ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

Institutional Research Culture, Doctoral Student Identity and Psychological Well-being Among PhD Scholars

Maya K.[1]; Muniza Shah[2]; Arsheena Manzoor[3]; Iflah Rashid[4]; Shabnum Showkat[5]; Humera Shafi[6]; Touseef Rizvi[7]; Shawkat Ahmad Shah[8]

[1]Research Scholar, Department of Psychology, University of Kashmir, Sgr, India
[2]Research Scholar, Department of Psychology, University of Kashmir, Sgr, India
[3]Research Scholar, Department of Psychology, University of Kashmir, Sgr, India
[4]Research Scholar, Department of Psychology, University of Kashmir, Sgr, India
[5]Research Scholar, Department of Psychology, University of Kashmir, Sgr, India
[6]Professor, Department of Psychology, University of Kashmir, Sgr, India
[7]Professor, Department of Psychology, University of Kashmir, Sgr, India
[8]Professor, Department of Psychology, University of Kashmir, Sgr, India

Publication Date: 2026/11/04

Abstract: The aim of the present study was to examine the relationship among Institutional Research Culture (IRC), Doctoral Student Identity (DI), and Psychological Well-being, and to explore differences based on gender, domicile, scholarship status, and prior research work experience. Design/ Methodology/ approach: A quantitative, cross-sectional research design was employed among 117 PhD scholars from various universities across India, predominantly from Kashmir region, comprising 82 females and 35 males. Data were collected using the Institutional Research Culture Scale, Doctoral Student Identity Scale, and WHO-5 Well-Being Index. Findings: The analysis of the data showed a significant positive relationship between institutional research culture and doctoral student identity ($r = .35$, $p < .001$). However, doctoral student identity was negatively associated with psychological well-being ($r = -.28$, $p = .002$), while institutional research culture showed no significant relationship with well-being. Regression analysis indicated that doctoral student identity was a significant negative predictor of well-being. No significant gender or scholarship-status differences were observed. Rural scholars reported significantly higher doctoral identity than urban scholars, while participants with prior research/work experience reported higher doctoral identity but lower well-being. Originality: The findings highlight the complex relationship between institutional context, identity development, and well-being, emphasizing the need for comprehensive institutional and psychological support for doctoral scholars.

Keywords: *Institutional Research Culture, Doctoral Student Identity, Psychological Well-being.*

How to Cite: Maya K.; Muniza Shah; Arsheena Manzoor; Iflah Rashid; Shabnum Showkat; Humera Shafi; Touseef Rizvi; Shawkat Ahmad Shah (2026) Institutional Research Culture, Doctoral Student Identity and Psychological Well-being Among PhD Scholars. *International Journal of Innovative Science and Research Technology*, 11(10), 2671-2680. https://doi.org/10.38124/ijisrt/26oct1521

I. INTRODUCTION

Doctoral education is an integral part of higher education, the scope of which exceeds merely finishing the independent research project. Scholars grow, learn, and develop intellectually, professionally and personally within this time. Over time, they develop the knowledge, skills and competencies required to be independent researchers. The doctoral study process can include a lot of time spent engaged with research, relationships with supervisors and colleagues, institutional demands, institutional assessments, and accommodation to the demands of the research environment. Thus, the doctoral experience is shaped by a variety of factors related to the individual student's experiences and the institutional culture of the research setting. Doctoral Student Identity refers to the extent to which PhD scholars perceive, recognize and emotionally and cognitively identify themselves as members of the doctoral student community including the meaning and value they attach to this identity. Zhao, Chen & Jia (2021) developed and validated the Doctoral Student Identity Scale. The doctoral student identity scale assesses doctoral student identity and it consists of two dimensions: identity exploration and identity commitment. Identity exploration is the scholar's efforts to understand the doctoral

