21$, SD = 1.08). Employees felt that mechanisms such as suggestion boxes

TABLE 2: Factor structure of internal work environment.

Number	Item description	Factor				
		Culture	Mechanism	Opportunity	Risk-taking tolerance	Dedication
1	The institution's formal and multi-level structure makes provision for EDI	0.587	-	-	-	-
6	The institution has a reward system for EDI ideas and creativity	0.426	-		-	-
8	The institution uses the information technology platform (e.g. intranet and internet) efficiently to communicate and exchange ideas	0.755	-	-	-	-
9	The institution has many creative employees	0.708	-	-	-	-
10	Employees are enthusiastic about generating winning ideas	0.765	-	-	-	-
13	The institution encourages ideas from employees at all levels	0.606	-	-	-	-
21	The institution uses open communication to gain new perspectives	0.486	-	-	-	-
11	We have an innovation task team in our department/unit	-	0.577	-	-	-
12	We have a suggestion scheme (suggestion box for ideas)	-	0.818	-	-	-
14	We have internal competitions for generating innovative ideas	-	0.808	-	-	-
2	My job requires me to be creative	-	-	0.403	-	-
18	We have regular informal sessions in the office to share ideas	-	-	0.674	-	-
19	We are encouraged to learn creative thinking skills	-	-	0.821	-	-
20	We are supported to keep our knowledge and skills up to date by attending training and development opportunities	-	-	0.790	-	-
15	I do not have to fear negative consequences when an idea fails	-	-	-	0.708	-
16	We have an error-tolerance culture (we learn from unsuccessful ideas)	-	-	-	0.929	-
17	We use conflict constructively to promote creativity and innovation	-	-	-	0.582	-
3	I will welcome a change to my job description to include innovation activities as an 'official' task	-	-	-	-	0.825
4	I will welcome special assignments that will help me to be more creative	-	-	-	-	0.872
5	I utilise opportunities to come up with my own ideas to do my job more effectively	-	-	-	-	0.384

Source: Adapted from Leach, G.C., 2020, 'The influence of supervisory behaviour and the internal work environment on employee-driven innovation and creativity in an open distance e-learning institution in South Africa', Master's dissertation, University of South Africa

EDI, employee-driven innovation.

TABLE 3: Internal consistency and reliability of the Internal Work Environment Questionnaire.

Internal work environment							Correlations				
Dimension name	**Cronbach's alpha**	**No of items**	**Mean**	**Standard deviation**	**Skewness**	**Kurtosis**	**Culture**	**Mechanism**	**Opportunity**	**Risk-taking tolerance**	**Dedication**
Culture	0.87	7	3.53	1.11	−0.09	−0.70	1	-	-	-	-
Mechanism	0.75	3	2.21	1.08	1.06	0.92	0.544**	1	-	-	-
Opportunity	0.76	4	3.73	1.13	−0.29	−0.62	0.587**	0.544**	1	-	-
Risk-taking tolerance	0.80	3	3.36	1.26	−0.13	−0.80	0.546**	0.475**	0.541**	1	-
Dedication	0.73	3	4.93	0.86	−0.90	0.91	0.279**	0.097*	0.182**	0.200**	1

Source: Adapted from Leach, G.C., 2020, 'The influence of supervisory behaviour and the internal work environment on employee-driven innovation and creativity in an open distance e-learning institution in South Africa', Master's dissertation, University of South Africa

Note: $N = 624$; ** $p \leq 0.01$, * $p \leq 0.05$. $r = 0.10 \leq 0.29$ is practically significant (small effect). $r \geq 0.30 \leq 0.49$ is practically significant (medium effect). $r = 0.50 \leq 1.0$ is practically significant (large effect).

and task teams are not available to facilitate creativity and innovation, despite them being dedicated to utilising opportunities for creativity. Although all the constructs had a negative skew, the values fell within the range of −2 to +2 and between −7 and +7 for kurtosis to be considered acceptable and for a normal distribution to occur (Kline 2011). *Mechanism* had a substantially skewed positive distribution (1.06), while the rest of the factors ranged between −0.91 and 0.05. These values were within the normal range of −1 to +1 set for these coefficients. According to Field (2009) and Pallant (2011), the skewness will not significantly differ in analysing reasonably large samples.

The Pearson product–moment correlation was used to measure the direction and strength of the relationship between the internal work environment factors. According to Cohen (1992), the correlations (r-values) from 0 to 0.30 indicate a small effect, 0.31 to 0.49 indicate a moderate effect and 0.50 to 1 indicate a high effect.

