

(Research/Review) Article

# Safety Culture as a Mediator between Self Efficacy, Social Support, and Patient Centered Care Among Healthcare Workers

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**Abstract:** Patient-Centered Care (PCC) is a healthcare approach that places the patient at the center of every interaction and clinical decision-making. However, a preliminary study at Tarumajaya Hospital showed that 58% of healthcare workers had not yet optimally implemented the PCC approach. This study aimed to analyze the influence of self-efficacy and social support on the implementation of Patient-Centered Care, with safety culture as a mediating variable, at Tarumajaya Hospital. The research method used was quantitative analytic with a cross-sectional design. The study sample used a saturated sampling technique of 132 healthcare workers, consisting of doctors, nurses, and medical support staff. Data analysis used Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results showed that self-efficacy and social support had a positive and significant effect on safety culture and PCC implementation. Safety culture also had a positive and significant effect on PCC implementation. Furthermore, safety culture was shown to mediate the influence of self-efficacy and social support on PCC implementation. The coefficient of determination value indicates that the model has strong ability to explain variations in PCC.

**Keywords:** Healthcare Workers; Patient Centered Care (PCC); Safety Culture; Self Efficacy; Social Support.

Received: November, 13 2025

Revised: December, 15 2025

Accepted: January, 11 2026

Published: February, 21 2026

Curr. Ver.: February, 24 2026



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## 1. Introduction

Patient-centered care (PCC) is globally recognized as a form of quality and high-value healthcare because it places patients and families as active partners in decision-making, as well as tailoring services to patients' needs, preferences, and values. This approach is important to improve the quality of services while strengthening the relationship between doctors and patients (Benson, 2012). However, the mechanisms that encourage health workers to implement PCC are not yet fully clear (Huang et al., 2022). The Joint Commission reports that communication failures are the leading cause of adverse medical errors, with 67% of cases related to the handover of care responsibilities (The Joint Commission, 2024). Due to the complex nature of PCC and the demand for comprehensive services throughout the patient's lifecycle, a thorough understanding of the internal and external factors that influence the behavior of healthcare workers is required (Mead & Bower, 2000).

Various studies have examined the internal factors that influence the implementation of PCC. Kanat et al. (2021) emphasize the importance of doctor-patient communication and relationships, physician characteristics, and patient involvement. Paiva et al. (2019) found that a conducive communication atmosphere, patient participation in decision-making, and

improved communication skills of medical personnel can encourage PCC. Mousazadeh et al. (2025) showed a significant positive association between moral sensitivity and PCC, but did not find a significant association between self-efficacy and PCC. Theoretically, self-efficacy according to Bandura (1977) is an individual's belief in his or her ability to complete a task or achieve a specific goal, which affects behavioral choices, effort intensity, perseverance, and emotional response. In the context of PCC, self-efficacy is a psychological capital so that health workers remain consistent in applying the principles of PCC even when facing work pressure. Research by Fuadi et al. (2024) and Huang et al. (2022) proves the significant influence of self-efficacy on the implementation of PCC.

In addition to internal factors, external factors such as social support also play a role. Bandura (2001) explained that social support is a resource from the social environment that helps individuals cope with stress and challenges. Social support creates a work climate that supports interprofessional coordination, team communication, and a culture of mutual respect, thus facilitating the implementation of PCC. Abu Lebda et al. (2023) mentioned social support as the main predictor of PCC. Abekah-Nkrumah & Nkrumah (2021) found that supervisor support and coworker support have an effect on patient-centered behavior. Baek et al. (2023) showed the influence of nursing teamwork on patient-centered care, while Liu et al. (2023) found that social support had an effect on humanistic practice ability.

Another contextual factor is safety culture which is rooted in the theory of Organizational Culture, which is a system of shared values, beliefs, and assumptions that guide the behavior of organizational members (Schein, 2010). Safety culture is understood as a shared value and norm that influences the way of thinking and acting in service (Zhang, 2014). Because PCC is a collective practice, a supportive organizational culture is an important prerequisite. A strong safety culture is characterized by a focus on patient safety and dignity, respect for patient voice, open communication, and policies that are in line with PCC principles. Research by Fuadi et al. (2024) and Huang et al. (2022) shows that hospital culture has a significant effect on PCC. Choi & Kim (2023) also found that person-centered care practices are influenced by innovation-oriented culture, relationship-oriented culture, and task-oriented culture through nursing organizational culture.