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

experience, academic career, goals, values and expectations of having a doctoral degree. Identity commitment is the stable sense of belonging, certainty, personal meaning, attachment and affirmation toward the doctoral student identity (Zhao, Chen & Jia, 2021). Various research studies have noted that there are certain factors that affect the academic identity development of scholars. Personal factors include individuals' perceptions of themselves in the context of academic communities (Sverdlik et al., 2018). Social factors include peer groups' expectations and evaluation (Bryne et al. 2025), socialization (Sverdlik et al., 2018) and networking (Mantai, 2019). Doctoral students' identities are closely associated with research situations like mentoring and publishing, professional norms within the field, and community building, expectations and norms of teaching (Göktürk, 2025; Zhang and Wang, 2025; Li and Horta, 2024). Institutional research culture is the knowledge about the topics and processes of research that are approved as suitable and relevant, the values, beliefs, attitudes and norms that surround the research related process in the institution, and the various material ways in which the institution supports or denies support to its researching individuals and groups. As people try to conduct research projects and push the boundaries of what the institution has allowed, new values, beliefs and norms about research emerge (Jayachandran & Chandrasenan, 2021). The present understanding of the research culture of the institution is based on the Clemena and Acosta Model of University Research Cultures. According to the model, university research culture emerges from a complicated relationship between the university's trifocal functions; individual attributes and policies and institutional attributes and policies. The latter comprises knowledge, skills, values, readiness, capacity and experience while the former covers teaching, research and service or extension (Clemena & Acosta, 2007 as cited in Jayachandran & Chandrasenan, 2021). Based on the model, Jayachandran and Chandrasenan (2021), classified institutional research culture into five dimensions; working conditions, research collaboration and sharing, research infrastructure, institutional research policy and agenda, and research monitoring and mentoring practices. This classification is meant to serve as a conceptual framework to explore the environment of the institution and processes of the research associated with the institutional research culture. Recent qualitative research has expanded this relational perspective in order to view the institutional research culture not as a neutral environment, but as an active, boundary setting agent. In this ethnography of doctoral education in Turkey, Gökturk (2024) shows how the act of constructing identity cannot be separated from the process of making these boundaries and imposing social order by the supervisor, which enable these students to acquire symbolic and social capital for academic credibility. Along with faculty or peer relationships and sociocultural expectations, institutional and disciplinary culture are two other core dimensions involved in the construction of academic identity (Zhang & Wang, 2025). Institutional research culture is multidimensional and can be seen as a questioned influence on doctoral identity that is practiced and transmitted through social network, relationship with supervisor, disciplinary norms and publication norms, and is shaped by institutional context. The institutional research culture has been reported to have a significant impact on the psychological health of doctoral students, and is said to operate through several mechanisms including relationship with supervisor, research burden, administrative clarity, provision of resources and wider research community (Mackie & Bates, 2018; Mahsood et al., 2025). Psychological well-being is a state of positive functioning, which involves feeling good and functioning effectively in daily life. It is more than just feelings of happiness or lack of mental distress, and includes positive emotions, personal growth, control, purpose, and relationships. Huppert (2009) explains that it is normal to experience sadness, failure and disappointment and that this does not imply poor psychological health. Instead, it's about how well you can handle challenging emotional moments without a lasting impact on functioning. Psychological well-being is especially important in the context of doctoral education for scholars' emotional experiences, personal development, sense of purpose, and effectiveness in their academic and institutional contexts. Thus, the current study investigates the correlation between psychological well-being and institutional research culture and identity of PhD scholars, with well-being as a significant part of their academic experience (Huppert, 2009). Previous reviews highlight that the wellbeing of doctoral students is a complicated phenomenon, composed of various dimensions and not just a psychological measure (Mahsood et al., 2025; Schmidt and Hansson, 2018; Guo et al., 2025). The mental health and psychological well-being of doctoral scholars are negatively affected by highly competitive academic environments and high publication pressure (Xu and Li, 2024; Nicholls et al., 2022; Byrom et al., 2020). Relationship with supervisor, institutional culture and connection with peers are clearly identified as organizational areas that can improve mental well-being (Ryan et al., 2021). Good mentorship, belief in career prospects, continued academic growth, and a sense of community belonging have been found to significantly improve the longitudinal mental health of doctoral scholars (Zhang & Litson, 2022). Moreover, positive relationship with supervisors and engaging more with co- scholars have been identified as factors for protecting psychological well-being regularly, while social isolation might be a significant structural risk (Mahsood et al., 2025; Hazell et al., 2020). Belonging and mentoring are linked to a higher level of mental well-being in a doctorate program, whereas maladaptive socialization, poor support, and poor mentoring, are linked to lower levels of mental well-being in the doctorate program (Zhang et al., 2022 ; Sverdlik et al., 2020). While institutional and supervisory factors, personal resources and identity of doctoral students have been studied in relation to doctoral student well-being to some extent, these three have been largely explored individually (Parveen et al., 2025; Ganesh et al., 2024). There is little empirical focus on their inter-relationships within a shared context, especially in the Indian context of doctoral education. Moreover, the impact of the demographic and academic features, prior studies or work experience, and financial assistance should be explored. Hence, the present study explores the relationship between institutional research culture, doctoral student identity, and psychological well-being, taking into account the various demographic, academic and contextual factors of doctoral students. In light of this background, the present study examines the relationships between the institutions' research

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

culture, the identity of doctoral students and their psychological well-being as PhD scholars. It also explores intergroup variations in identity and psychological state of doctoral students based on selected demographic and academic characteristics: gender, domicile, previous research/work experience and scholarship status. The study aims to integrate these dimensions to help build a whole picture of the academic and psychological determinants of the doctoral scholars in the research environment of their institutions.

➢ *Objectives of the Study*

- To assess the interrelationships among institutional research culture, doctoral student identity, and psychological well-being among PhD scholars.
- To examine the differences in doctoral student identity and psychological well-being across the selected demographic characteristics: gender and domicile among PhD scholars.
- To examine the influence of prior research work experience and current financial support on doctoral student identity and psychological well-being among PhD scholars.

II. METHODOLOGY

➢ *Research Design*

The study employed a quantitative, cross-sectional research design to explore the relationship between the institutional research culture, doctoral student identity and psychological well-being among PhD scholars. In addition, the study considered the differences in doctoral student identity and psychological well-being in relation to certain demographic and academic variables and analysed the role of past research/work experience and financial support.

➢ *Sample*

The sample consisted of 117 Ph.D scholars. The participants were selected through a purposive sampling method and were included in the study on the basis of the following criteria: currently enrolled PhD scholars who were willing to participate in the study, doctoral scholars from various universities and disciplines. Out of the total sample, 82 (70.1%) were females, and 35 (29.9%) were males. The age of the participants involved ranged between 22 years and 37 years having a mean age of 27.40 years (SD = 2.27). The participants were in various phases of doctoral registration. 44 (37.6%) were in the first year of their PhD, 43 (36.8%) were in the second year, 17 (14.5%) were in the third year, 4 (3.4%) were in the fourth year, 7 (6.0%) were in the fifth year, and 2 (1.7%) were in the sixth year. As far as prior research/work experience, 34 participants (29.1%) had prior research/work experience, while 83 (70.9%) did not have any prior research/work experience. 55 (47%) of the participants reported currently receiving financial support for their research; 62 (53.0%) reported not receiving financial support for their research. Three main constructs were investigated: doctoral student identity, institutional research culture and psychological well-being. Other demographic and academic variables such as gender, age, discipline, year of PhD registration, previous research/work experience and current financial support status were also gathered.

