

Resilience Transforms Challenges: Fostering Academicians' Job Resilience in Open, Distance, and Digital Education Higher Institutions

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Abstract

This study investigates the importance of job resilience among academicians in open, distance, and digital education (ODDE) higher education institutions, emphasising the need for effective support systems that foster resilience in rapidly evolving educational environments. The primary aim is to explore the relationships between organisational support, social support, coping strategies, self-efficacy, and job resilience, providing insights for enhancing faculty well-being and performance. A survey was conducted to collect primary data, utilising a purposive sampling method that yielded a total of 314 clean data points suitable for analysis. Data analysis was performed using Partial Least Squares Structural Equation Modelling (PLS-SEM), which facilitated rigorous hypothesis testing. Results revealed significant positive relationships, with organisational support and coping strategies showing strong influences on job resilience, while self-efficacy emerged as a critical mediating factor. The study highlights the need for educational institutions to implement comprehensive

support systems, enhance faculty training, and foster collaborative environments. Suggestions for future research include exploring the long-term impacts of support systems on job resilience, identifying specific coping strategies that are most effective, and examining cultural differences in the perception of support in academic contexts. The implications of this study underline the necessity of prioritising faculty support in ODDE institutions to improve job satisfaction, retention, and overall educational quality. By fostering resilience among academicians, institutions can cultivate an engaged and efficient workforce capable of adapting to the challenges inherent in digital learning environments. This research not only contributes to the theoretical understanding of resilience but also informs practical interventions aimed at enhancing the academic experience within the dynamic landscape of higher education.

Keywords: Social Support, Organisational Support, Self-Efficacy, Coping Strategies, Job Resilience

Introduction

Job resilience among academicians in open, distance, and digital education (ODDE) Higher Education Institutions is increasingly important as these educational models continue to grow globally. Job resilience refers to the ability of individuals to adapt and thrive in the face of challenges and stressors related to their professional environment (Nguyen et al., 2025). In the context of distance education, where reliance on technology, self-motivation, and adaptability are paramount, resiliency becomes a critical asset for educators who must navigate unforeseen obstacles such as shifts in technology, varying student needs, and personal challenges (Duan, Chu, & Liu, 2023). Current issues affecting job resilience among academicians include the rapid adoption of digital tools, increased workload, and the need for continual professional development (Tran et al., 2023). The COVID-19 pandemic highlighted these challenges, as many academicians were thrust into online teaching without adequate training or support (Ross, Scanes, & Locke, 2024). Research indicates that despite the growing emphasis on online education, many educators still struggle with technology integration and online pedagogy (Yang, Shu, & Yin, 2022). Burnout and feelings of isolation are prevalent among faculty, creating barriers to effective teaching and job satisfaction (Yetkin Tekin, 2024). There are notable research gaps regarding job resilience, specifically in the context of open and distance education (Intarat et al., 2024). While general studies on resilience exist, few focus on the unique circumstances faced by distance educators (Yin & Mu, 2023). Areas that require further exploration include the role of institutional support in fostering resilience, the impact of social networks on academic stress management, and specific coping strategies that can enhance resilience among staff in these environments (Bagdžiūnienė et al., 2023). The problems academicians face in fostering resilience stem from insufficient organisational support, lack of resources for professional development, and limited social support networks (Anasori et al., 2023). Many institutions may prioritise student outcomes over faculty well-being, leading to a lack of initiatives aimed at building resilience among educators (Asfahani, 2024). This oversight can result in high turnover rates, reduced job satisfaction, and ultimately a decline in the quality of education offered (Varshney & Varshney, 2024). The significance of studying job resilience among educators in distance education extends to policymakers, higher education institutions, academicians, and students. Policymakers can use findings to develop frameworks that provide the necessary resources and support systems for educators. Higher education institutions can benefit from understanding the unique challenges their faculty face and establishing support mechanisms

to enhance resilience (Chowdhury et al., 2025). For academicians, increased resilience leads to better job satisfaction and improved teaching effectiveness, benefiting students through enhanced learning experiences (Madrid-Guijarro, Maldonado-Guzmán, & Rodríguez-González, 2025). Thus, investing in job resilience not only supports educators but also contributes to the overall quality and sustainability of open, distance, and digital education. This study aims to assess the direct and indirect relationship between social support and organisational support with academician job resilience, with self-efficacy and coping strategies as mediators in open, distance, and digital education (ODDE) higher education institutions.