At Tarumajaya Bekasi Hospital, a type C hospital that has been operating since 2018, various service complaints were found based on Google Reviews, especially related to attitudes, punctuality, and responses of health workers. Interviews show a lack of confidence in communication, difficulty understanding non-verbal cues, and limitations in explaining medical terms simply. Peer support and access to resources are also considered not optimal. A preliminary study of 10 healthcare workers showed that 58% had not implemented PCC optimally, with dominant problems on effective communication, patient engagement, understanding the patient's agenda, and empathy. The survey also showed that 68% experienced self-efficacy problems, 60% faced social support constraints, and 58% assessed that the safety culture had not been adequately supported, especially in internal communication, cross-team cooperation, and organizational innovation.

Overall, the findings indicate that the problems with the implementation of PCC are suspected to be related to self-efficacy, social support, and safety culture. Previous studies have generally tested these variables separately with inconsistent results. Therefore, this study offers novelty by integrating the three variables in one model and placing safety culture as a mediating variable in the context of Tarumajaya Hospital.

The problems identified include the number of patient complaints against health workers' services; low implementation of PCC (58%) with major obstacles in communication and understanding of patient agendas; high self-efficacy problems (68%) which is reflected in lack of initiative, perseverance, and effort; weak social support (60%) both from the team and its utilization; and the safety culture (58%) is not optimal, especially in internal communication, cross-team collaboration, and organizational innovation.

This study aims to analyze the influence of self-efficacy and social support on the implementation of PCC with safety culture as a mediating variable. Specifically, this study examined the simultaneous and partial influence between variables and the mediating role of safety culture in these relationships.

## 2. Literature Review

### Theory of Human Caring

This research is based on the Theory of Human Caring developed by Jean Watson as a grand theory (Watson, 2008). This theory is built on a humanistic–existential–phenomenological paradigm that views humans as whole beings, have meaning, and cannot be reduced to just the object of medical action. Watson emphasized that the core of nursing and health care practice is caring, which is a human relationship based on empathy, compassion, appreciation, and moral awareness of human dignity (Watson, 2008). Caring is not understood simply as a technical action, but as a fundamental value that shapes the quality of interaction between health workers and patients.

According to Watson, the healing process is the result of the integration of biological, psychological, social, and spiritual aspects that occur in an empathic and authentic relationship between nurse and patient (Watson, 2008). Thus, patients are seen as active subjects who have values, beliefs, life experiences, and personal meanings that must be respected in every health service process. This approach is in line with the principles of Patient-Centered Care (PCC) which emphasizes appreciation of patients' individual preferences, needs, and values (Frampton et al., 2008).

The concept of transpersonal relationships in the Theory of Human Caring emphasizes interactions that transcend the physical and procedural dimensions. Health workers are emotionally and spiritually present in accompanying patients, so as to create a deeper understanding of the patient's experience (Watson, 2008). In addition, Watson also highlighted the importance of a safe, comfortable, and supportive healing environment as an integral part of the caring process. A conducive environment is believed to contribute to patient comfort and well-being (Frampton et al., 2008). Therefore, the Theory of Human Caring provides a comprehensive conceptual framework in understanding the importance of empathic relationships and holistic care in improving the quality of health services.

### Patient-Centered Care

Patient-Centered Care (PCC) is a patient-centered approach to health care through collaboration between service providers, patients, and families in identifying care needs and preferences (Genteis et al., 1993). The Institute of Medicine (2001) defines PCC as a service that reflects compassion, empathy, respect, and response to the patient's expressed values and needs, so that the patient's value becomes the basis for clinical decision-making.

Frampton et al. (2008) affirm that PCC includes the practice of active listening, sharing relevant information, and involving patients in every stage of care. This concept has traditionally been aligned with person-centered care which has a close relationship with nursing practice (McCormack & McCance, 2010). In principle, this approach means treating each individual as a unique individual, respecting their rights, building trust, and creating a therapeutic relationship that values each other between health workers and patients.