➢ *Instruments*

Three standardised scales were used: the Institutional Research Culture Scale (IRCS), the Doctoral Student Identity Scale (DSIS), and the World Health Organization-Five Well-Being Index (WHO-5).

➢ *Institutional Research Culture Scale (IRCS)*

The Institutional Research Culture Scale (IRCS), developed by Jayachandran and Chandrasenan in the year 2021, was used to assess the institutional research culture. The scale is designed to evaluate the research culture in higher education institutions. It was developed based on the following aspects of institutional research culture: working environment, research infrastructure, research collaboration and sharing, research mentoring and monitoring, institutional research policies and research agenda. The scale is a 5-point Likert-type response format, with high scores representing a high level of perceived institutional research culture and low scores representing a low level of perceived institutional research culture; 1 = Strongly Disagree, 5 = Strongly Agree. The scale consists of 28 items, reporting an overall Cronbach's alpha .78. The mean score on each of the 28 items was computed to create an overall mean score for IRC, with higher scores indicating more positive perceptions of IRC. The scale had good internal consistency in the current sample ($\alpha = .889$).

➢ *Doctoral Student Identity Scale (DSIS)*

The Doctoral Student Identity Scale (DSIS) (Zhao et al., 2021) was employed to measure the doctoral student identity. The scale was created to measure the identity of doctoral students qualitatively and quantitatively. The DSIS consists of eight statements, with responses on a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The scale has two dimensions - identity exploration and identity commitment. The items from 1 to 4 measure identity exploration, and the items from 7 to 10 measure identity commitment. Identity exploration is related to the students' level of information seeking and knowledge of what it means to be a doctoral student, and identity commitment is related to their sense of belonging and attachment to the group of doctoral students (Zhao et al., 2021). The total scale had high test-retest reliability, and satisfactory reliabilities were reported in the original validation study. The mean score of the eight items was averaged together to be used as an overall identity mean score for doctoral students for the present study; higher scores reflect higher levels of doctoral student identity. In the present sample, the scale had an acceptable internal consistency (Cronbach's $\alpha = .798$).

➢ *World Health Organization-Five Well-Being Index (WHO-5)*

The World Health Organization-Five Well-Being Index (WHO-5) was used to measure psychological well-being. The WHO-5 is a 5-item subjective psychological well-being scale asking the person about their psychological state in the last two weeks. The questions measure positive aspects of well-being, such as feeling cheerful, feeling in good spirits, feeling calm and relaxed, feeling active and vigorous, feeling fresh and

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

rested when they wake up in the morning, and feeling that there are things that interest them in everyday life. A mean score of WHO-5 was obtained by averaging the five item scores; the higher the score, the more psychological well-being. The overall internal consistency for the present sample was good (Cronbach's α = .884).

➢ *Procedure*

The data were obtained from PhD scholars studying in various universities across India through both online and offline questionnaires. For online data collection, the questionnaires were shared with the eligible PhD scholars through WhatsApp. Hard copies of the questionnaires were distributed among eligible PhD scholars and retrieved when completed in offline mode. Purposive sampling was used to approach the participants. Before completing the questionnaire, the aim and scope of the study were explained to the participants along with its voluntary nature; and the assurance that all responses would remain confidential. The participants completed the demographic and academic information section, then the three study measures. The demographic information included information on gender, age, discipline, year of PhD registration, prior research/work experience, and ongoing scholarship or fellowship. The data sources (Online and Offline) were consolidated for analysis. There were no missing data on the variables included in the analysis of the final coded data set (N = 117).

➢ *Statistical Analysis*

The data was analysed using Jamovi statistical software. Descriptive and Inferential statistics were used as per the objectives of the study. Descriptive statistics like frequency, percentage, mean, standard deviation, minimum/maximum scores, skewness and kurtosis were used to analyze the demographic characteristics and major study variables. Cronbach's alpha measured the internal consistency of the three study measures. Pearson's product-moment correlation coefficient was calculated to discuss the relationships between institutional research culture, doctoral student identity and psychological well-being. Then, a multiple linear regression analysis was performed using psychological well-being as the dependent variable, and institutional research culture and doctoral student identity as the predictor variables. The differences between the two groups in terms of doctoral students' identity and psychological well-being were analyzed by Welch's independent-samples t-test. Gender, domicile, previous research/work experience, and current financial support were used to make this analysis. While using significant tests, the effect sizes and confidence intervals were also taken into account. The significance level of .05 was used to determine the overall statistical significance.

III. RESULTS

➢ *Participant Characteristics*

The sample comprised 117 participants pursuing PhD from the various universities of India, with a mean age of 27.40 years (SD = 2.27, range = 22–37). The majority of the participants were female (n = 82, 70.1%) relative to male (n = 35, 29.9%). Majority of the participants resided in rural areas (n = 82, 70.1%) as compared to the urban areas (n = 35, 29.9%). The number of participants holding scholarships was slightly less than half (47.0%, n = 55), while the remaining were self-financed (53.0%, n = 62) and most (70.9%, n = 83) of the respondents indicated having no previous study/work experience, while 29.1% (n = 34) possessed prior study/work experience. With respect to socioeconomic status, 94.0% (n = 110) of the participants fell in the middle category, 6.0% (n = 7) in the low category and no participants (n = 0) in the high category. The majority of the participants were from the social sciences (59.0%, n = 69), followed by the natural sciences (23.1%, n = 27), humanities (15.4%, n = 18), and engineering and technology (2.6%, n = 3). In terms of doctoral stage, 37.6% of participants were in their first year and 36.8% in their second year. Together, nearly three-quarters of the sample was in the first two years of doctoral study, with the remaining participants in their Year 3–6. The detailed characteristics of the sample are presented in Table 1 below.

