RESEARCH ARTICLE

The Antecendents Of Innovative Work Behavior: Concepts And Dimensions

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ABSTRACT

The study aims of this article is to propose a definition, identify dimensions and concepts of innovative behavior in lecturers. Innovative work behavior means all lecturer behavior regarding ideas in general, promotion and implementation of new ideas, processes, products or procedures in the lecturer's work. The concept and definition of "Innovative Work Behavior" is more specifically carried out by teacher and lecturers in a specific and clear context. Discover several dimensions of the concept of innovative behavior from various views. Antecendents of innovative work behavior can be categorized, namely from individual, job characteristics, social characteristics and organizational factors. The method used is a systematic meta-analysis review of several articles from Researchgate, Ed.gov, Sinta, etc. There are several challenges in research to produce innovative work behavior towards lecturers, especially in providing definitions and dimensions.

Keywords: Innovative Work Behavior, Concept and Dimension, Teacher, Lecturers

INTRODUCTION

Indonesia, as a developing country, has a diverse population of 284,286,341 people in 2024, with the productive age group (ages 15-64) comprising 69.58% as of June 2024. This large potential of Indonesia's human resources presents a significant opportunity to develop a productive workforce with competencies at national and international levels. To fulfill the demand for a highly skilled workforce, a robust educational system and qualified educators are essential in both academic and non-academic environments. Educators play a crucial role in shaping the future of individuals and society as a whole. Their presence, whether as teachers or lecturers, is vital in the formation of character and knowledge. Educators not only transfer knowledge but also guideindividuals as students in developing noble character and productive, positive values. Teachers and lecturers help students understand the world, hone their critical thinking skills, and prepare for a prosperous future. Educators can teach important values, such as responsibility, discipline, and leadership. They also serve as role models and create environments in which students learn to become effective leaders in society. The education provided by educators can enhance students' opportunities to access better economic prospects, which, in turn, contributes to social empowerment and an overall improvement in the standard of living across society.

In the current era of technological advancement, educators play an essential role as connectors in transferring knowledge and the latest technologies to younger generations. Educators not only teach content but also help students and university students become prepared to face future changes and challenges. Educators are required to continually innovate to shape students into productive workers capable of thriving in an increasingly competitive job market each year. In the context of technological advancement, globalization, and social change, teachers and lecturers must innovate to ensure that education remains relevant and effective in addressing these challenges. Innovation can enhance various teaching methods and techniques that accommodate different learning styles to meet the diverse needs of students. Innovative teaching

approaches, such as using technology, collaborative projects, or problem-based learning, can engage students more actively, encouraging them to think critically and become more motivated in their studies.

Indonesia, as a country with a substantial population of productive age, also recognizes the importance of innovation in education. Several government policies emphasize the use of technology in education to encourage teachers to innovate in their teaching practices. The *Merdeka Belajar* (Freedom to Learn) program stresses that innovation is the key to creating more flexible, student-centered learning that leverages various technologies. International education policies, such as those advocated by UNESCO and the OECD, also highlight the importance of innovation in education. UNESCO emphasizes that education should be more inclusive, relevant, and centered on 21st-century skills, such as critical thinking, collaboration, and digital skills. Innovation in education, particularly through the use of technology and new teaching methods, is considered essential to achieving these goals.

Educational thinker John Dewey emphasized the importance of education that is relevant to students' life experiences and adaptable to the needs of the times. He believed that education should encourage students to think critically and creatively, as well as to adapt to change. According to Dewey, education is not merely the delivery of knowledge but should involve exploration and innovation in the learning-teaching process. Paulo Freire, an educator from Brazil, argued that education should be dialogic and transformative, rather than simply conveying information passively. Innovation in education, according to Freire, is about creating spaces for students to interact, think critically, and become agents of change in society. Innovation in teaching is the key to creating a more relevant and democratic education. A challenge in education related to innovation is the availability of educators from elementary to higher education levels. For primary and secondary education, UNESCO recommends a teacher-student ratio of 1:20 to 1:25 at the primary level and 1:25 to 1:30 at the secondary level. In Indonesia, based on data from the Ministry of Education and Culture, the teacher-student ratio in elementary and junior high schools still varies by region. In some areas with very low teacher ratios, there are significant challenges to education quality. The government faces considerable challenges and efforts regarding the availability of teachers in Indonesia.