Gremigni et al. (2016) define PCC as an approach that respects and responds to patients' needs, preferences, and expectations. PCC focuses not only on the clinical aspect, but also on the emotional dimension, communication, and patient involvement as part of the healing process.

### Self-Efficacy

The concept of self-efficacy is the core of Social Cognitive Theory (SCT) developed by Albert Bandura (Bandura, 1986). Self-efficacy was originally defined as an individual's belief in his or her ability to perform certain actions in order to achieve the expected outcome (Bandura, 1986). This definition is then expanded to an individual's belief in controlling events that affect his or her life as well as mobilizing their motivation and cognitive resources.

Self-efficacy is not a general personality trait, but rather a belief that is contextual and specific to a particular task (Maddux, 1995). In attribution theory, self-efficacy is concerned with the way an individual explains the success or failure of performance (Weiner, 1986). Wylie (1979) views self-efficacy as part of the self-concept, while Schwarzer (1992) emphasizes its role in goal setting, business investment, perseverance in the face of obstacles, and the ability to bounce back from setbacks.

Bandura (1997) put forward three dimensions of self-efficacy, namely magnitude (level), strength, and generality. Magnitude relates to the level of difficulty the task is believed to be able to complete. Strength reflects the strength of an individual's belief in his or her abilities. Generality shows the extent to which these beliefs apply to various job contexts.

Maddux (1995) and Sherer et al. (1982) through the General Self-Efficacy Scale (GSE) measure self-efficacy based on three dimensions: willingness to start, willingness to put in the effort, and perseverance in the face of adversity. This study uses the Maddux (1995) approach as the basis for measuring self-efficacy.

### **Social Support**

In the perspective of SCT, social support is an environmental factor that provides psychosocial resources for individuals (Bandura, 2001). Caplan (1974) stated that social networks play a role in maintaining the psychological and physical integrity of individuals. Sarason & Sarason (1985) define social support as emotional, informational, and material support available in a person's social network. Xiao (1994) emphasized the importance of individual perception of the support received. Cohen & Hoberman (1983) see social support as an interpersonal resource that affects individual well-being.

Cohen & Hoberman (1983) through the Interpersonal Support Evaluation List (ISEL) divided social support into four dimensions, namely belonging, self-esteem, assessment, and real help. A sense of belonging is related to the feeling of being accepted in a social network. Self-esteem reflects support that boosts self-confidence. Assessment in the form of advice or guidance in problem solving. Real assistance is material or practical support provided directly. This research uses these four dimensions.

### **Safety Culture**

The concept of safety culture is rooted in the theory of organizational culture from Edgar Schein (Schein, 2010), which views culture as a system of shared values, beliefs, and assumptions that shape the behavior of organizational members. In the context of safety, James Reason (1990, 1997) explained that safety culture is a product of values, attitudes, perceptions, competencies, and behavior patterns that determine an organization's commitment to safety. Safety culture develops from organizational culture and is reflected in communication, reporting systems, and risk prevention orientation (Liana, 2021).

According to Reason (1990), safety culture consists of five dimensions: information-based culture, reporting culture, fairness culture, flexibility, and learning culture. These five dimensions reflect a safety management system that is transparent, adaptive, fair, and oriented towards continuous improvement.

## **3. Materials and Method**

This research was carried out at Tarumajaya Hospital which is located on Jl. Tarumajaya Raya No.1, Pantai Makmur, Kec. The research implementation time starts from January 2026 to February 2026.

The method used is quantitative analytical research with a crosssectional design. Crosssectional design is a research design that collects data from the population at a certain time, so that data collection is carried out once without repeated measurements (Cooper & Schindler, 2019).

The research population includes all medical personnel and health workers at Tarumajaya Hospital in 2025 totaling 132 people, consisting of 17 specialists, 1 dentist, 31 nurses, 34 midwives, 8 health analysts, 1 nutritionist, 2 physiotherapists, 11 general practitioners, and 27 pharmaceutical teams. The sampling technique applied is total sampling, where all members of the population are sampled because the number is limited and it is possible to be studied as a whole. This technique aims to produce a representative sample so that the findings can be generalized to the population (Ruswanti & Januarko, 2021). According to Akdon & Riduwan (2013), total sampling is used when the entire population is sampled because the number is relatively small.