Table 1 Participant Characteristics

Characteristic	Category	n	%
Gender	Male	35	29.9
	Female	82	70.1
Domicile	Rural	82	70.1
	Urban	35	29.9
Scholarship status	Availing	55	47.0
	Not availing	62	53.0
Prior research/work experience	Yes	34	29.1
	No	83	70.9
Socioeconomic status	Middle	110	94.0
	Low	7	6.0
Academic discipline	Social sciences	69	59.0
	Natural sciences	27	23.1
	Humanities	18	15.4
	Engineering & technology	3	2.6
Doctoral stage	Year 1	44	37.6
	Year 2	43	36.8
	Years 3–6 (combined)	30	25.6

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

- *Note.* Age: M = 27.40, SD = 2.27, Range = 22–37

➢ *Reliability and Descriptive Statistics of the Study Measures*

All three measures showed a satisfactory internal consistency (see Table 2). The internal consistency of institutional research culture scale was at Cronbach's α .889 . An acceptable-to-good internal consistency (α = .798) for the doctoral student identity scale and a good internal consistency (α = .884) for WHO-5 Well-Being Index was demonstrated. The item-rest correlations for most items were fairly satisfactory (r > .30–.40), with a small number of institutional research culture items having relatively low discriminations (e.g., IRC2 = .211, IRC4 = .214). No meaningful increase in reliability from deletion of any of the items was indicated, and the items were thus retained for further analyses.

Table 2 Descriptive Statistics and Internal Consistency of the Study Measures

Measure	Items	M	SD	Min–Max	α
Institutional research culture	28	4.20	0.372	3.36–5.00	.889
Doctoral student identity	8	4.14	0.435	3.25–5.00	.798
Psychological well-being (WHO-5)	5	2.10	0.944	0.00–4.00	.884

- *Note.* N = 117

➢ *Associations Among Institutional Research Culture, Doctoral Student Identity and Psychological Well-Being*

Pearson correlations (see Table 3) revealed that moderate positive relationships existed between Institutional research culture (IRC) and Doctoral student identity, r (115) = .35, p < .001, 95% CI [.18, .50], with scholars having a more positive perception of their institutional research environments reporting a higher sense of identity in their doctoral programs. IRC, however, was not significantly related to psychological well-being, r (115) = .05, p = .613, 95% CI [-.14, .23]. Meanwhile, DI was significantly and negatively correlated with WB, r (115) = -.28, p = .002, 95% CI [-.44, -.10], with scholars scoring higher on the DI scale reporting lower levels of psychological well-being. The lack of significant association between institutional research culture and well-being indicates that the link between institutional context and well-being might not be well captured by a simple bivariate association.

Table 3 Pearson Correlations Among Institutional Research Culture, Doctoral Student Identity, and Psychological Well-Being

Variable	M	SD	1	2	3
1.Institutional research culture	4.20	0.372	—	.35***	.05
2. Doctoral student identity	4.14	0.435		—	-.28**
3. Psychological well-being	2.10	0.944			—

- *Note.* N = 117. **p < .01. ***p < .001.

A multiple linear regression model (see Table 4) was estimated with psychological well-being as the dependent variable and institutional research culture and doctoral student identity as simultaneous predictors. The overall model was statistically significant, F(2, 114) = 6.43, p = .002, with R^2 = .101 and adjusted R^2 = .086, indicating that the two predictors together accounted for 10.1% of the variance in psychological well-being. Doctoral student identity was a significant negative predictor of psychological well-being (B = −0.729, SE = 0.206, β = −.336, p < .001, 95% CI [−1.137, −.322]). Institutional research culture had a positive, non-significant unique association with psychological well-being (B = 0.421, SE = 0.241, β = .166, p = .083, 95% CI [−0.056, 0.898]). The collinearity diagnostics did not reveal any problematic overlap between the two predictors (VIF = 1.14; tolerance = .876). After controlling for the effects of institutional research culture, there remained a statistically significant relationship between doctoral student identity and well-being, and no unique contribution of institutional research culture was observed as statistically significant.

Table 4 Multiple Linear Regression Predicting Psychological Well-Being

Predictor	B	SE	β	t	p	95% CI for B
Intercept	3.347	1.071	—	3.13	.002	[1.226, 5.468]
Institutional research culture	0.421	0.241	.166	1.75	.083	[-0.056, 0.898]
Doctoral student identity	-0.729	0.206	-.336	-3.55	< .001	[-1.137, -0.322]

- *Note.* N = 117. R^2 = .101, adjusted R^2 = .086, F(2, 114) = 6.43, p = .002.

➢ *Differences by Demographic and Academic Characteristics*

Independent-samples comparisons (Welch's t tests, used throughout because group sizes and/or variances were not assumed to be equal) showed no significant differences between male and female scholars in doctoral identity, t(62.7) = 0.10, p = .923, d = 0.02 (male M = 4.14; female M = 4.13). Although women reported slightly higher psychological well-being than men, the effect size was still small and hence, was not considered, t(66.5) = -1.43, p = .158, d = -0.29 (male M = 1.91; female M = 2.18). Participants from rural domiciles had significantly higher doctoral identity than their urban counterparts, Welch's t (73.7) = 2.59, p = .012 (rural M = 4.20; urban M = 3.99). However, no significant domicile difference emerged for psychological well-being, t (115) = -0.05, p = .958 (rural M = 2.09; urban M = 2.10). The doctoral identity score was significantly higher for scholars with prior research or

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

work experience compared to those without, t(60.8) = 2.24, p = .029 (experience M = 4.28; no experience M = 4.08). In a surprising result, the participants with prior experience also reported significantly poorer well-being, with a medium-large effect size (whelch's t (59.6) = -3.44, p = .001, medium-large effect size); experience M = 1.64, no experience M = 2.28. No significant differences were reported between scholarship holders and self-financed scholars on either DI, Welch's t(114) = -0.86, p = .391 (scholarship M = 4.10; no scholarship M = 4.17), or WB, Welch's t(113) = -0.77, p = .444 (scholarship M = 2.03; no scholarship M = 2.16).