Three factors, namely mechanism ($r = 0.54$; $p = 0.00$; large practical effect), opportunity ($r = 0.59$; $p = 0.00$; large practical effect) and risk-taking tolerance ($r = 0.55$; $p = 0.00$; large practical effect), have a strong correlation with culture. There is also a strong correlation between mechanism and opportunity ($r = 0.54$; $p = 0.00$; large practical effect).

Opportunity ($r = 0.54$; $p = 0.00$; large practical effect) significantly correlates with risk-taking tolerance ($r = 0.48$; $p = 0.00$; medium practical effect). Dedication, however, had no statistically significant relationship at the 1% level, but was significant at the 5% level. According to the results, culture, mechanism, opportunity and risk-taking tolerance significantly link to employees' innovative behaviour. Dedication has a small effect on employees' innovative behaviour.

This study identified five work environment factors crucial in advancing employee innovation and creativity in a higher education environment where hierarchical structures and cumbersome administrative processes often pose barriers to implementing innovative ideas. An innovative culture, proper mechanisms to promote idea implementation, the provision of opportunities, tolerance of risks and dedication by all stakeholders are key to navigating the internal work environment.

Studies by Ekvall (1996) and Isaksen et al. (2000) on the influence of the work environment on employees' innovation and creativity identified the following factors: challenges, freedom, idea support and time, trust and/or openness, dynamism and/or liveliness, humour and/or playfulness, risk-taking tolerance, debates and the absence of conflict.

More recent studies identified continuous and collaborative learning and empowerment as significant factors in promoting workplace creativity (Barua et al. 2024; Lemmetty & Billet 2023; Lidman et al. 2023). Compared to the factors identified by this study (culture, mechanism, opportunities, risk-taking tolerance and dedication), opportunity and risk-taking tolerance remain central to innovation and creativity.

Recommendations for practical implementation

Concerning the higher education environment, EDI and creativity among administrators, faculty members, support staff and management are crucial for improving institutional development, teaching and research. Strategies to enhance the conduciveness of the work environment for innovation in higher education should include the following:

- Foster a ***culture*** of psychological safety, academic freedom and open discussions by establishing platforms for proposing new ideas without fear of criticism and rejection (Jin & Peng 2024). This action links to the importance of an organisational innovation culture (factor 1) that supports employee initiative and creativity.
- Implement constructive ***feedback mechanisms*** for recognising staff and providing them with feedback on their proposals (Van de Brande & Stam 2021). Innovation mechanisms (factor 2) involve providing feedback to employees to facilitate innovation.
- Empower staff and provide them with ***opportunities*** (factor 3) to experiment with teaching syllabi and methods. Decentralised decision-making will prevent bureaucratic structures from jeopardising innovation (Barua et al. 2024).
- Create a ***risk-tolerance culture*** (factor 4) by allowing staff to fail and learn. Learning from failures rather than penalising mistakes encourages employees to take calculated risks. Part of the workload of faculty staff should provide time dedicated to creative work such as research, course development and community projects (Javed et al. 2020).
- Display ***dedication*** (factor 5) by investing in training, collaborations, mentorship, cross-disciplinary research, industry–academia partnerships and removing barriers to funding and approval of projects (Lidman et al. 2023).

Limitations and conclusion

The exploratory research on the internal work environment was conducted at a single distance higher education institution. Future studies could involve several higher education institutions. This limitation, however, did not influence the identification of internal work environment factors that influence creativity and innovation in a higher education institution.

The research focused on the internal environment and did not consider individual factors such as personal motivation, personality and commitment. Other organisational factors, such as leadership and workload, also influence EDI and creativity.

This study highlights five critical factors that organisations must prioritise to effectively advance employee creativity and innovation: cultivating an innovative culture, establishing robust mechanisms to support innovation, offering meaningful innovation opportunities, embracing calculated risks and committing dedicated efforts to drive innovation. Furthermore, the study provides actionable strategies to design and sustain a work environment that actively nurtures and accelerates innovation, underscoring its practical value for organisational growth and competitiveness.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

Both authors, M.C. and G.L., worked jointly on the conceptualisation of the research topic, the design and interpretation of the data, and the final report. Both authors worked on the draft and finalised the article.

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Data availability

Derived data supporting the findings of this study are available from the corresponding author, M.C., on reasonable request.

Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. They do not necessarily reflect the official policy or position of any affiliated institution, funder, agency or that of the publisher. The authors are responsible for this article's results, findings and content.

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