Some challenges affecting the quality of education include:

1. Uneven distribution of teacher placements: Many areas, particularly remote, disadvantaged, frontier, and outermost regions, still face a shortage of teachers. This imbalance can impact education quality due to these disparities.
2. Teacher qualifications: Not all teachers in Indonesia have adequate qualifications. The government is making ongoing efforts to improve teacher qualifications through certification and training programs.
3. Ideal number of teachers: Indonesia requires more ideal teachers to meet the demand for quality education, especially to reduce disparities between urban and rural areas. The number of early childhood education teachers in Indonesia is approximately 500,000 (data from the Ministry of Education and Culture, 2023). The number of elementary school teachers in Indonesia is around 1.3 million. Although the total number of teachers is substantial, there is still a shortage of teachers in remote and rural areas. The number of junior high and senior high school teachers in Indonesia ranges from 700,000 to 800,000. The number of higher education teachers is around 300,000, yet there remains a significant disparity between public and private universities. Data from the Ministry of Research, Technology, and Higher Education and BPS (2023) show that there are about 400,000 lecturers teaching in various universities. This indicates a current lecturer-student ratio in Indonesia of about 1:20, which is generally an improvement over the 1:30 ratio commonly found in some universities, especially in areas or study programs with large student populations. However, ideally, this ratio should be further reduced to achieve optimal educational quality, particularly in programs

that require intensive interaction between lecturers and students. According to UNESCO and other international educational organizations, the ideal lecturer-student ratio for quality education ranges between 1:10 and 1:15. This ratio allows for more personalized interaction between lecturers and students, enabling lecturers to provide deeper attention in teaching and guidance.

4.

The availability of lecturers and teachers, which is not yet ideal, requires innovation in teaching. Education is not only about delivering information but also about helping students develop holistically and prepare to face the challenges of life and the ever-changing workforce. Innovation in education brings many benefits, both in enhancing the quality of learning and in preparing students for an increasingly complex world. Through innovation, educators can equip students with various competencies essential for facing an increasingly uncertain future.

Innovation in teaching is not just about trying new methods or using the latest technology, but also about how to adapt education to the ever-changing needs of the times. Innovative lecturers and teachers can create a more dynamic, interactive, and relevant learning environment, helping students not only to master knowledge but also to develop the skills needed in an increasingly complex world. This situation highlights the importance of understanding the efforts and activities of employees that lead to innovative activities. The activities of teachers and lecturers that lead to innovation are referred to as innovative work behavior. In the research by Anderson, De Dreu, and Nijstad (2004), it is stated that from a psychological perspective, innovation is emphasized from the individual's viewpoint, including the individual characteristics that influence the success of an innovation. This research is related to innovative behavior, which shows that individual behavior is linked to the work environment when innovation occurs.

LITERATURE REVIEW

The definition of innovative behavior according to West and Farr (1990) states that all individual behaviors aimed at producing, introducing, and applying 'new' things, which are beneficial at various levels of an organization. Some researchers refer to this as shop-floor innovation (e.g., Axtell et al., 2000 in De Jong & Den Hartog, 2003). Furthermore, West and Farr also state that innovative behavior is the behavior of humans or individuals in promoting or realizing new ideas within a workgroup or organization that directly benefits the performance of the group or organization. The characteristics of individuals with innovative behavior are as follows:

1. They have a clear vision of the outcomes to be achieved, even when they do not have a definite starting point on how to achieve them.
2. They define specific goals and take advantage of the activities carried out.
3. They are able to present examples, problems, or tangible forms of ideas rationally.
4. They gain support from superiors, colleagues, and subordinates and are able to build a group with the same objectives so that everyone feels they are partners in every activity.
5. They are brave and capable of taking calculated risks and facing difficulties or obstacles.
6. They can motivate and inspire others to engage in activities so that everyone contributes fully to the activities and participates in every decision.
7. They can influence others to mobilize support and available resources to ensure activities proceed.
8. They possess perseverance and maintain momentum after a decline in group member enthusiasm.
9. They are able to convince all group members to be fully and fairly involved in every reward given.

According to De Jong and Den Hartog (2008), innovative behavior is the behavior of employees that generates, introduces, and applies new things or creative ideas, as well as the courage to take risks, which provides benefits to the

organization. They elaborate on innovative behavior in the innovation process by breaking it down into four stages as follows:

1. Identifying Opportunities
   This involves employees identifying various opportunities or chances that arise. Opportunities may stem from incongruence and discontinuity that occur due to discrepancies with expected patterns, such as problems in established workflows, unmet consumer needs, or indications of changing trends.
2. Generating Ideas
   In this phase, employees come up with new concepts aimed at improvement. This includes generating new ideas or renewing services, client meetings, and supporting technologies. The key to generating ideas is combining and reorganizing existing information and concepts to solve problems and/or enhance performance.
3. Championing
   This means that in order to develop and implement ideas, employees must display behaviors focused on results. Convergent innovation behavior includes efforts to become a champion and working hard. A person who behaves as a champion invests all their efforts in the creative idea. Efforts to become a champion involve persuading and influencing employees, as well as pushing and negotiating. To implement innovation, coalitions are often needed, gaining power by selling the idea to potential allies.
4. Application
   In this phase, the behavior of employees is aimed at building, testing, and marketing new services. This involves creating innovations in the form of new workflows or in routine processes that are commonly carried out.

Next, Noercholidah (2022) states that innovative behavior is an individual's ability to develop, generate, and implement new ideas, processes, or procedures in their work that can enhance personal and organizational performance. According to Michael K. Muchiri (2020) innovative work behavior is the actions of an individual aimed at generating, processing, and implementing new ideas in products, technologies, procedures, or work processes with the goal of improving organizational effectiveness and success.

In the research results of Teguh Setiawan (2020) it is stated that innovative behavior is defined as the deliberate effort to create, develop, and realize new ideas in work, workgroups, and organizations to provide benefits for group or organizational performance.

The research by Hurley dan Hult (1998) indicates that innovative behavior positively influences team performance. This can occur because innovative behavior benefits team performance and encourages an individual to generate innovative ideas within their workgroup in an organization. However, when innovative behavior is not well applied in solving a problem, it can prolong the issue, as such behavior often consumes time in problem-solving. The creative ideas that often emerge from innovative behavior lead to lengthy discussions that require time to resolve the problem. According to Janssen (2000), innovative behavior involves the creation, introduction, and implementation of new ideas or concepts in work, groups, or organizations to improve the performance of the individual, group, or organization.

Janssen (2000) states that innovative behavior is a complex behavior, which can be divided into several dimensions as follows:

1. Idea Generation
   Individual innovation begins with an individual's awareness to see and recognize new opportunities arising from a problem that emerges (Kanter, in Janssen, 2000). Janssen (2000) adds that perceptions of problems in work, sensing inconsistencies, or the emergence of a trend are the driving forces in generating new ideas.
2. Idea Promotion
   Individuals seek support for the ideas they present and try to build a coalition to support the innovation idea (Scott & Bruce, 1994). Once individuals are involved in an idea and generate a concept, they must engage in social activities to gain colleagues and

supporters for the idea around them (Janssen, 2000).