Data collection was carried out using questionnaires as primary data. Because the research is quantitative, a quality assessment scale (Ruswanti & Januarko, 2021) in the form of a four-point likert scale is used. The likert scale is used to measure the level of approval of respondents to statements, with a range from very negative to very positive (Sugiyono, 2018).

Further analysis using Structural Equation Modeling (SEM) based on Partial Least Square (PLS) through SmartPLS version 4. The PLS method was chosen because it is predictive, flexible, does not require data normality, is suitable for small samples, and is able to handle multicollinearity (Hair et al., 2017).

### 4. Results and Discussion

#### Data Analysis

The data analysis in this study was carried out using the SEM-PLS method using the SmartPLS program, through two main stages, namely testing the measurement model (outer model) and the structural model (inner model). The measurement model test aims to assess the suitability between indicators and latent variables.

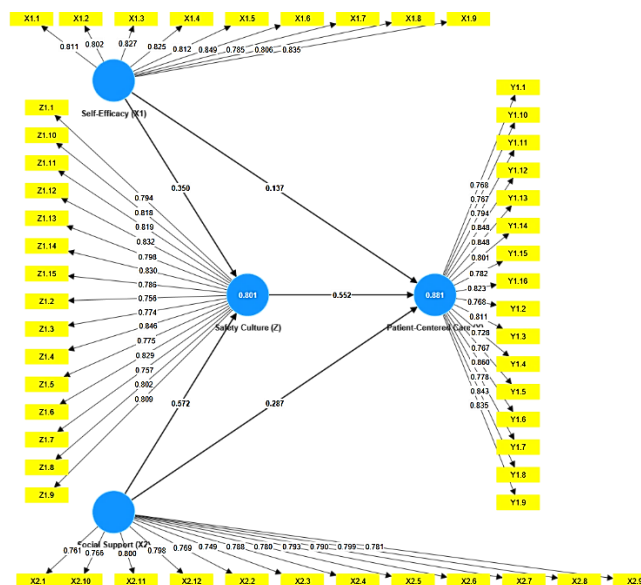


Figure 1. Outer Model Results.

Based on the results of the outer model (Figure 1), all indicators in the variables Self-Efficacy (X1), Social Support (X2), Safety Culture (Z), and Patient-Centered Care (Y) have a loading factor value above the critical limit of 0.70. Thus, all indicators are declared valid and meet the Convergent Validity criteria.

Table 1. Average Variance Extracted (AVE) Test Results.

Variabel	Average variance extracted (AVE)
Self-Efficacy (X1)	0,668
Social Support (X2)	0,611
Safety Culture (Z)	0,643
Patient-Centered Care (Y)	0,643

Discriminant Validity testing through the Average Variance Extracted (AVE) value shows that each variable has an AVE value above 0.50.

Table 2. Construct Reliability and Validity.

Variabel	Cronbach's alpha	Composite reliability	Remarks
Self-Efficacy (X1)	0,938	0,939	Reliabel
Social Support (X2)	0,942	0,942	Reliabel
Safety Culture (Z)	0,960	0,961	Reliabel
Patient-Centered Care (Y)	0,963	0,963	Reliabel

Furthermore, reliability testing through Composite Reliability and Cronbach's Alpha showed that all variables had Cronbach's Alpha values above 0.6 and Composite Reliability above 0.7, even close to 1. Therefore, all constructs in this study are declared reliable.

