

Identifying Factors Affecting Personal Knowledge Management of Postgraduate Students

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Abstract

Purpose: This study aimed to identify the factors influencing personal knowledge management (PKM) among postgraduate students and to present a relevant model.

Method: A qualitative approach using grounded theory was adopted to develop a model for PKM. The participant group included 28 experts in knowledge and personal knowledge management, selected through purposive sampling. Data were collected via in-depth interviews and analyzed through open, axial, and selective coding using MAXQDA software.

Findings: The analysis revealed that PKM consists of six main dimensions and 27 categories. The central category and its components include the following: causal conditions (information identification, knowledge organization, technologies, skills, interaction, motivation); contextual factors (documenting experiences, software, efficient systems, culture, economic status, educational background); Strategies (developing guidelines, integrating PKM tools into curricula, teaching digital literacy, promoting collaborative learning), consequences (enhanced productivity, increased effectiveness, reduced duplication, improved educational and research quality, innovation, knowledge sharing); and intervening factors (time constraints, poor work environment, lack of motivation, unfamiliarity with methods, lack of trust).

Conclusion: The proposed model provides a practical framework for improving learning and research among postgraduate students. It offers a foundation for designing educational programs and policies in higher education. Applying this model can enhance educational quality and promote intellectual capital in universities.

Value: This study addresses a research gap by developing a comprehensive, theory-based PKM model. Its novelty lies in systematically analyzing individual, ontexual, and behavioral factors influencing PKM among postgraduate students.

Keywords: *Knowledge Management, Personal Knowledge Management, Grounded Theory.*

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Extended Abstract

Introduction: In the digital era, personal knowledge management (PKM) has become a fundamental skill for postgraduate students, who must navigate complex academic environments, engage with vast information resources, and produce high-quality research. Although knowledge management at the organizational level has received considerable attention, a notable gap remains in the literature regarding the individual processes through which students manage their personal knowledge. Postgraduate students face unique challenges, including time constraints, information overload, and the need to develop lifelong learning competencies. Recognizing the significance of PKM in higher education, this study seeks to identify the key factors influencing PKM among postgraduate students and to construct a grounded theoretical model capable of informing both educational practice and policy.

Purpose: This study aims to identify the barriers and outcomes associated with personal knowledge management practices among postgraduate students. The ultimate goal is to present comprehensive, applicable model that can inform educational theory and institutional policy. In doing so, this study contributes to student empowerment and the enhancement of academic and research capacities within the higher education system.

Method: This research adopted a qualitative methodology rooted in grounded theory. A total of 28 subject matter experts—including academics and professionals in knowledge management and education—were selected using purposive sampling. In-depth, semi-structured interviews were conducted to explore their perspectives and experiences. The data were analyzed through a three-stage coding process: open coding, axial coding, and selective coding. MAXQDA qualitative data analysis software facilitated the organization and interpretation of the interview data, leading to the development of a conceptual framework.

Findings: The data analysis revealed six major dimensions encompassing 27 core categories that collectively shape personal knowledge management (PKM) among postgraduate students. These include: (1) causal conditions, (2) contextual factors, (3) strategies, (4) consequences, (5) intervening factors, and (6) the central phenomenon of PKM itself. Each dimension reflects a unique aspect of the PKM process, from internal motivations to institutional support systems.

Table 1 .Dimensions and Associated Categories of Personal Knowledge Management (PKM)

Dimension	categories
Causal Conditions	Information Identification, Knowledge Organization, Technologies, Skills, Interaction, Motivation
Contextual Factors	Documenting Experiences, Software, Efficient System, Culture, Economic Status, Educational Background
Strategies	Integrating Personal Knowledge Management Tools into University Curricula, Curriculum Integration, Digital Literacy Education, Collaborative Learning Environments
Consequences	Improved Productivity, Increased Effectiveness, Reduced Duplication, Enhanced Quality, Innovation and Creativity, Knowledge Sharing
Intervening Factors	Lack of Time, Inappropriate Work Environment, Lack of Motivation, Unfamiliarity with Methods, Lack of Trust
Central Phenomenon	Personal Knowledge Management (PKM)



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Table 2 .Axial Coding Categories and Conceptual Sub-Codes

Main Category	Sub-Categories	Dimension
Information Identification	Recognizing key information and knowledge resources	Causal Conditions
Knowledge Organization	Structuring and storing personal knowledge	
Technologies	Using digital tools and platforms for PKM	
Skills	Cognitive and sharing capabilities	
Interaction	Collaboration with peers and academic communities	
Motivation	Intrinsic and extrinsic motivation for managing knowledge	
Documenting Experiences	Recording and reflecting on personal academic experiences	Contextual Factors
Software	Familiarity with tools to capture knowledge	
Efficient System	Supportive institutional mechanisms	
Culture	Norms and attitudes toward knowledge sharing	
Economic Status	Financial and infrastructural investment	
Educational Background	Prior exposure to KM concepts and training	
Integrating personal knowledge management tools into university curricula	Creating structured frameworks for PKM	Strategies
Curriculum Integration	Embedding PKM into academic programs	
Digital Literacy Education	Training students in technology use	
Collaborative Learning Environments	Fostering peer interaction and group learning	
Improved Productivity	Efficient use of time and resources	Consequences
Increased Effectiveness	Enhanced quality in academic tasks	
Reduced Duplication	Avoiding repetition and redundant effort	
Enhanced Quality	Improving educational and research outcomes	
Innovation and Creativity	Generating new ideas through PKM	
Knowledge Sharing	Encouraging collaborative knowledge practices	
Lack of Time	Limited availability due to workload	Intervening Factors
Inappropriate Work Environment	Lack of support or conducive spaces	
Lack of Motivation	Low interest or incentives for PKM	
Unfamiliarity with Methods	Limited awareness of PKM techniques	
Lack of Trust	Hesitation in sharing personal insights	



Conclusion: The model derived from this research presents a holistic perspective on personal knowledge management (PKM) among postgraduate students. It can be used as an applied framework for scientific empowerment, enhancing the level of learning, and improving the research performance of graduate students. The use of this model by higher education institutions can be an effective step toward enhancing the quality of the educational system and developing intellectual capital in the country's universities and educational institutions. This study emphasizes the importance of integrating PKM strategies into educational policies and curricula to foster academic resilience, productivity, and lifelong learning capabilities

Value: This study addresses a research gap by developing a comprehensive, theory-based PKM model. Its novelty lies in systematically analyzing individual, contextual, and behavioral factors influencing PKM among postgraduate students. By providing a grounded, empirically supported framework, this model can guide higher education institutions in designing targeted interventions. These may include workshops, digital literacy training, and the development of knowledge-sharing cultures that empower students to manage their knowledge proactively and efficiently.

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