3. Idea Realization

   Individuals complete the ideas they have by creating a product or model from the idea they have developed. This idea can be applied and implemented in a job, workgroup, or the organization as a whole so that the idea can be disseminated, mass-produced, or used productively (Janssen, 2000).

The research by Byrd and Brown (2003) states that there are two dimensions underlying innovative behavior: creativity and risk-taking. Furthermore, De Jong and Kemp (2003) argue that all innovations begin with creative ideas. Creativity is the ability to develop new ideas, consisting of aspects such as expertise, the ability to think flexibly and imaginatively, and internal motivation (Byrd & Brown, 2003). In the innovation process, individuals come up with new ideas based on imaginative thinking and are supported by high internal motivation.

However, under certain conditions, the innovation process stops at the stage of generating creative ideas, and this cannot be categorized as innovative behavior. In the process of implementing ideas, courage to take risks is required, as introducing something new involves risk. Risk-taking refers to the ability to push new ideas through obstacles, so it becomes a means to turn creative ideas into reality (Byrd & Brown, 2003). Therefore, if the original goal of innovation is for the benefit of the organization but it is not well managed, it could backfire.

According to Kleysen and Street (2001), innovative behavior is multidimensional with a more complex and rich concept. They adapted from Kirton (1976), who showed the complexity and differences in cognitive styles between problem-solving and redesign frameworks. De Jong and Den Hartog (2010) argue that innovative behavior is multidimensional, consistent with the work of Kleysen and Street (2001), where it can be observed that:

a. Multidimensionality better reflects practical conditions, where each step of the behavior is more dominant.
b. Although each dimension contributes to the entire construct of innovative behavior, the existing dimensions have different assumptions.
c. Previous research was less detailed in reporting the evaluation of the scale.

Scott & Bruce (1994) and Janssen (2000) state that innovative behavior in the workplace is a complex behavior consisting of a series of tasks and behaviors, which have been divided into several dimensions of innovative behavior, including idea generation, promotion, and the realization of those ideas. Individual innovation starts with idea generation, which involves producing new ideas that are useful in activities or anything (Amabile, 1996). The next task in the innovation process is idea promotion to potential allies, meaning that after someone has generated an idea, they must engage in social activities to seek support for the idea they have created. The final task in the innovation process is the realization of the idea, which involves creating an innovation model that can be applied and implemented in work roles, teams, or organizations (Kanter, 1988). Innovation is often completed by the individuals involved, whereas more complex innovation achievements usually require teamwork based on various specifications, knowledge, competencies, and work roles (Kanter, 1988).

According to Messmann (2012), in the research by Aria Elshifa (2019), innovative work behavior is the sum of physical and cognitive work activities carried out by employees in the context of their work, either individually or in groups, to achieve the tasks needed for innovation development. It is measured by indicators: Idea Exploration (exploratory thinking), Idea Generation (sustained thinking), Idea Championing (successful thinking), and Idea Implementation (execution of thinking). Furthermore, Van Dyne and LePine (1998) argue that innovative behavior is proactively voicing constructive ideas for performance improvement, not just criticism, and supporting change for long-term interests.

Proactive behavior is essential in dynamic environmental situations, and new ideas serve as a means of continuous improvement (Nemeth & Staw, 1989).

In the research by Praptini Yulianti (2016), it was stated that innovative behavior of lecturers can develop if there is support from the faculty for the emergence of lecturers' innovations and a good relationship between leaders and lecturers. The innovative behavior of lecturers provides positive outcomes for the organization and can be stimulated by a creative atmospere and creative thinking among organizational members. The work atmospere within an organization can influence members to exhibit innovative behavior. An atmosphere that is perceived as positive by organizational members will foster innovative behavior among lecturers. Organizational support for innovation and a quality relationship with leaders will cultivate positive expectations from employees and the belief that innovative behavior will lead to improvements in performance. These positive expectations will be realized through innovative behavior.