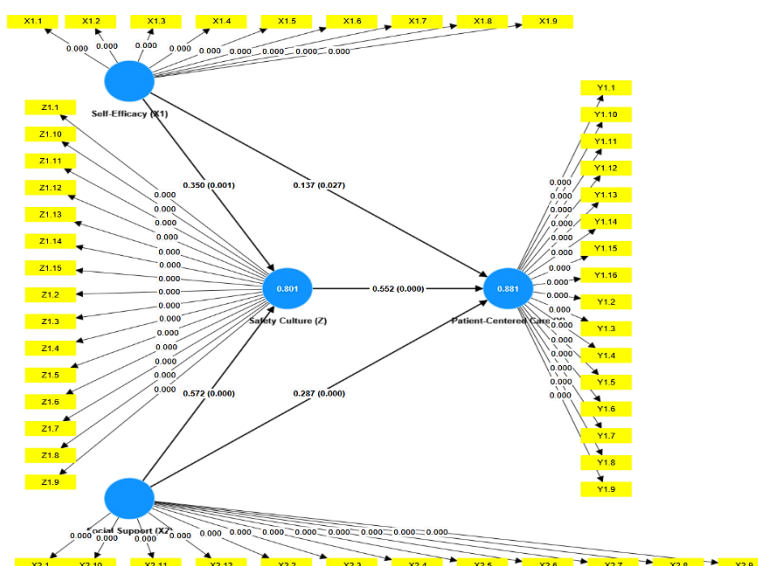


Figure 2. Structural Model Results.

In the inner model stage, the relationships between variables are analyzed using two exogenous variables and two endogenous variables as shown in Figure 2.

Table 3. Determination Coefficient Test Results.

Variable endogenous	R-Square
Safety Culture (Z)	0,801
Patient-Centered Care (Y)	0,881

Evaluation of the determination coefficient showed that the R-Square value for Safety Culture (Z) was 0.801, which means that 80.1% of the variation could be explained by exogenous variables in the model, while 19.9% was influenced by other factors outside the study. Meanwhile, Patient-Centered Care (Y) had an R-Square value of 0.881, indicating that 88.1% of the variation could be explained by variables in the model, and the remaining 11.9% were influenced by other factors. This value indicates that the model has a strong ability to explain the two endogenous variables.

Table 4. Fit Model Assessment Results.

SRMR	NFI
0,051	0,705

The Model Fit assessment shows an SRMR (Standardized Root Mean Square Residual) value of 0.051, which is below the limit of 0.1 or 0.08, indicating a low residual error rate and a good model (fit). The NFI (Normed Fit Index) value of 0.705 also indicates a sufficient level of model suitability in explaining the relationship between variables.

Simultaneous hypothesis testing was carried out through manual calculations of the F test as it was not available on the SmartPLS output, using the formula (Hair et al., 2017):

$$\begin{aligned}
 F_{hit} &= \frac{R^2(n - k - 1)}{(1 - R^2)k} \\
 &= \frac{0,881(132 - 3 - 1)}{(1 - 0,881)3} \\
 &= \frac{112,768}{0,357} \\
 &= 315,87
 \end{aligned}$$

$F_{tabel} = F_{\alpha}(k,n-k-1)$   
 $= F_{0,05}(3,132-3-1)$   
 $= f_{0,05}(3,128)$   
 $= 2.68$  (obtained from F Table)

With an  $R^2$  of Patient-Centered Care of 0.881, the number of independent variables ( $k$ ) as many as 3, the number of samples ( $n$ ) as many as 132, and  $\alpha = 5\%$ ,  $F_{cal}$  was obtained as much as 315.87 and  $F_{tabel}$  as much as 2.68. Because of  $F_{cal}$ 's  $>$  calculation (Hair et al., 2017), Self-Efficacy, Social Support, and Safety Culture simultaneously have a significant effect on Patient-Centered Care, so  $H_1$  is accepted.

Direct and indirect influence testing was carried out with the criteria of  $t$ -statistics  $>$  1.96 and/or  $p$ -value  $<$  0.05.

**Table 5.** Results of Direct and Indirect Influence Test.

Hypothesis Test	Path coefficients	T Statistics	P Values	Remarks
<b>Direct Influence</b>				
Self-Efficacy (X1) -> Safety Culture (Z)	0,350	3,239	0,001	H2 Accepted
Social Support (X2) -> Safety Culture (Z)	0,572	5,852	0,000	H3 Accepted
Self-Efficacy (X1) -> Patient-Centered Care (Y)	0,137	2,207	0,027	H4 Accepted
Social Support (X2) -> Patient-Centered Care (Y)	0,287	3,659	0,000	H5 Accepted
Safety Culture (Z) -> Patient-Centered Care (Y)	0,552	7,175	0,000	H6 Accepted
<b>Indirect Influence</b>				
Self-Efficacy (X1) -> Safety Culture (Z) -> Patient-Centered Care (Y)	0,193	2,934	0,003	H7 Accepted
Social Support (X2) -> Safety Culture (Z) -> Patient-Centered Care (Y)	0,316	4,495	0,000	H8 Accepted