Literature Review

Underpinning Theories

Resilience Theory (Masten, 2001) serves as the primary framework for understanding job resilience among academicians in open, distance, and digital education. This theory posits that individuals can adapt and thrive despite adversity by utilising internal and external resources. In this context, job resilience is influenced by various factors that help academicians navigate challenges and pressures linked to their roles. In this study, organisational support and social support are identified as independent variables playing a critical role in fostering resilience. Organisational support encompasses resources, training, and encouragement provided by institutions, while social support refers to assistance from colleagues, friends, and family. Both types of support are vital in shaping coping strategies, central mediating variables that help individuals manage stress and adversity. Coping strategies, including problem-solving and emotional regulation, empower academicians to respond effectively to workplace challenges. Self-efficacy (Bandura, 1997), another key mediating variable, reflects an individual's belief in their capabilities to succeed in specific situations. High self-efficacy can enhance coping strategies, making it a pivotal determinant of resilience. The interplay between these variables highlights how strong organisational and social support can bolster coping strategies and self-efficacy, ultimately leading to enhanced job resilience. By incorporating Social Support Theory (Cohen & Wills, 1985) into the Resilience Theory framework, this model illustrates how external support mechanisms are essential for academicians to thrive in dynamic and often challenging educational environments. Thus, understanding these relationships can inform interventions aimed at improving resilience among academic professionals.

Relationship between Organisational Support, Coping Strategies & Job Resilience

Organisational support plays a crucial role in fostering job resilience among academicians in open and distance learning higher institutions, with coping strategies serving as a mediating factor that enhances this relationship. When academic institutions provide robust support systems, including resources, training, and a positive work environment, faculty members are more likely to develop resilience in the face of challenges inherent in online education (Sihag & Dhoopar, 2023). This organisational backing not only equips educators with the necessary tools and knowledge but also instils a sense of value and belonging within the institution. As a result, academicians can employ effective coping strategies such as problem-solving, seeking social support, and emotional regulation to manage stressors such as technological challenges and student engagement issues (Huang et al., 2024). These coping strategies are critical as they enable academicians to adapt to changing educational landscapes and maintain a high level of performance despite adversity (Liu et al., 2024). When institutional

support is perceived as adequate, it positively influences self-efficacy, leading to the adoption of proactive coping mechanisms that ultimately enhance job resilience (Alimbekov et al., 2025). Consequently, the interplay between organisational support and coping strategies significantly impacts academicians' ability to navigate the complexities of open and distance learning environments, highlighting the importance of fostering supportive organisational cultures to bolster resilience in higher education (Pu et al., 2024; Poku et al., 2025). Therefore, the following hypotheses were proposed for this study:

H1: There is a relationship between organisational support and coping strategies toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

H2: There is a relationship between organisational support and academicians' job satisfaction resilience in open, distance, and digital education (ODDE) higher education institutions.

H3: There is a mediating effect of coping strategies on the relationship between Organisational support and coping strategies toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

Relationship between Organisational Support, Self-Efficacy & Job Resilience

The relationship between organisational support and job resilience among academicians in open and distance learning higher institutions is significantly influenced by self-efficacy as a mediating factor. Organisational support provides faculty with essential resources, such as professional development opportunities, access to technology, and emotional encouragement, which enhance their confidence and competence in navigating the challenges of online education (Hameli, Vehapi, & Tafili, 2025). When academicians perceive strong organisational support, their self-efficacy, the belief in their ability to succeed in specific tasks, tends to increase, fostering a sense of empowerment (Liu et al., 2025). This heightened self-efficacy enables educators to embrace challenges, take initiative, and persist in the face of adversity, ultimately leading to greater job resilience (Bawazier et al., 2025). Resilient academicians are better equipped to adapt to the demands of their roles, effectively handle student engagement issues, and respond to technological changes (Dewi et al., 2025). Furthermore, as self-efficacy serves as a psychological buffer, it reinforces the impact of organisational support on job resilience, creating a positive feedback loop where empowered educators contribute to a supportive institutional environment. Thus, understanding the interplay between organisational support, self-efficacy, and job resilience is essential for higher education institutions aiming to cultivate a resilient faculty that can thrive in dynamic and complex online learning landscapes (Alimbekov et al., 2025). Hence, the following hypotheses were proposed for this study:

H4: There is a relationship between organisational support and self-efficacy toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

H5: There is a mediating effect of self-efficacy on the relationship between organisational support and coping strategies toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