According to Zheng (2014), the factors that influence employees' innovative behavior at the individual level are:

1. Organizational Commitment

In order to achieve employee performance, organizations provide employees with various resources, and employees build personal commitment to the organization depending on what they receive from it. Organizational commitment refers to a mental state where employees are willing to maintain membership in the organization, showing the employee's goals for why they should continue working. According to employees, the goals and interests of the organization and its consisten targets, can be divided into positive emotional commitment and negative continuous commitment.

King (1995, 2002) states that employees who strongly agree with the values and ideas of the organization and love their jobs are in an active state that generates innovative behavior. Furthermore, Janssen (2003) argues that the psychological contract perceived by employees, which reflects the level of organizational commitment, determines whether they engage in innovation activities. The emotional bond created by an individual's internal motivation will benefit employees in improving their learning and working efficiency, and in making full use of their own creativity. On the other hand, when commitment continues due to considerations of costs termination, individuals will be less likely to take the initiative in innovation. Positive emotional commitment from individuals is an important condition for promoting innovative behavior in employees (Tao et al., 2012).

2. Psychological Capital

Psychologically, employees are willing to take the risk of failure in innovation and actively participate in innovation, which is closely related to their psychological characteristics. Employees with psychological capital are more likely to exhibit innovative behavior (Han et al., 2011). Individual psychological capital refers to positive psychological development, which includes: 1) self-efficacy (confidence); 2) optimism; 3) hope; 4) resilience (Luthans & Avolio, 2003). Sweetman et al. (2010) found that there is a significant positive relationship between all these variables and employee creativity after each examination.

Furthermore, the research findings by Devanny and Dewi Syarifah (2018) state that there is a significant relationship between employees' resilience in the hospitality industry and innovative behavior. The study by Agung and Dimas Aryo (2018) also explains that emotional intelligence has an influence on the innovative behavior of leaders in star-tup companies.

Factors influencing employees' innovative behavior at the organizational level are as follows:

1. Organizational Innovation Atmosphere

The organizational innovation atmosphere is defined by Amabile (1996) as a description of the perception that the level of support for creativity

and innovation is felt by the members of the organization in the workplace environment. This reflects individuals' perceptions of whether the organization provides an environment conducive to learning and innovative, and equitable. And it is a system of individual and environment reflection, determining the level of innovation in both individuals and organizations (Tao, 2012). The organizational innovation atmosphere includes concepts such as advocacy, market guidance, evaluation and incentives, training, communication and cooperation, resource assurance, modeling, and authority (Ma, 2009), which directly affect the behavior, capabilities, and innovative performance of organizational employees, attitudes, motivation, and values of organizational members. Psychological capital plays an intermediary role in the relationship between organizational innovation climate and employees' innovative behavior (Meirong, et al., 2012). Lian (2013) empirically demonstrates that the organizational innovation climate has a direct effect on individual innovative behavior.

2. Leadership

Employees' innovative behavior depends not only on cognitive styles, intrinsic motivation, psychological capital, but also on effective stimuli from the external environment, especially leadership and motivation (Mumford et al., 2002). Communication is the primary way leaders transfer management concepts and employee behavior effects, which are more useful than other forms of communication (Wang & Duan, 2014). Leadership enhances employees' innovative behavior through direct encouragement or by setting innovation goals for employees (Wang & Hong, 2010). Leaders can quickly capture emotional information from subordinates, provide evaluations, and offer praise to show their support and admiration for employee innovation.

3. Social Capital

Madjar (2005) states that creativity is not the result of independent thinking by organizational members, but is generated in the process of regular interaction among members. Interactions can promote emotional reciprocity and trust among members, which is not only conducive for employees to share learning experiences and technological knowledge, but also expands their vision, promotes new ideas, and generates innovative concepts (Yang & Chen, 2005).