## Discussion

### *The simultaneous influence of Self-Efficacy, Social Support, and Safety Culture on Patient-Centered Care*

The results of the hypothesis test show that Self-Efficacy, Social Support, and Safety Culture together have a significant effect on Patient-Centered Care (PCC). This means that patient-centered services are not only determined by individual factors of health workers, but also by social support in the work environment as well as the organization's safety culture. PCC is formed through the integration of the psychological capacity of the individual and the organizational system that supports safe and humanistic services.

Descriptively through the Three-Box Method, Self-Efficacy is in the medium category with the lowest dimension of willingness to put in the effort. This indicates that self-confidence has been sufficiently formed, but consistency in providing additional efforts still needs to be strengthened. In Watson's perspective, this aspect is important to maintain a sustainable commitment to care. Social support is also in the medium category, with the lowest dimension in real aid, which indicates the need to strengthen practical support and the availability of resources. Safety Culture is also in the medium category, with the lowest dimension in the culture of justice, so the perception of justice in handling errors needs to be improved in order to create a safe and open work environment.

These findings strengthen the Theory of Human Caring by Watson (2008) which emphasizes that caring relationships are the core of health services. The results of this study are in line with Fuadi et al. (2024), Huang et al. (2022), and Abu Lebda et al. (2023) which show the influence of self-efficacy, hospital culture, and social support on PCC. Thus, PCC optimization requires strengthening the self-confidence of health workers, real social support, and a fair and learning-oriented safety culture.

### ***The effect of self-efficacy on safety culture***

The results of the hypothesis test showed that Self-Efficacy (X1) had a significant effect on Safety Culture (Z). The higher the self-efficacy of health workers, the better the safety culture will be formed. An individual's confidence in his or her abilities encourages engagement in safety practices. The analysis of the Three-Box Method shows that self-efficacy is in the medium category with the lowest dimension in the willingness to exert effort, while safety culture is also in the medium category with the lowest dimension in the culture of justice. Descriptively, increasing self-efficacy has the potential to strengthen individual participation in building a more open and constructive safety culture.

These findings are in line with Bandura's (2009) theory which explains self-efficacy as an individual's belief in controlling task demands, as well as Weiner's (1986) attribution theory. Research by Fuadi et al. (2024) and Huang et al. (2022) also supports that self-efficacy has a positive effect on safety culture. Therefore, strengthening competencies and organizational support is an important strategy in building a safety culture.

### ***The effect of social support on safety culture***

The results of the hypothesis test showed that Social Support had a significant effect on Safety Culture. High social support encourages the formation of a better safety culture. Based on the Three-Box Method, social support is in the medium category with the lowest dimension in real assistance, while safety culture is also in the medium category with the lowest dimension in the culture of justice. This shows the need for increased practical support and a fair system.

Theoretically, Cohen & Hoberman (1983) state that social support is an interpersonal resource that affects individual well-being and behavior. Within hospital organizations, this support strengthens collaboration and shared responsibility for patient safety. These findings are supported by Wahyuni et al. (2024) who show a significant influence of social support on organizational culture. Thus, a supportive work environment is the foundation in building a safety culture.

### ***Effect of self-efficacy on the implementation of PCC provision***

The results of the study show that Self-Efficacy has a significant effect on Patient-Centered Care. Health workers with high self-efficacy are more confident in communication, decision-making with patients, and showing empathy. Descriptively, self-efficacy and PCC are in the medium category. The lowest dimension of self-efficacy is the willingness to put in the effort, while in PCC it is empathy and effective communication. This shows the need to strengthen the aspects of initiative and interpersonal communication.

Bandura's theory (2001) explains that self-efficacy affects an individual's ability to organize actions to achieve certain outcomes. Research by Fuadi et al. (2024), Huang et al. (2022), and Zhang et al. (2022) supports these findings. Therefore, communication training and strengthening clinical competencies are important to improve the implementation of PCC.

