

Article

# Types of perception towards workplace spirituality among nurses bring to work—Application of Q methodology

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## CITATION

Choi JH, Park SJ, Suk JW. (2024). Types of perception towards workplace spirituality among nurses bring to work—Application of Q methodology. *Journal of Infrastructure, Policy and Development*. 8(7): 5097. <https://doi.org/10.24294/jipd.v8i7.5097>

## ARTICLE INFO

Received: 7 March 2024

Accepted: 26 March 2024

Available online: 2 August 2024

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**Abstract: Purpose:** This study aimed to explore the perception types of workplace spirituality among nurses. **Method:** To achieve this, Q methodology was applied, selecting 34 Q samples from a total of 102 Q statements extracted. The Q samples were distributed among 40 nurses and categorized into a normal distribution. A 9-point scale was used for measurement, and the data were analyzed using the pc-QUANL program. **Results:** The four types identified were ‘reflective type’, ‘nursing-oriented type’, ‘relationship-oriented type’, and ‘spirituality-oriented type’. **Conclusion:** The four types derived in this study classify nurses’ perceptions of workplace spirituality for establishing a nurse’s workplace spirituality that provides integrated nursing care. This categorization can serve as foundational information when planning workplace spirituality programs, considering each type’s characteristics.

**Keywords:** nurses; perception; workplace; spirituality; type

## 1. Significance of the research

Spirituality is a dynamic and essential aspect of human beings that manifests through the search for ultimate meaning, purpose, and transcendence in life as individuals experience relationships with oneself, family, others, community, society, nature, and sacred existence. Spirituality is defined and expressed through beliefs, values, traditions, and practices (Kazemipour and Mohd Amin, 2012). Spirituality is a broad concept that encompasses religion, viewed as a unique and integral aspect of human life, influencing aspects such as life, health, behavior, and relationships through its transcendent orientation. Specifically, in nursing, nightingale advocated for the provision of care addressing the spiritual aspect of humans in the pursuit of holistic nursing care (Lee et al., 2015). Furthermore, it is recognized as a professional competence that nurses sensitively respond to not only the physical, mental, and social needs of patients but also their spiritual needs, providing integrated and holistic care (Lee and Suh, 2014). Therefore, recognizing and enhancing their own spirituality can have a positive impact on nurses’ care for patients.

As the largest organization within the hospital, nursing departments, which comprise about 50% of healthcare personnel, play a crucial role in performing nursing duties at the frontline with healthcare consumers, influencing the quality of medical services, and contributing significantly to the overall quality and productivity of both the nursing department and the hospital organization (Roh, 2013). Especially with the recent increase in public interest in healthcare services related to domestic and international healthcare accreditation systems, the improvement of the quality of nursing services and nursing performance has been identified as a major challenge for

nursing organizations (Lim and Jung, 2015).

Workplace spirituality can be defined as the inherent psychological state of individuals seeking meaning and purpose in life and striving to realize enhanced existential values within the work and organizational environment (Song and Seomun, 2014). In the course of managing organizations, workplace spirituality is recognized as a factor that has both direct and indirect impacts on various facets of the organization. This influence extends beyond the immediate social context of the workplace and encompasses the internal value system and social dimensions of organizational members. Ultimately, it affects the overall effectiveness and functioning of the organization as a whole (Song and Seomun, 2014). With the emergence of workplace spirituality, which influences the effectiveness of organizations by fostering happiness and achieving integrated self in work and organizational settings, efforts have been made in the fields of medicine, nursing, and health to establish and apply the concept of workplace spirituality within organizations (Hong and Lim, 2017). Recently in nursing, workplace spirituality has been reported to have a positive impact on mental health and stress coping. Its influence at the organizational level, including its relationship with organizational citizenship behavior mediated through organizational commitment, is also being documented.

Within the nursing work environment, workplace spirituality helps nurses gain internal strength to contemplate, endorse, and embody the meaning of nursing that they perceive, experience, and practice in their work. It entails ascribing significance to nursing within the workplace, deriving joy and self-realization through inner reflections and nursing practice, and fostering a sense of community through interconnected exchanges among colleagues as organizational policies or philosophies align with individual values (Lee et al., 2015). Workplace spirituality in nursing is recognized as a factor that positively influences nursing performance within the organization (Kazemipour and Mohd Amin, 2012; Suk and Koh, 2016; Lee et al., 2015). Specifically, it can be seen as a factor that impacts nurses' practical engagement in safety nursing activities (Suk and Koh, 2016). To delve deeper into the workplace spirituality of nurses, it is essential to adopt an approach that recognizes and understands the individual variations in perceptions. The Q methodology is considered suitable for the purpose of this study as it collects diverse statements through individual interviews, allowing for an in-depth exploration of personal experiences and subjective values (Watts and Stenner, 2007). This methodology aligns with the research objective as it enables the expression of participants' thoughts and feelings subjectively through the cognitive process.