Table 5 Group Differences in Doctoral Student Identity and Psychological Well-Being

Grouping variable	Outcome	Welch's t	df	p	Mean difference	Cohen's d
Gender (male − female)	Doctoral student identity	0.10	62.7	.923	0.009	0.02
Gender (male − female)	Psychological well-being	-1.43	66.5	.158	-0.267	-0.29
Domicile (rural − urban)	Doctoral student identity	2.59	97.3	.012	0.210	0.51
Domicile (rural − urban)	Psychological well-being	-0.05	64.6	.958	-0.010	-0.01
Scholarship (availing − not availing)	Doctoral student identity	-0.86	114.4	.391	-0.069	-0.16
Scholarship (availing − not availing)	Psychological well-being	-0.77	113.4	.444	-0.133	-0.14
Research experience (yes − no)	Doctoral student identity	2.25	60.8	.029	0.196	0.46
Research experience (yes − no)	Psychological well-being	-3.45	59.6	.001	-0.641	-0.71

- *Note.* All comparisons are Welch's t tests, used because group sizes and/or variances were not assumed to be equal. Mean difference is Group 1 minus Group 2, as ordered in the grouping-variable label.

IV. DISCUSSION

This study investigated the relationships between institutional research culture, doctoral student identity and psychological well-being and the differences in these constructs among PhD scholars with respect to various demographic and academic variables of the PhD scholars. The results showed a differentiated pattern, as the presence of a positive association between institutional research culture and doctoral student identity, but no direct association between institutional research culture and psychological well-being. Additionally, the negative association between doctoral student identity and psychological well-being persisted even when research culture was taken into account at the same time. Higher levels of doctoral identity and lower well-being were related to previous research experience. These results collectively indicate that academic integration and psychological health do not necessarily show a linear relationship with each other when pursuing a doctorate degree.

➢ *Institutional Research Culture and Doctoral Student Identity*

In line with the previous literature, moderate correlation was found between a positive institutional research culture and increased doctoral student identity. The finding aligns with the conceptualization of doctoral student identity as a socially and contextually constructed identity. Through research activities, interactions with supervisors and fellow students, institutional and disciplinary expectations, students gain insight into themselves as researchers and members of academic communities (McAlpine et al., 2009; McAlpine & Amundsen, 2009). Similarly, Douglas (2022) found that perceived fit between doctoral candidates and the culture and environment of the institution is also a factor with regard to how candidates understand and develop their academic identity. The present finding highlights the significance of the research culture as an integral contextual factor in the development of doctoral student identity. The finding is also consistent with the Doctoral Student Identity Scale conceptualisation. In the study of doctoral student identity, Zhao et al. (2021) conceptualised it as a recognition of being a doctoral student, a sense of belonging to the doctoral group and emotional and value-oriented connotations that emerge from that identity. They found identity exploration and identity commitment to be separate components and showed relationships among these identity facets and wellbeing. In the current sample, a greater overall sense of doctoral identity was related to greater perceived research culture, indicating that institutional context may be a factor in how students develop a sense of belonging to the research community.

➢ *Doctoral Student Identity and Psychological Well-Being*

One of the most interesting findings of the present study is the negative relationship reported between doctoral identity and psychological well-being. The bivariate results showed higher doctoral identity was not associated with higher psychological well-being, the regression analysis showed that higher doctoral identity was negatively associated with well-being. Not all scholars who could identify more with the role of a PhD scholar experienced higher psychological well-being as well, as one might think. On the contrary, those who were more strongly identified as a scholar had lower psychological well-being. One possible explanation for this finding may be the high effort and investment that comes with the doctoral role. This mirrors the findings of previous research that the psychological demands of doctoral training, particularly as related to one's identity, have been a constant source of stress, even beyond the demands of the external structural conditions (Sverdlik et al., 2018; Schmidt & Hansson, 2018). The doctoral process is characterized by a long term intellectual engagement with the task, unpredictable research results, assessment and career stressors. McAlpine et al. (2009) demonstrated that many of the factors that are positive in terms of promoting academic identity can also prove negative for the scholar and can create tensions. Once DSI's negative association with psychological well-being was accounted for, IRC's positive association weakened to a non-significant trend, suggesting that even a supportive research culture may not be