Relationship between Social Support, Coping Strategies & Job Resilience

The relationship between social support and job resilience among academicians in open and distance learning higher institutions is significantly influenced by coping strategies, which serve as a critical mediating factor. Social support, encompassing emotional, informational, and practical assistance from colleagues, friends, and family, is essential for faculty members facing the unique challenges of online education (Hou & Chen, 2024). When academicians perceive strong social support, they are more likely to develop effective coping strategies that enable them to manage stressors such as workload pressures, technological challenges, and isolation (Zhang et al., 2023). These coping strategies may include problem-solving approaches, seeking collaborative solutions, and engaging in emotional regulation techniques, allowing educators to adapt positively to their evolving roles (Mohamad & Osman, 2025). Moreover, when academicians employ these strategies, their sense of job resilience is bolstered, facilitating their ability to thrive despite adversities (Demir & Köksal, 2025). As resilient faculty members demonstrate enhanced commitment and engagement, they contribute positively to the educational environment, not only for themselves but also for their students (Liu et al., 2025). Therefore, understanding the interplay between social support and coping strategies is crucial for promoting job resilience, as fostering a supportive atmosphere can empower academicians to effectively navigate the complexities of open and distance learning settings (Rohani et al., 2025). Thus, the following hypotheses were proposed for this study:

- H6: There is a relationship between social support and coping strategies toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.*
- H7: There is a relationship between social support and academicians' job satisfaction towards resilience in open, distance, and digital education (ODDE) higher education institutions.*
- H8: There is a mediating effect of coping strategies on the relationship between social support and coping strategies toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.*

Relationship between Social Support, Self-Efficacy & Job Resilience

The relationship between social support and job resilience among academicians in open and distance learning higher institutions is significantly mediated by self-efficacy, which plays a crucial role in enhancing the ability to cope with challenges. Social support, which entails emotional, informational, and practical assistance from peers, family, and the institution, provides a vital cushion for educators confronting the stresses associated with online teaching (Ikhwan, 2025). When faculty members perceive high levels of social support, they experience a boost in their self-efficacy the belief in their capability to execute tasks and meet challenges effectively (Wang et al., 2023). This increased self-efficacy empowers academicians to navigate uncertainties and obstacles inherent in distance learning environments, thereby promoting their resilience (Hosseininezhad et al., 2024). Resilient academicians are better equipped to manage stressors such as technology integration and student engagement, which can be particularly daunting in remote education settings. As self-efficacy strengthens, so too does the capacity for proactive coping strategies, facilitating optimal performance even under pressure (Wang et al., 2024; Alsheef, 2025). Consequently, recognising the interplay between social support, self-efficacy, and job resilience is essential for higher education institutions aiming to foster a supportive and empowering climate that enhances faculty well-

being and ultimately contributes to improved educational outcomes for students. Therefore, the following hypotheses were proposed for this study:

H9: There is a relationship between social support and self-efficacy toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

H10: There is a mediating effect of self-efficacy on the relationship between social support and coping strategies toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

Relationship between Self-Efficacy, Coping Strategies & Job Resilience

The relationship between self-efficacy and job resilience among academicians in open and distance learning higher institutions is significantly mediated by coping strategies, forming a critical framework for navigating the challenges of remote education. Self-efficacy, or the belief in one's ability to succeed in specific tasks, empowers educators to confront various stressors, such as workload management and technological adaptation (Bawazier et al., 2025). When academicians have a strong sense of self-efficacy, they are more likely to employ effective coping strategies such as problem-solving, time management, and emotional regulation, which enable them to address obstacles proactively (Cabrera-Aguilar et al., 2023). These coping strategies serve as vital mechanisms that enhance their resilience in the face of difficulties, allowing them to bounce back and thrive despite the adversities encountered in distance learning environments (Rubio et al., 2024). Additionally, resilient faculty members who effectively use coping strategies contribute positively to their institutions, fostering a supportive learning environment that benefits both themselves and their students. Therefore, understanding the interplay between self-efficacy, coping strategies, and job resilience is essential for higher education institutions seeking to promote faculty well-being and performance in increasingly dynamic educational landscapes (Gerçek, 2024; Wang et al., 2023). This highlights the need for institutional support programs that bolster self-efficacy and equip educators with coping skills to enhance their resilience effectively. Hence, the following hypotheses were proposed for this study:

H11: There is a relationship between self-efficacy and coping strategies toward academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

H12: There is a relationship between self-efficacy and academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

H13: There is a relationship between coping strategies and academicians' jobs resilience in open, distance, and digital education (ODDE) higher education institutions.

H14: There is a mediating effect of coping strategies on the relationship between Self-efficacy and academicians' job resilience in open, distance, and digital education (ODDE) higher education institutions.