4. Job Characteristics

The characteristics of innovative behavior are also related to work experience and job characteristics. Relevant work experience influences employees' innovative behavior. Employees familiar with tasks can more easily find work tips, overcome the fear of innovation failure, and be more confident when innovating (Ericsson et al., 1993).

Another perspective on the factors affecting innovative behavior, according to Etikariena (2018), is based on internal and external factors. These factors are:

1. Internal Factors
   a. Personality Type. According to Janssen, Van den Ven, and West, individuals with certain personality types are capable and willing to take risks related to the innovative behaviors they create.
   b. Individual Problem-Solving Style, Employees who have an intuitive problem-solving style are able to generate ideas and thus develop new solutions.
2. External Factors
   a. Leadership. Many subordinates are unable to maintain their relationship with their leaders, which can prevent innovative behaviors from being expressed. However, employees who have positive relationships with their leaders tend to exhibit more innovative behavior. High expectations from leaders for their employees to be innovative can also influence the emergence of innovative behavior in employees (Scott & Bruce, 1994).
   b. Support for Innovation. Support from people around the individual greatly assists the employee in creating innovative behavior. Not only that, support from people within the organization can also stimulate innovative behavior in the employee.

c. Job Demands. High demands from the company tend to increase employees' motivation to exhibit innovative behavior. These demands act as a driving force for employees. One outcome of high level of job demands is the emergence of innovative behavior.
d. Psychological Atmosphere. Psychological atmosphere refers to how the organizational environment is perceived and interpreted by employees.

In the research results of Nilawati (2022), using the Social Exchange Theory (SET) approach, a model for Innovative Work Behavior was found, specifically for vocational lecturers. Innovative behavior in vocational lecturers can be influenced by Work Engagement and Proactive Personality. Furthermore, the dimensions of innovative behavior include idea generation, idea promotion, and idea realization. West and Farr (1989) further divided several factors that support and facilitate innovative behavior into individual, group, and organizational levels. Some researchers such as Anderson, De Dreu, & Nijstad (2004) and Hammond, Farr, Neff, Schwall, & Zhao (2011) conducted literature studies on several multilevel factors that facilitate innovation. The following is an explanation of the factors that facilitate innovation at the three levels:

1. Individual Level.
   A meta-analysis study by Hammond et al. (2011) and Anderson, De Dreu, & Nijstad (2004) identified several factors that facilitate innovation at the individual level. These factors are grouped into five categories, as follows:
   a. Personality. It is known that a creative personality is related to innovative behavior. In addition, based on the Big Five Factors of personality traits, openness to experience is associated with innovative behavior. Individuals with high openness tend to be curious, imaginative, independent, and sensitive to art (McCrae, in Hammond et al., 2011). Individuals with high openness are also more likely to think divergently. Additionally, personality traits such as tolerance of ambiguity, self-confidence, unconventionality, originality, authoritarianism, independence, and proactivity also influence innovation at the individual level (Anderson et al., 2004).
   b. Demographics. In terms of demographics, aspects such as education and work experience reflect knowledge mastery over tasks through formal education, training, or work experience (Oldham & Cummings, in Hammond et al., 2011). Individuals who acquire knowledge and experience are more likely to build and integrate ideas, facts, and opportunities, which lead to creative ideas for solving problems (Amabile, in Hammond et al., 2011).
   c. Abilities. From studies conducted by Anderson, De Dreu, & Nijstad (2004), several ability factors that facilitate innovative behavior were identified, such as above-average intelligence, task-specific knowledge, divergent thinking styles, and ideational fluency.
   d. Motivation. Both intrinsic and extrinsic motivation are positively related to innovative behavior. Intrinsic motivation refers to the motivation that arises from an individual's engagement with a task, while extrinsic motivation comes from external factors, such as rewards and compensation (Hammond et al., 2011). Furthermore, self-efficacy, both in terms of job competency and creative competence, also influences an individual's motivation to engage in innovation. Additionally, determination to succeed and personal initiative also facilitate innovation (Anderson et al., 2004).
   e. Job Characteristics. There are several job characteristics that predict innovation, including task complexity, autonomy, time pressure, and role requirements. Non-routine and challenging job complexity can enhance idea generation. There is a positive relationship between autonomy and idea generation, idea testing, and innovation implementation. By providing employees with flexibility and independence in completing tasks stimulates innovation