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

straightforwardly able to protect an individual's well-being due to the psychological costs of an established doctoral student identity. The scores for the "Research culture" and "Identity" domain, which are relatively positive in this sample, were not by themselves predictive of well-being. This could be a factor to consider when institutions directly intervene in these dimensions as part of their well-being initiatives. Additionally, the result is inconsistent with the positive relationship between the two dimensions of doctoral identity and subjective well-being, self-esteem, and psychological school belonging that was revealed in the validation study conducted by Zhao et al. (2021). The difference is not necessarily a contradiction. The present study was conducted in a different national and institutional context and involved a different measure of well-being, the WHO-5, while the Zhao et al. study developed and validated the identity measure with a broader measure of subjective well-being. Therefore, the difference might be due to the context, how well being is defined or the dimensions measured by the identity measure. It is important to interpret this as an empirical and context specific finding, rather than an adverse effect of being a doctoral student on well-being. The present results are consistent with the hypothesis that high identity and high role demands are compatible; however, the data do not allow for determining whether poorer well-being leads to changes in identity or poorer identity to changes in well-being or whether both are affected by other unmeasured factors. Institutional Research Culture and Psychological Well-Being The institutional research culture was not significantly associated with psychological well-being in the bivariate analysis. It also did not emerge as a statistically significant unique predictor in the regression model. This finding does not imply that institutional conditions are unimportant for doctoral well-being. Instead, the findings suggest that a general indicator of a research culture may not reflect the aspects of the culture that are most closely related to well-being. The relationship between research environment dimensions and positive and negative dimensions of well-being was investigated in 592 PhD students from eight universities in Hong Kong across different elements of the research environment; in terms of supervision, research culture and skills development (Li et al., 2025) . Similarly, Levecque et al. (2017), using data from 3,659 PhD students in Flanders, found that certain factors such as job demands, job control, supervisor leadership style, work-family interface and team decision-making culture were associated with mental-health outcomes. However, this distinction is important for the present study. Research culture may provide opportunities, resources, scholarly interaction and recognition, but it may not necessarily reduce the workload, uncertainty, evaluation pressure or financial concerns which come with the doctoral research. Hence, may reduce the psychological well-being of the PhD scholar. The literature on doctoral candidates in India also points toward the importance of differentiating institutional resources from individual and relational resources. Ganesh et al. (2024) reported positive associations of harmonious passion and grit with doctoral well-being among doctoral students in Indian higher-education institutions. Parveen et al. (2025) in interviews with 40 Indian doctoral students identified supervision, peer collaboration, financial security, institutional resources and prolonged evaluation among important factors which shape the mental health and research engagement of the scholars. Thus, the absence of a direct association in the current study points towards the evidence that the relationship between institutional research culture and well-being is likely to be more specific and nuanced than a single overall score. The regression result strengthens the interpretation of the findings further. Once the shared variance between research culture and doctoral student identity was taken into account, doctoral student identity showed a statistically significant negative association with psychological well-being. This pattern therefore corresponds with the possibility of institutional context being more directly connected with processes of academic socialization and identity rather than with well-being itself. Contemporary doctoral research suggests that research environments influence well-being through multiple, non-equivalent pathways, with supervision, research culture, skills development, and other environmental dimensions showing different relationships with well-being outcomes (Li et al., 2025). The modest R^2 also suggests that substantial variation in doctoral well-being remains unaccounted for. These findings are consistent with research identifying multiple academic, interpersonal, financial, motivational and personal determinants of the doctoral experience (Sverdlik et al., 2018).

- *Demographic and Academic Correlates of Doctoral Identity and Well-Being*

No significant gender differences were found in either doctoral identity or well-being. While earlier work (e.g., Clance & Imes, 1978) emphasized gendered patterns in impostor phenomenon and identity crisis, more recent reviews of the doctoral experience have found gender effects on well-being to be inconsistent across situations (Sverdlik et al., 2018) and the present null finding is compatible with that pattern. The small effect size favouring women's well-being ($d = -0.29$) suggests the study may have been not strong enough to detect a significant difference, particularly given the gender split (35 men vs. 82 women) which is not balanced in this sample; this should be read as an absence of a notable difference rather than as evidence that gender is not relevant to the doctoral experience. Recent qualitative work in Indian higher education has identified gender-differentiated experiences of social support even when doctoral experiences are examined more generally (Parveen et al., 2025). Rural scholars reported significantly stronger doctoral identity than urban scholars ($d = 0.51$), with no corresponding difference in well-being. One possible reading is that for scholars from rural backgrounds, the doctoral degree may carry greater relative social and symbolic significance, potentially this may be the first advanced credential in their family or community, intensifying recognition with the researcher role as a marker of achievement, autonomy and mobility. Because the study was not designed to explain place-based differences, the finding is best regarded as exploratory. Scholarship status was not significantly associated with either doctoral identity or well-being. One interpretation might be that the binary "scholarship vs. self-financed" distinction may not adequately capture actual financial difficulties: self-financed scholars in this context may still have adequate family or personal resources, while some scholarship holders may face delays or inadequacies in fund release not captured by funding status

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

alone. Indian doctoral research more vastly points to financial security and instability, rather than funding category per se, as relevant to students' mental health and engagement (Ganesh et al., 2024; Parveen et al., 2025); a more fine-grained measure of financial adequacy may be needed to detect a relationship in future work. The prior research experience finding was the most consequential of the demographic results. Scholars with prior research or work experience reported both significantly stronger doctoral identity (d = 0.46) and significantly lower well-being (d = -0.71) than those without such experience. The identity finding fits socialization accounts in which prior exposure to research practice contributes to professional identity formation by accelerating it, consistent with work emphasizing the cumulative role of research activities and academic participation in identity development (Gardner, 2008; McAlpine et al., 2009). The present finding therefore supports a view of prior research experience as neither inherently protective nor inherently harmful, its association with well-being may depend on the nature and quality of the research experiences through which doctoral students are socialized. Conclusion and Limitations The present study investigates the interrelationships among institutional research culture, doctoral student identity and psychological well-being among 117 PhD scholars, along with selected demographic and academic characteristics. The results suggest that the doctoral experience is not only determined by institutional conditions but by the interplay of several and interrelated aspects. A positive and moderate association between institutional research culture and doctoral student identity emerged, which indicates that a positive research context can be associated with scholars' sense of identity and belongingness. Institutional research culture, however, did not have a significant correlation at bivariate level or as a unique predictor in the regression model. Contrastingly, doctoral student identity had a significant negative correlation with psychological well-being, and was also a significant negative predictor in the presence of institutional research culture. The regression model explained 10.1% of the variance in psychological well-being, meaning that there was a significant amount of variance in well-being that was not explored in the present study. The results also revealed a significant difference between rural and urban scholars in favour of rural scholars on the dimensions of doctoral student identity, but there was no significant difference between the groups on psychological well-being. In the same way, it had been previously discovered that scholars with prior research or work experience scored greater on the doctoral student identity scale and much less on psychological well-being than scholars without such prior research or work experience. No significant differences were found between males and females or among those who availed or were not availing scholarship. All of this indicates that it is not always expected that academic identification and psychological wellbeing will grow hand in hand. The development of a strong doctoral identity can coexist with the demands, performance expectations, uncertainty and other pressures of doctoral education. Academic integration and identity development, therefore, should not be the only focus of institutions, as psychological well-being must also be addressed by enhancing the research environment, supervisory and peer support, and psychological resources. The present results should, however, be regarded as associations and not as causal relationships. There are some limitations to be taken into consideration when interpreting the findings. First of all, the cross-sectional research design does not allow for conclusions regarding the temporal and causal relationships between institutional research culture, doctoral student identity and psychological well-being. Second, the study used purposive sampling that recruited a relatively medium sample size of 117 scholars. Participants were drawn from various universities in India but the sample consisted mainly of students from the Kashmir region, and was not representative in terms of gender, domicile, discipline, and year of doctoral studies. The sample was also predominantly female and scholars from social sciences, and nearly three-quarters were in the first two years of doctoral study, which may have implications for the generalizability of the findings to other contexts and years of doctoral study. Thirdly, all major constructs were measured with self-report instruments, which can be distorted by personal perceptions and response patterns. Internal consistency was acceptable for the three measures in this sample, but some of the institutional research culture items in this study had lower item discrimination, and may warrant continued evaluation of the scale. Lastly, the general scope of previous research/work experience and the scholarship status was not sufficient to reflect the type, duration, quality and intensity of previous research/work experience and the quality and stability of the financial support received. Larger and more diverse samples, longitudinal designs, and more specific measures of supervisory relationships, workload, financial resources, social support, and dimensions of the institutional research culture would benefit future research and help to develop a more complete understanding of doctoral students' identity and psychological well-being.