### ***The effect of social support on the implementation of PCC provision***

The results of the hypothesis test show that Social Support has a significant effect on Patient-Centered Care. A supportive work environment increases the motivation and confidence of health workers in providing empathic services. The Three-Box Method shows that social support is in the medium category with the lowest dimension of real help, while PCC is also in the medium category with the lowest dimension of empathy and effective communication. This shows that practical support and a supporting work system have the potential to improve the quality of PCC.

The theory of Cohen & Hoberman (1983) asserts that social support affects psychological well-being and professional behavior. Research by Abu Lebda et al. (2023), Abekah-Nkrumah & Nkrumah (2021), Baek et al. (2023), and Liu et al. (2023) support this relationship. Thus, a strong social support system needs to be developed through supportive leadership and open communication.

### ***The influence of safety culture on the implementation of PCC provision***

The results of the study show that Safety Culture has a significant effect on Patient-Centered Care. A culture that emphasizes open reporting, learning from mistakes, and organizational fairness supports patient engagement.

Descriptively, safety culture and PCC are in the medium category, with the lowest dimensions of a culture of justice and empathy and effective communication. This suggests that a fair and constructive safety culture can strengthen PCC practices. In the Theory of Human Caring (Watson, 2008), the caring environment is a condition for the realization of patient-centered services. The concept of safety culture according to Reason (1997) emphasizes values, attitudes, and behavior patterns that reflect commitment to safety. These findings are supported by Fuadi et al. (2024), Huang et al. (2022), and Choi & Kim (2023). Thus, strengthening the safety culture is the main strategy to improve the quality of PCC.

### ***Safety culture mediates the influence of self-efficacy on the implementation of PCC provision***

The test results showed that Self-Efficacy had an indirect effect on Patient-Centered Care through Safety Culture. This means that the self-confidence of health workers strengthens the safety culture which then improves the implementation of PCC. The three variables are in the medium category, with the lowest dimension in willingness to exert effort, culture of justice, and empathy and effective communication. In the Theory of Human Caring (Watson, 2008), the practice of caring requires the support of an organizational system. These findings are supported by Fuadi et al. (2024) and Huang et al. (2022) who demonstrate the mediating role of hospital culture.

### ***Safety culture mediates the influence of social support on the implementation of PCC provision***

The results of the study show that Social Support has an indirect effect on Patient-Centered Care through Safety Culture. Social support forms a culture of safety which then strengthens the implementation of the PCC. The lowest dimension is found in real assistance, a culture of justice, as well as empathy and effective communication. The Theory of Social Support (Cohen & Hoberman, 1983) and the Theory of Human Caring (Watson, 2008) explain that the supportive environment forms a caring environment. These findings are supported by Wahyuni et al. (2024), Fuadi et al. (2024), and Huang et al. (2022). Thus, the integration of social support and safety culture is the key to PCC optimization.

## **Research Findings**

This study found that Safety Culture plays a mediator in the relationship between Self-Efficacy and Social Support to the implementation of Patient-Centered Care (PCC). The implementation of PCC is not only influenced by individual and interpersonal factors, but is highly determined by the organization's safety culture. These findings reinforce the Theory of Human Caring by Jean Watson (2008), which emphasizes the integration of personal capacity and the organizational environment in caring practice. Self-efficacy reflects the psychological readiness of individuals, social support reflects interpersonal support, and safety culture is a factor that optimizes both in the implementation of PCC.

The results of the analysis showed that Safety Culture had the greatest direct influence on PCC. In addition, Social Support has a stronger influence on Safety Culture than Self-Efficacy, emphasizing the importance of collective support in shaping a safety culture. Thus, the successful implementation of PCC depends on the synergy between individual self-confidence and organizational systems that support collaboration, open communication, and continuous learning.

## **5. Conclusion**

This study has a number of limitations that need to be considered in understanding the results and the scope of generalization. Data collection was carried out through an online questionnaire that provided convenience and flexibility for respondents, as well as improved efficiency and response rates. However, this method makes the researcher unable to fully control the situation during charging, such as workload conditions, fatigue, and disturbances

in the work environment that have the potential to affect the focus and objectivity of the answers. In addition, all variables are measured based on respondents' perceptions (self-reports), so there is a possibility of subjective bias, including social desirability bias, where respondents tend to give answers that are considered in accordance with organizational expectations or professional norms.