(Axtell, in Hammond et al., 2011). Furthermore, perceptions of expectations or requirements for innovation are positively correlated with individual behavior (Scott & Bruce, in Hammond et al., 2011). Anderson et al. (2004) also identified other job characteristics that affect innovation, such as job satisfaction, job demands, support for innovation, mentor guidance, and relevant training.

2. Team Level.
   According to Hülsheger, Anderson, and Salgado (2009), team-level variables are classified as predictors of innovation based on a team performance model in input-process-output. Team Input Variables according to Hülsheger, Anderson, and Salgado (2009) identify team composition and structure into group member diversity, team size, and tenure. Job-relevant diversity has a positive correlation with innovation. Job-relevant diversity refers to the heterogeneity of group members according to work or task-related aspects, such as function, profession, education, tenure, knowledge, skills, and expertise.

   The next influence is cohesion which also influences innovation. Cohesion refers to the commitment of team members to the team's work and the desire to maintain group membership (Lott & Lott, in Hülsheger, Anderson, and Salgado, 2009). Innovation researchers consider cohesion is an essential prerequisite for displaying innovative behavior (West & Farr, 1989; Woodman et al., 1993). Group members with strong belongingness and attachment to each other tend to be more cooperative, interactive, and able to exchange ideas.

3. Organizational Level.
   A content analysis study by Anderson, De Dreu, and Nijstad (2004) on various innovation studies resulted in the classification of innovation facilitators at the organizational level into structure, strategy, resources, and organizational culture. Organizational structure that tend to specialize, where having a variety of specialists, functional differentiation, and professionalism, is positively associated with organizational innovation. On the other hand, organizations with high centralization and formalization tend to be less innovative. Organizational culture that supports employees to experiment, tolerate failed ideas, and take risks influences the growth of innovation within the organization.

METHOD

This study uses a type of research in the form of a literature review, which relates to theoretical studies and several references that will be linked to scholarly literatures. The data sources obtained from relevant literatures, including journals or scholarly articles related to the chosen topic. The data collection technique used in this literature research is to search for data on matters or variables in the form of notes, books, papers, articles, journals, and so on. The research instruments used by the researcher are a checklist of research material classifications based on the focus of the study, writing schemes/maps, and research note formats. The data analysis technique used in this literature review is content analysis. Data collection is carried out through a systematic meta-analysis of various research articles from journals such as Researchgate, The Journal of Developing Areas, Sys Rev Pharm, Ed.gov, Front. Psychol., Sinta, and others. The data obtained focus on the concepts and factors that cause innovative behavior to emerge in teachers and lecturers, aiming to obtain the correct concept after analyzing various concepts of innovative behavior that have developed with varying dimensions.

RESULTS

The results of this literature review refer to the concepts and dimensions of innovative behavior, particularly among teachers and lecturers. Various research findings indicate that the concept of innovative behavior in teachers and lecturers consists of multidimensional constructs that refer to several different but related dimensions, treated as a single concept. Various definitions of the concept of innovative behavior

show actions that involve the ability to create and generate new ideas, then develop these ideas and process them through work procedures, and subsequently apply or implement them in the form of products, technologies, or work procedures aimed at improving the performance of teachers, lecturers, and the school or university organization.

The dimensions of innovative behavior that emerge from various studies show similarities, including: the dimensions of idea generation, idea championing or idea promotion, and idea implementation or idea realization. Furthermore, the factors influencing innovative behavior can be grouped into two categories: internal individual and environmental influences. Internal individual influences include psychological capital, personality type, and individual work styles. Environmental influences consist of organizational atmosphere, leadership, job characteristics, and innovation support or innovation culture within the organization.