V. CONCLUSION AND LIMITATIONS

The present study investigates the interrelationships among institutional research culture, doctoral student identity and psychological well-being among 117 PhD scholars, along with selected demographic and academic characteristics. The results suggest that the doctoral experience is not only determined by institutional conditions but by the interplay of several and interrelated aspects. A positive and moderate association between institutional research culture and doctoral student identity emerged, which indicates that a positive research context can be associated with scholars' sense of identity and belongingness. Institutional research culture, however, did not have a significant correlation at bivariate level or as a unique predictor in the regression model. Contrastingly, doctoral student identity had a significant negative correlation with psychological well-being, and was also a significant negative predictor in the presence of institutional research culture. The regression model explained 10.1% of the variance in psychological well-being, meaning that there was a significant amount of variance in well-being that was not explored in the present study. The results also revealed a significant difference between rural and urban scholars in favour of rural scholars on the dimensions of doctoral student identity, but there was no significant difference between the groups on psychological well-being. In the same way, it had been previously discovered that scholars with prior research or work experience scored greater on the

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

doctoral student identity scale and much less on psychological well-being than scholars without such prior research or work experience. No significant differences were found between males and females or among those who availed or were not availing scholarship. All of this indicates that it is not always expected that academic identification and psychological wellbeing will grow hand in hand. The development of a strong doctoral identity can coexist with the demands, performance expectations, uncertainty and other pressures of doctoral education. Academic integration and identity development, therefore, should not be the only focus of institutions, as psychological well-being must also be addressed by enhancing the research environment, supervisory and peer support, and psychological resources. The present results should, however, be regarded as associations and not as causal relationships.

There are some limitations to be taken into consideration when interpreting the findings. First of all, the cross-sectional research design does not allow for conclusions regarding the temporal and causal relationships between institutional research culture, doctoral student identity and psychological well-being. Second, the study used purposive sampling that recruited a relatively medium sample size of 117 scholars. Participants were drawn from various universities in India but the sample consisted mainly of students from the Kashmir region, and was not representative in terms of gender, domicile, discipline, and year of doctoral studies. The sample was also predominantly female and scholars from social sciences, and nearly three-quarters were in the first two years of doctoral study, which may have implications for the generalizability of the findings to other contexts and years of doctoral study. Thirdly, all major constructs were measured with self-report instruments, which can be distorted by personal perceptions and response patterns. Internal consistency was acceptable for the three measures in this sample, but some of the institutional research culture items in this study had lower item discrimination, and may warrant continued evaluation of the scale. Lastly, the general scope of previous research/work experience and the scholarship status was not sufficient to reflect the type, duration, quality and intensity of previous research/work experience and the quality and stability of the financial support received. Larger and more diverse samples, longitudinal designs, and more specific measures of supervisory relationships, workload, financial resources, social support, and dimensions of the institutional research culture would benefit future research and help to develop a more complete understanding of doctoral students' identity and psychological well-being.

REFERENCES

[1]. Byrom, N. C., Dinu, L., Kirkman, A., & Hughes, G. (2022). Predicting stress and mental wellbeing among doctoral researchers. Journal of Mental Health, 31 (6), 783–791. Byrne, T., Leggett, S. E., Mallampooty, V., Jameel, R., Zapata, A., Blodgett, P., ... & Xiao, Z. (2025). The struggle for identity in doctoral supervision: A phenomenologically grounded qualitative study of power and conflict.

[2]. Choi, Y. H., Bouwma-Gearhart, J., & Ermis, G. (2021). Doctoral students' identity development as scholars in the education sciences: Literature review and implications. International Journal of Doctoral Studies, 16 .

[3]. Clance, P. R., & Imes, S. A. (1978). The impostor phenomenon in high achieving women: Dynamics and therapeutic intervention. Psychotherapy: Theory, Research & Practice, 15 (3), 241–247.

[4]. Donaghue, H., & Adams, G. (2025). The role of situated talk in developing doctoral students' researcher identities. Studies in Continuing Education, 47 (1), 68–87.