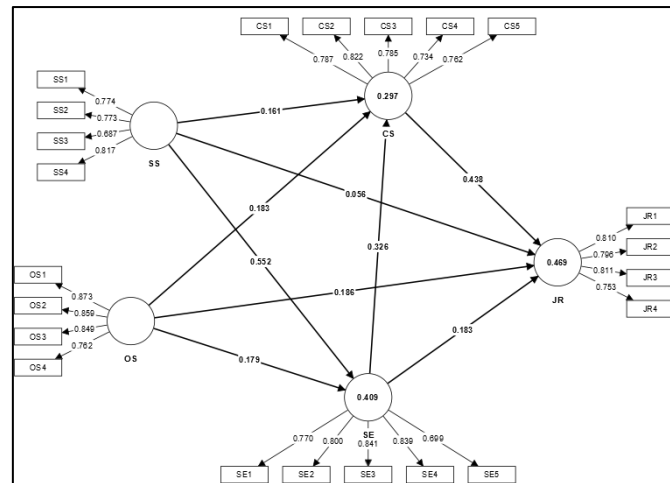


Figure 1: Research Model

Note: SS= Social Support OS=Organizational Support CS=Coping Strategies SE=Self-Efficacy JR=Job Resilience

Methodology

This study aimed to comprehensively evaluate both the direct and indirect impacts of organisational support, social support, and performance, with coping strategies acting as a mediator, among academics in open, distance, and digital education higher education institutions. To achieve this objective, researchers implemented a survey to gather primary data, carefully choosing reliable and valid measurement instruments based on an in-depth review of existing literature. The survey questionnaires were disseminated via email to selected participants, utilising purposive sampling due to the absence of a complete population list. A total of 22 observed variables were analysed, including exogenous variables such as social support, adapted from Cohen and Wills (1985) (4 items), and organisational support, adapted from Eisenberger et al. (1986) (4 items). The mediating variables identified were self-efficacy, based on Bandura (1997) (5 items), and coping strategies, derived from Lazarus & Folkman (1984) (5 items), while the endogenous variable was job resilience, taken from Cassidy (2016) (4 items). Participants rated elements within each construct using a five-point Likert scale, ranging from strongly disagree to strongly agree. Out of 430 distributed surveys, 336 responses were received, yielding a favourable response rate of 78.1%, which was suitable for employing structural equation modelling (SEM) in the data analysis. Of the collected surveys, 314 were deemed clean and appropriate for analysis. Researchers employed SmartPLS 4 software, known for its effectiveness in structural equation modelling (SEM) techniques, for data analysis and hypothesis testing. This choice was informed by the software's robust assessment capabilities and its adeptness at managing multivariate data analysis, aligning with the study's objectives and adhering to the guidelines recommended by Ringle et al. (2022). SmartPLS 4 allowed for a thorough investigation of the proposed hypotheses and conducted extensive multivariate data analysis, enabling a comprehensive evaluation of both measurement and structural models.

Data Analysis

Respondents' Profiles

The demographic data collected from a sample of 314 individuals at a higher education institution provides important insights into their gender, age, years of service, and job titles. Among the participants, 61.0% are male and 39.0% are female. Looking at age demographics,

22.9% of respondents are under 30 years old, while 7.9% are in the 31-40 age bracket. A significant proportion, 40.6%, falls within the 41-50 age range, followed by 20.0% aged 51-60, and 8.6% are over 60 years old. Regarding years of service, 5.7% have less than 5 years of experience, while 13.4% possess between 6 and 10 years. Additionally, 29.8% report having 11 to 15 years of experience. Furthermore, 29.0% have worked for 16 to 20 years, 12.7% have 21 to 25 years, and the categories for both 26 to 30 years and over 30 years comprise 4.8% each. In terms of professional roles, the majority of participants, 75.5%, are Senior Lecturers, whereas 21.0% are Associate Professors, 2.2% are Professors, and only 1.3% are categorised as Lecturers.

Common Method Bias

In analyzing the potential for common method bias (CMB) in the data using the full collinearity assessment as recommended by Kock & Lynn (2012) and Kock (2015), Table 1 indicates that the variance inflation factors (VIFs) for all variables are below the critical threshold of 3.3, which suggests that the presence of CMB is unlikely. Specifically, the highest VIF value is observed for organisational support at 2.128, followed closely by coping strategies at 1.811. Other variables, including job resilience and self-efficacy, show VIFs in the range of 1.472 to 1.647, all of which are well within the acceptable limits. This analysis affirms that the relationships among the constructs are not significantly distorted by CMB, enhancing the reliability of the findings. Therefore, the effects measured in this study can be considered valid, allowing for confidence in the conclusions drawn regarding the interplay between job resilience, self-efficacy, social support, organisational support, and coping strategies.