DISCUSSION

Innovative behavior among teachers and lecturers has become crucial with the development of technology, which is now a demand in every field. The education sector serves as a platform to produce a workforce with competencies through the real work of teachers and lecturers in preparing a labor force ready to meet the demands of the times. The presence of teachers and lecturers is essential for conveying information, skills, and character development to prepare students for future challenges. The concept of innovative behavior in teachers and lecturers focuses on their actions and efforts to create new ideas, develop them, and apply them in their performance. This aligns with the definition of innovative behavior by West and Farr (1990), who stated that all individual behaviors aimed at generating, introducing, and applying 'new' things that are beneficial at various organizational levels.

According to research by De Jong and Den Hartog (2008), innovative behavior refers to employees' actions that generate, introduce, and apply new things or creative ideas, along with their courage to take risks, benefiting the organization. Janssen (2000) defined innovative behavior as the creation, introduction, and implementation of new ideas to improve individual, group, and organizational performance. Xuemei Yuan (2022) defined innovative behavior as creative actions enhanced by the "school innovation atmosphere," which can increase student involvement, academic self-efficacy, interest, and perceived value in students. An innovative environment encourages students to be more creative and motivated during the learning process.

The dimensions of innovative behavior show the criteria for behavior that indicate someone can be considered to have innovative behavior. Innovative behavior in teachers and lecturers includes Idea Exploration (exploratory thinking), Idea Generation (sustained thinking), Idea Championing (successful thinking), and Idea Implementation (implementing ideas), as found in research by Aria Elshifa (2019). Further, according to Nadia Edelwais (2023), four dimensions of innovative work behavior have been conceptually formulated by De Jong and Den Hartog (2007), namely opportunity exploration, idea emergence, advocating for ideas, and idea implementation.

In the findings of Nilawati Fiernaningsih (2022), the indicators of innovative behavior refer to previous research by Janssen (2000), which included: Idea Generation as the generation of ideas originating from members of the organization, Idea Promotion as an idea put forward by members of the organization to be carried out, and Idea Realization as the realization of innovation ideas that have been proposed and accepted by the organization. The same findings were observed in the research of Dikdik Supriyadi (2020), who stated that innovative work behavior is adapted from the Innovative Work Behavior scale based on theoretical studies (Jong & Hartog, 2008). This scale is based on four aspects: Opportunity Exploration, Generativity (idea appearance), Championing (manifesting), and Application (applying ideas).

CONCLUSION

Various studies related to innovative behavior in teachers and lecturers have resulted in a concept of innovative behavior that differs slightly from that of other roles. In the case of teachers and lecturers, innovative behavior focuses on creating new ideas, developing, and applying those ideas through engaging teaching methods and techniques, developing work procedures, that are enhanced by the school's innovation atmosphere. Innovative behavior supported by an innovation atmosphere and culture can increase engagement in innovative behavior, academic self-efficacy, interest, and motivate students to be more creative.

There are several different terms for the dimensions of innovative behavior in teachers and lecturers. According to Janssen, the dimension of innovative behavior includes idea generation, which is the generation of ideas originating from within the members of the organization; idea promotion, which refers to an idea put forward by members to be implemented; and idea realization, which is the realization of these ideas. However, there are slight differences in the terminology used by Jong & Hartog, which includes idea opportunity exploration, which explains exploring opportunities, followed by idea generation, which describes the emergence of ideas within teachers and lecturers, idea championing, which refers to the manifestation or form of an idea, and idea application, which is the application of ideas in student learning programs.

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DECLARATION OF POTENTIAL CONFLICT OF INTEREST

Iffah Rosyiana does not work for, consult, own shares in, or receive funding from any company or organization that would benefit from this manuscript, and has disclosed no affiliations other than those noted above.

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