[5]. Douglas, A. S. (2022). Dimensions of fit for doctoral candidates: Supporting an academic identity. Research Papers in Education, 37 (6), 954–974.

[6]. Ganesh, P., Krishna, N. S., & Srivastava, K. B. L. (2024). Impact of personal resources on well-being of doctoral students in Indian higher academic institutions. Educational and Developmental Psychologist, 41 (1), 58–73.

[7]. Gardner, S. K. (2008). "What's too much and what's too little?": The process of becoming an independent researcher in doctoral education. The Journal of Higher Education, 79 (3), 326–350.

[8]. Gin, L. E., Wiesenthal, N. J., Ferreira, I., & Cooper, K. M. (2021). PhDepression: Examining how graduate research and teaching affect depression in life sciences PhD students. CBE—Life Sciences Education, 20 (3), Article ar41.

[9]. Göktürk, D. (2025). How boundaries work in higher education: An ethnographic account of PhD students' identity formation. Compare: A Journal of Comparative and International Education, 55 (5), 792–809.

[10]. Guo, Y., & Liu, X. (2026). Mental health and well-being of doctoral students: A systematic review. International Journal of Mental Health Promotion, 28 (1).

[11]. Hazell, C. M., Chapman, L., Valeix, S. F., Roberts, P., Niven, J. E., & Berry, C. (2020). Understanding the mental health of doctoral researchers: A mixed methods systematic review with meta-analysis and meta-synthesis. Systematic Reviews, 9 (1), Article 197.

[12]. Horta, H., & Li, H. (2023). Nothing but publishing: The overriding goal of PhD students in mainland China, Hong Kong, and Macau. Studies in Higher Education, 48 (2), 263–282.

[13]. Jayachandran, J., & Chandrasenan, D. (2021). Institutional Research Culture Scale (IRCS): Development and validation in the context of universities in Kerala, India. In Proceedings of the 8th International Conference on Research in Behavioral and Social Science (pp. 47–53).

[14]. Levecque, K., Anseel, F., De Beuckelaer, A., Van der Heyden, J., & Gisle, L. (2017). Work organization and mental health problems in PhD students. Research Policy, 46 (4), 868–879.

[15]. Li, Y., King, R. B., Chen, J., & Xu, W. (2025). PhD students' well-being and its antecedents and consequences: A perspective of the Job Demands-

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26oct1521

Resources model. Higher Education Research & Development, 44 (8), 1981–1997.
[16]. LT, L., Hense, S., Kodali, P. B., & Thankappan, K. R. (2022). Prevalence and underlying factors of depressive disorders among PhD students: A mixed-method study in the Indian context. Journal of Applied Research in Higher Education, 14 (4), 1704–1717.
[17]. Mackie, S. A., & Bates, G. W. (2019). Contribution of the doctoral education environment to PhD candidates' mental health problems: A scoping review. Higher Education Research & Development, 38 (3), 565–578.
[18]. Mahsood, N., Mahboob, U., Asim, M., & Shaheen, N. (2025). Assessing the well-being of PhD scholars: A scoping review. BMC Psychology, 13 (1), Article 362.
[19]. Mantai, L. (2019). "Feeling more academic now": Doctoral stories of becoming an academic. The Australian Educational Researcher, 46 (1), 137–153.
[20]. McAlpine, L., & Amundsen, C. (2009). Identity and agency: Pleasures and collegiality among the challenges of the doctoral journey. Studies in Continuing Education, 31 (2), 109–125.
[21]. McAlpine, L., Jazvac-Martek, M., & Hopwood, N. (2009). Doctoral student experience in education: Activities and difficulties influencing identity development. International Journal for Researcher Development, 1 (1), 97–109.
[22]. Nicholls, H., Nicholls, M., Tekin, S., Lamb, D., & Billings, J. (2022). The impact of working in academia on researchers' mental health and well-being: A systematic review and qualitative meta-synthesis. PLOS ONE, 17 (5), Article e0268890.
[23]. Parveen, S., Yasmeen, J., Ajmal, M., Qamar, M. T., Sohail, S. S., & Madsen, D. Ø. (2025). Unpacking the doctoral journey in India: Supervision, social support, and institutional factors influencing mental health and research engagement. Social Sciences & Humanities Open, 11 , Article 101282.
[24]. Ryan, T., Baik, C., & Larcombe, W. (2022). How can universities better support the mental wellbeing of higher degree research students? A study of students' suggestions. Higher Education Research & Development, 41 (3), 867–881.
[25]. Schmidt, M., & Hansson, E. (2018). Doctoral students' well-being: A literature review. International Journal of Qualitative Studies on Health and Well-being, 13 (1), Article 1508171.
[26]. Sverdlik, A., Hall, N. C., McAlpine, L., & Hubbard, K. (2018). The PhD experience: A review of the factors influencing doctoral students' completion, achievement, and well-being. International Journal of Doctoral Studies, 13 , 361–388.
[27]. Xu, W., Li, Y., King, R. B., & Chen, J. (2024). The well-being of doctoral students in education: An ecological systems perspective. Behavioral Sciences, 14 (10), Article 929.
[28]. Zhang, F., Litson, K., & Feldon, D. F. (2022). Social predictors of doctoral student mental health and well-being. PLOS ONE, 17 (9), Article e0274273.
[29]. Zhang, H., & Wang, X. (2025). Beyond the ivory tower: An exploration of influential factors affecting Chinese doctoral students' academic identity construction. International Journal of Educational Management, 1–17.
[30]. Zhao, J.-L., Chen, F., & Jia, X.-M. (2021). The development and validation of the Doctoral Student Identity Scale. Frontiers in Psychology, 12, Article 688948.