Table 1
Full Collinearity (VIF)

	JR	SS	OS	CS	SE
JR		1.566	1.556	1.472	1.483
SS	1.643		1.405	1.647	1.628
OS	2.128	1.832		1.764	2.158
CS	1.811	1.932	1.586		1.928
SE	1.240	1.297	1.319	1.310	

Measurement Model

Analysing the construct reliability and validity based on Cronbach's Alpha, composite reliability (CR), average variance extracted (AVE), and item loadings, as recommended by Hair et al. (2019), reveals satisfactory results for the constructs measured in this study (Table 2). For coping strategies, the Cronbach's Alpha is 0.838, indicating acceptable internal consistency, while the composite reliability is 0.841, which also confirms reliability. The AVE of 0.606 suggests that more than half of the variance in the construct is captured by its indicators, affirming convergent validity. Each item loading for coping strategies ranges from 0.734 to 0.822, all exceeding the recommended threshold of 0.70, further supporting the construct's reliability. Job resilience exhibits a Cronbach's Alpha of 0.803 and a composite reliability of 0.810, demonstrating good internal consistency, while its AVE of 0.628 reflects adequate convergent validity. The loadings for job resilience indicators range from 0.753 to 0.811, indicating strong relationships among the items. Organisational support has a high Cronbach's Alpha of 0.856 and a composite reliability of 0.862, coupled with an AVE of 0.700, which indicates excellent reliability. Item loadings for organisational support range from 0.762

to 0.873, signalling strong construct validity. Self-efficacy shows similarly robust reliability characteristics, with a Cronbach's Alpha of 0.851, composite reliability of 0.867, and an AVE of 0.627, while item loadings vary from 0.699 to 0.841. Social support has a Cronbach's Alpha of 0.762 and a composite reliability of 0.767, accompanied by an AVE of 0.584, indicating acceptable reliability, albeit slightly lower than the other constructs. Loading values for social support fall between 0.687 and 0.817, which still supports construct validity. Finally, the Heterotrait-Monotrait ratio (HTMT) values (Table 3) suggest that discriminant validity is achieved, as all values remain under the threshold of 0.85, indicating that constructs are both distinct and interrelated (Henseler et al., 2015). Together, these results affirm the reliability and validity of the constructs, thereby enhancing the credibility of the subsequent analyses and interpretations conducted in this study.

Table 2

Construct Reliability and Validity & Items Loadings

Constructs	Indicators	Loadings	CA	CR	AVE
Coping Strategies	CS1	0.787	0.838	0.841	0.606
	CS2	0.822			
	CS3	0.785			
	CS4	0.734			
	CS5	0.762			
Job Resilience	JR1	0.810	0.803	0.810	0.628
	JR2	0.796			
	JR3	0.811			
	JR4	0.753			
Organizational Support	OS1	0.873	0.856	0.862	0.700
	OS2	0.859			
	OS3	0.849			
	OS4	0.762			
Self-Efficacy	SE1	0.770	0.851	0.867	0.627
	SE2	0.800			
	SE3	0.841			
	SE4	0.839			
	SE5	0.699			
Social Support	SS1	0.774	0.762	0.767	0.584
	SS2	0.773			
	SS3	0.687			
	SS4	0.817			

Note: CA=Cronbach Alpha CR=Composite Reliability AVE=Average Variance Extracted

Table 3

Heterotrait-Monotrait (HTMT) Ratios

	CS	JR	OS	SE
JR	0.747			
OS	0.431	0.521		
SE	0.570	0.590	0.434	
SS	0.526	0.533	0.450	0.748

Structural Model

This study evaluated the structural model following the methodologies outlined by Hair et al. (2017), focusing on pathway coefficients (β) and coefficients of determination (R^2). Employing a Partial Least Squares (PLS) approach, the analysis utilized 5,000 sub-samples to assess the significance of the path coefficients. The results from the hypothesis testing are summarized in Table 4, which displays beta coefficients, t-statistics, and p-values, offering valuable insights into the strength and significance of the relationships among the variables. This thorough methodology enhances the robustness of the study's conclusions by providing a detailed understanding of the interactions between the variables examined. In examining the results of the hypotheses testing, significant insights into the relationships among organizational support (OS), social support (SS), coping strategies (CS), self-efficacy (SE), and job resilience (JR) are revealed. *Hypothesis 1 (H1)* positing that OS positively impacts CS was accepted, with a beta of 0.183, t-statistics of 3.300, and a p-value of 0.001, indicating a strong relationship. Similarly, *Hypothesis 2 (H2)*, which suggests that OS influences JR, was also accepted, with a beta of 0.186, t-statistics of 3.248, and a p-value of 0.001, demonstrating significant support for the effect of OS on JR. Further, *Hypothesis 3 (H3)* found that OS affects JR through CS, yielding a beta of 0.080, t-statistics of 3.053, and a p-value of 0.002, which was accepted, confirming the mediating role of CS. *Hypothesis 4 (H4)* proposed that OS affects SE, which was accepted with a beta of 0.179, t-statistics of 3.182, and a p-value of 0.001. *Hypothesis 5 (H5)* indicated that OS influences JR through SE, accepted with a beta of 0.033, t-statistics of 2.026, and a p-value of 0.043. Moving to social support, *Hypothesis 6 (H6)* posited that SS affects CS, which was accepted, showing a beta of 0.161, t-statistics of 2.540, and a p-value of 0.011. However, *Hypothesis 7 (H7)*, stating that SS directly impacts JR, was rejected, with a beta of 0.056, t-statistics of 0.889, and a p-value of 0.374, indicating no significant effect. *Hypothesis 8 (H8)* proposed that SS influences JR through CS, which was accepted, with a beta of 0.070, t-statistics of 2.384, and a p-value of 0.017. *Hypothesis 9 (H9)* suggested that SS affects SE, accepted with a substantial beta of 0.552, t-statistics of 11.212, and a p-value of 0.000. *Hypothesis 10 (H10)* indicated that SS influences JR through SE, accepted with a beta of 0.101, t-statistics of 2.976, and a p-value of 0.003. *Hypothesis 11 (H11)* showed that SE significantly impacts CS, accepted with a beta of 0.326, t-statistics of 5.103, and a p-value of 0.000. *Hypothesis 12 (H12)* found that SE influences JR, accepted with a beta of 0.183, t-statistics of 3.044, and a p-value of 0.002. The relationship between CS and JR was strongly supported by *Hypothesis 13 (H13)* with a beta of 0.438, t-statistics of 8.519, and a p-value of 0.000, leading to its acceptance. Finally, *Hypothesis 14 (H14)* indicated that SE impacts JR through CS, accepted with a beta of 0.143, t-statistics of 4.194, and a p-value of 0.000. Collectively, these results provide substantial evidence supporting the hypothesized relationships among the constructs in the study.