Based on the results of the analysis, it can be concluded that Patient-Centered Care is simultaneously influenced by Self-Efficacy, Social Support, and Safety Culture. This shows that health workers' self-confidence, social support in the workplace, and safety culture in hospitals together contribute to improved patient-oriented services. Partially, Self-Efficacy and Social Support each have an effect on Safety Culture, which indicates that the confidence of health workers and support from colleagues and superiors play a role in forming an open, supportive, and responsible safety culture. In addition, Self-Efficacy, Social Support, and Safety Culture have also been proven to directly influence Patient-Centered Care, emphasizing that individual factors and work environments are important elements in encouraging services that respect patient needs, preferences, and engagement. Furthermore, Safety Culture plays a mediating variable in the relationship between Self-Efficacy and Patient-Centered Care, as well as between Social Support and Patient-Centered Care. These findings suggest that self-confidence and social support first reinforce a culture of safety, which then has an impact on optimizing the implementation of patient-centered services.

## References

- Abekah-Nkrumah, G., & Nkrumah, J. (2021). Perceived work environment and patient-centered behavior: A study of selected district hospitals in the central region of Ghana. *PLoS ONE*, *16*(1), 1–15. <https://doi.org/10.1371/journal.pone.0244726>
- Abu Lebda, H., Malak, M. Z., & Hamaideh, S. H. (2023). Self-awareness, empathy, and patient-centered care among critical care nurses in Jordan. *Psychology, Health & Medicine*, *28*(9), 2764–2775. <https://doi.org/10.1080/13548506.2022.2094427>
- Baek, H., Han, K., Cho, H., & Ju, J. (2023). Nursing teamwork is essential in promoting patient-centered care: A cross-sectional study. *BMC Nursing*, *22*(1), 1–8. <https://doi.org/10.1186/s12912-023-01592-3>
- Caplan, G. (1974). *Support systems and community mental health: Lectures on concept development*. Behavioral Publications.
- Choi, Y. S., & Kim, S. H. (2023). The influence of professional competency, professional commitment, and nursing organizational culture on the person-centered practice of nurses in long-term care hospitals: A cross-sectional study. *Journal of Korean Gerontological Nursing*, *25*(2), 116–127. <https://doi.org/10.17079/jkgn.2302.07001>
- Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology*, *13*(2), 99–125.
- Cooper, D. R., & Schindler, P. S. (2019). *Business research methods*. McGraw-Hill Companies, Inc.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications.
- Liana, D. (2021). *A nurse practitioner who is responsible for improving hospital accreditation efforts for the maturity of the Salvation Army* [Thesis, University of Indonesia].
- Liu, H., Zhang, L., Yan, J., Huang, H., Yi, Q., & Peng, L. (2023). The relationship between social support, empathy, self-efficacy, and humanistic practice ability among clinical nurses in China: A structural equation model. *Journal of Nursing Management*, *2023*, Article 1378278. <https://doi.org/10.1155/2023/1378278>

- Reason, J. (1990). *Human error*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139062367>
- Ruswanti, E., & Januarko, M. U. (2021). *Scientific report writing guide: Attention, company credibility, two-sided advertising on the intention to buy Elang Air aviation services*. CV. Andi Offset.
- Sarason, I. G., & Sarason, B. R. (1985). *Social support: Theory, research and applications*. Martinus Nijhoff Publishers. <https://doi.org/10.1007/978-94-009-5115-0>
- Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). Jossey-Bass.
- Sugiyono. (2018). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Wahyuni, R., Adhikara, A., & Rita, K. (2024). Influence of work environment and social support on nurse performance at Tzu Chi Hospital with organizational culture as an intervening variable. *Vitalitas Medis: Jurnal Kesehatan dan Kedokteran*, 1(3), 77–90. <https://doi.org/10.62383/vimed.v1i3.331>
- Watson, J. (2008). *Nursing: The philosophy and science of caring* (Rev. ed.). University Press of Colorado.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. Springer-Verlag. <https://doi.org/10.1007/978-1-4612-4948-1>
- Xiao, S. (1994). The theoretical basis and research application of social support rating scale. *Journal of Clinical Psychiatry*, 4, 98–100.