Table 4

Hypothesis Testing Results

Hypotheses	Beta	T-statistics	P-values	2.50%	97.50%	Decision
H1: OS → CS	0.183	3.300	0.001	0.076	0.291	<i>Accepted</i>
H2: OS → JR	0.186	3.248	0.001	0.066	0.292	<i>Accepted</i>
H3: OS → CS → JR	0.080	3.053	0.002	0.033	0.137	<i>Accepted</i>
H4: OS → SE	0.179	3.182	0.001	0.067	0.286	<i>Accepted</i>
H5: OS → SE → JR	0.033	2.026	0.043	0.009	0.073	<i>Accepted</i>
H6: SS → CS	0.161	2.540	0.011	0.032	0.283	<i>Accepted</i>
H7: SS → JR	0.056	0.889	0.374	-0.064	0.181	<i>Rejected</i>
H8: SS → CS → JR	0.070	2.384	0.017	0.015	0.131	<i>Accepted</i>
H9: SS → SE	0.552	11.212	0.000	0.441	0.635	<i>Accepted</i>
H10: SS → SE → JR	0.101	2.976	0.003	0.039	0.172	<i>Accepted</i>
H11: SE → CS	0.326	5.103	0.000	0.191	0.446	<i>Accepted</i>
H12: SE → JR	0.183	3.044	0.002	0.067	0.304	<i>Accepted</i>
H13: CS → JR	0.438	8.519	0.000	0.338	0.538	<i>Accepted</i>
H14: SE → CS → JR	0.143	4.194	0.000	0.081	0.215	<i>Accepted</i>

Note: Significant at $p < 0.05$, $t\text{-value} > 1.96$

Effect Sizes (f^2)

Effect sizes (f^2) were evaluated based on Cohen's (1992) guidelines, which categorize f^2 values as small (0.02), medium (0.15), and large (0.35). In Table 5, the effect size for the relationship between coping strategies (CS) and job resilience (JR) is substantial at 0.254, indicating a medium effect. Organizational support (OS) exhibits small effects on CS (0.039), JR (0.052), and self-efficacy (SE) (0.047). Self-efficacy shows a medium effect on CS (0.089) but a small effect on JR (0.034). Social support (SS) has a small effect on CS (0.022) and JR (0.003), while it significantly impacts SE with a large effect of 0.446.

Table 5

Effect Sizes (f^2)

	CS	JR	SE
CS		0.254	
OS	0.039	0.052	0.047
SE	0.089	0.034	
SS	0.022	0.003	0.446

PLSpredict & Cross-Validated Predictive Ability Test (CVPAT)

According to the recommendations of Shmueli et al. (2016, 2019), the analysis of PLSpredict indicates that the RMSE values from the PLS-SEM predictions surpassed those of the linear model (LM) benchmarks, demonstrating a superior predictive capability. In Table 6, seven PLS RMSE values are smaller than their corresponding LM RMSE values, specifically for items CS1, CS2, CS5, JR1, JR2, SE1, and SE2. This suggests that the PLS-SEM approach offers enhanced fit for the data compared to the linear model, reinforcing the robustness of the PLS-SEM model in predicting outcomes across the assessed constructs. The Cross-Validated Predictive Ability Test (CVPAT) results, following the guidelines of Hair et al. (2022) and Liengard et al. (2021), indicate strong predictive capabilities across the constructs tested. As shown in Table 7, each construct demonstrates a negative average loss difference, with job resilience (JR) showing a

loss of -0.086, and self-efficacy (SE) exhibiting the highest loss at -0.167. All constructs have significant t-values exceeding 3, with p-values of 0.000, confirming robust predictive validity. The overall average loss difference of -0.107 further underscores the model's effectiveness, suggesting that the PLS-SEM approach reliably predicts outcomes in this study.

Table 6

PLSpredict

Items	Q ² predict	PLS-SEM RMSE	LM-RMSE	PLS-LM
CS1	0.175	0.649	0.657	-0.008
CS2	0.124	0.651	0.660	-0.009
CS3	0.112	0.684	0.688	-0.004
CS4	0.110	0.706	0.710	-0.004
CS5	0.118	0.645	0.653	-0.008
JR1	0.197	0.654	0.662	-0.008
JR2	0.165	0.638	0.642	-0.004
JR3	0.166	0.703	0.718	-0.015
JR4	0.097	0.746	0.756	-0.010
SE1	0.221	0.742	0.730	0.012
SE2	0.188	0.766	0.763	0.003
SE3	0.366	0.654	0.656	-0.002
SE4	0.224	0.774	0.776	-0.002
SE5	0.208	0.682	0.685	-0.003

Table 7

Cross-Validated Predictive Ability Test (CVPAT)

	Average loss difference	t value	p-value
CS	-0.065	3.602	0.000
JR	-0.086	4.272	0.000
SE	-0.167	5.93	0.000
Overall	-0.107	6.334	0.000

Importance-Performance Map Analysis (IPMA)

The Importance-Performance Map Analysis (IPMA), as recommended by Ringle and Sarstedt (2016) and Hair et al. (2018), provides valuable insights into the relationship between the importance and performance of different constructs related to job resilience. In Table 8, coping strategies (CS) demonstrate the highest importance score of 0.438 but only a performance score of 60.867, indicating a disparity between their significance and execution. Conversely, social support (SS) has the lowest importance (0.306) coupled with a performance score of 66.600, signifying a need for intervention. To enhance social support, which has low importance and performance, institutions could implement initiatives such as peer mentoring programs, workshops, and forums to foster a supportive community among academic staff. Additionally, increasing opportunities for collaboration and communication can bolster relationships, thereby elevating both the perceived importance and actual performance of social support, ultimately leading to improved job resilience. This strategic focus will help create a more conducive environment for faculty to thrive in their roles.

Table 8

Importance-Performance Map Analysis (IPMA)

	Importance	Performance
CS	0.438	60.867
OS	0.325	67.467
SE	0.326	66.358
SS	0.306	66.600

Discussion & Conclusion*Discussion*

To enhance interaction with social support and organizational support, open, distance, and digital education (ODDE) higher education institutions must adopt practical strategies that positively impact academicians' job resilience through coping strategies and self-efficacy as mediators. The hypothesis testing results reveal significant path coefficients, particularly the beta values, indicating strong relationships among these constructs. For instance, the beta values from both organizational support (OS) to coping strategies (CS) and job resilience (JR) were 0.183 and 0.186, respectively, emphasizing the essential role organizational support plays in fostering resilience (H1, H2). Additionally, self-efficacy's significant influence, with a beta of 0.552 from social support (SS) to self-efficacy (H9), indicates that bolstering self-efficacy can significantly enhance coping strategies and job resilience among educators (Ringle & Sarstedt, 2016). To strengthen social and organizational support, institutions should implement structured mentoring programs where experienced faculty guide newer members, creating a culture of collaboration and emotional support. Workshops focused on skill development, stress management, and resilience training can also foster coping strategies, thereby amplifying the positive impact of self-efficacy on job resilience (Cabrera-Aguilar et al., 2024). Regular feedback mechanisms, such as surveys and forums, should be established to assess the effectiveness of support initiatives, allowing institutions to adapt their approaches proactively as needs evolve (Hosseiniyeh et al., 2024). Additionally, enhancing communication channels through virtual platforms can help maintain strong social connections among faculty, thereby promoting a supportive community (Bawazier et al., 2025). However, some hypotheses may not be supported, such as the relationship between social support and job resilience (H7), where the beta coefficient was low (0.056) and the p-value was not significant. This could be attributed to the virtual nature of ODDE environments, which may hinder the development of deep interpersonal relationships compared to traditional settings. Therefore, institutions must foster opportunities for personal interaction, such as team-building activities or informal gatherings, to mitigate these barriers and enhance the available support networks. Implementing these strategies will not only improve the overall well-being of academicians but also enhance their capacity to adapt and thrive in the dynamic landscape of open, distance, and digital education. Furthermore, enhancing institutional policies that prioritize work-life balance and mental health resources can further reinforce the impact of social and organizational support on job resilience. Institutions should consider providing access to counseling services, stress management workshops, and wellness programs tailored specifically for academic staff. By creating an environment that values mental health and well-being, institutions will encourage faculty to engage proactively with the support systems available to them, thereby boosting their self-efficacy and resilience. Such comprehensive strategies will ultimately lead to a more committed, effective, and satisfied academic workforce in the ODDE context.

Theoretical Implications

The theoretical implications of this study significantly contribute to the existing literature on job resilience within open, distance, and digital education (ODDE) environments by elucidating the intertwined relationships among organizational support, social support, coping strategies, self-efficacy, and job resilience. By employing resilience theory, the findings affirm the notion that resilience can be fostered through external supports and internal psychological resources, reflecting Masten's (2001) emphasis on the role of protective factors in fostering resilience. Moreover, the study expands upon Social Support Theory, illustrating how both emotional and instrumental support directly impact self-efficacy and coping strategies, crucial mediators in the job resilience process (Cohen & Wills, 1985). Notably, this research introduces the concept of coping strategies as a critical mechanism through which organizational and social support translate into enhanced job resilience, supporting Bandura's (1997) assertion that self-efficacy significantly influences how individuals engage with challenges. The empirical evidence regarding beta values reflecting strong relationships among constructs provides a nuanced understanding of how ODDE educators can thrive in their roles. These insights suggest avenues for future research to explore the specific types of coping strategies that are most effective in mediating the relationship between support systems and resilience. This will refine and enrich theoretical understanding, enabling educational institutions to implement targeted interventions aimed at bolstering faculty resilience, thus contributing profoundly to the ongoing discourse in resilience and support literature.

Practical Implications

The practical implications of this study highlight essential strategies that open, distance, and digital education (ODDE) institutions must adopt to enhance job resilience among academicians. Firstly, institutions should prioritize providing robust organizational support through comprehensive training programs that equip faculty with the necessary skills to adapt to evolving educational technologies. Regular workshops focusing on coping strategies can also help faculty manage stress effectively, thereby enhancing their self-efficacy and overall resilience. Additionally, fostering a culture of social support is crucial. Institutions can implement mentoring programs that pair experienced faculty with newer members, promoting collaboration and emotional support. Creating structured platforms for faculty engagement, such as virtual networking events or discussion forums, can strengthen social connections, enhancing the sense of community among educators. Furthermore, institutions should continuously solicit feedback from academic staff to assess the effectiveness of support systems and make necessary adjustments. By addressing the unique challenges faced by faculty in ODDE environments and emphasizing supportive practices, educational leaders can cultivate a resilient academic workforce. Ultimately, these strategies will lead to improved job satisfaction, retention, and performance, contributing positively to the quality of education delivered to students in the rapidly changing landscape of digital learning.

Suggestion for Future Study

Future studies should explore several avenues to build on the findings of this research. Firstly, longitudinal studies could assess the long-term effects of organizational and social support on job resilience among academicians in open, distance, and digital education (ODDE) environments. Additionally, research could delve into specific coping strategies to determine which are most effective in enhancing resilience, offering tailored recommendations for

faculty development programs. Another valuable avenue for exploration is the impact of cultural differences on perceptions of social and organizational support within diverse academic settings. Examining the role of technology in facilitating support and fostering resilience among academicians could also yield insightful findings, particularly in the context of remote learning. Furthermore, qualitative studies might uncover deeper insights into personal experiences and barriers that faculty face, providing context to quantitative findings. Ultimately, these future studies will enhance theoretical understanding and inform practical interventions aimed at strengthening faculty resilience in the evolving landscape of higher education.

Conclusion

This study underscores the critical role of organizational and social support in enhancing job resilience among academicians in open, distance, and digital education (ODDE) environments. The findings demonstrate that both types of support positively influence coping strategies and self-efficacy, which serve as vital mediators in fostering resilience. By highlighting significant relationships among these constructs, the study contributes to the existing literature on resilience theory and social support, providing actionable insights for educational institutions. Implementing robust support systems, training programs, and fostering a culture of collaboration are essential strategies for enhancing faculty well-being and performance. As institutions navigate the complexities of digital learning environments, prioritizing the support of academic staff is paramount for maintaining a committed and effective workforce. Ultimately, the insights gained from this research not only enrich theoretical understanding but also offer practical pathways for improving the overall quality of education and academic experiences in the evolving landscape of higher education.

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