Accordingly, this study aims to utilize the Q methodology to identify various types of workplace spirituality as perceived by nurses. Through the analysis of these characteristics, the research endeavors to contribute to providing foundational data for professional nurses, facilitating holistic nursing care and mitigating turnover. The specific research question for this study is set to 'What are the types of workplace spirituality perceived by nurses, and what are the characteristics of each type?'

## **2. Research methodology**

### **2.1. Research design**

This study is exploratory research utilizing the Q methodology approach to more specifically and scientifically confirm the subjectivity of workplace spirituality as perceived by nurses.

## **2.2. Sampling method**

### **A. Q methodology step 1: Selection of Q population and Q sample.**

In this study, a primary survey for Q statements was conducted from 1 September to 14 September 2023, among a total of 50 nurses working in hospitals located in Seoul. The content of the workplace spirituality survey for nurses included questions such as ‘What do you think workplace spirituality for nurses is?’ ‘What do you perceive as important for enhancing workplace spirituality?’ and ‘If there are any aspects necessary for improving workplace spirituality, please describe them.’ Additionally, information related to workplace spirituality in nursing was obtained through literature reviews of previous studies, professional publications, and domestic academic journals. The data underwent iterative review and revision by two nursing professors experienced in Q methodology research, resulting in the extraction of a total of 102 items for the Q population.

To select the Q sample, the prepared Q population was repeatedly read and categorized through an iterative process. The selected statements were modified after seeking advice from a nursing professor experienced in Q methodology research and a nurse with over 10 years of experience in a tertiary hospital. Their consultation considered aspects such as content redundancy, reliability, and accuracy of expression. Based on this, and taking into account the researcher’s experience and the spirituality intertwined in daily clinical practice, the Q population was read and reviewed multiple times. Statements with common meanings or values within specific topics were then combined and categorized, ultimately leading to the final selection of 40 Q samples.

### **B. Q methodology step 2: Selection of study participants (P-sample).**

The P-sample suggested in the Q methodology follows the theory that as the sample size increases, there is a statistical risk of multiple individuals being biased towards a single factor, making it difficult to clearly understand its characteristics (Watts and Stenner, 2012). Therefore, the number of 35–40 samples is deemed sufficient if it allows for the generation of factors and comparisons between these factors (Kim, 2008). Hence, for the P-sample in this study, the researcher purposely selected a total of 40 respondents among nurses working at comprehensive hospitals in Seoul and Gangwon Province. These respondents earnestly answered the Q survey questions from 1 September to 30 September 2023, providing responses judged to align with the research objectives. Also, to encompass diverse participants, factors such as age, gender, department of work, years of experience, and perception of workplace spirituality were also taken into consideration.

### **C. Q methodology step 3: Data collection through Q sample sorting.**

The sorting of Q samples was conducted based on the principles of the Q methodology, forcing the distribution of the selected 40 statements according to the thoughts of the research participants from 1 December to 30 December 2023. Prior to initiating the Q sorting, participants were briefly explained about the research topic, and they were instructed to read the statements written on the Q cards and categorize

them as positive, neutral, or negative. Q cards with statements perceived relatively positive were placed on the right, those with negative statements on the left, and cards with statements perceived as neither positive nor negative were placed in the middle. The categorized bundles of Q cards were then reviewed again by repeatedly reading each statement on the Q cards. During the course, interviews were conducted to discuss and record the reasons for selecting each of the two statements placed at either extreme (+4, -4), which provide useful information for interpreting Q factors (Kim, 2008). The collected data were scored by assigning a starting point of 1 for the statement perceived as most negative (-4) during the Q sample sorting and assigning a score of 9 for the statement perceived as most positive (+4).

### **2.3. Statistical analysis method**

The score table derived from Q sorting was subjected to a type analysis using the pc-QUANL Program. For optimized decision-making, various numbers of factors were considered for calculation, with an eigenvalue threshold of 1.0 or higher. Based on the results, four types were selected, considering their conceptual significance and discriminative power. In this study, a comparative analysis was performed on factor loadings and standard scores, with a specific emphasis on items demonstrating strong positivity and strong negativity for each type among the research statements. Furthermore, the demographic data of the P-sample based on the four types and the characteristics of research participants with high weights for each factor were interpreted to understand the attributes of each type.

### **2.4. Ethical considerations**

For the rights of participants, complete anonymity was maintained throughout all stages of the research. The data utilized in the study solely serve research purposes and not be employed for any other intent. Additionally, personal information collected from participants has been coded into numerical form to ensure the protection of privacy.

## **3. Results**

### **3.1. Formation of Q types**

The subjectivity of perception types regarding nurses' workplace spirituality was analyzed through Q factor analysis, resulting in the extraction of four types. These four types explained 50.3% of the total variance, with explanatory power for each type as follows: Type 1 accounted for 26.9%, type 2 for 15.3%, type 3 for 7.0%, and type 4 for 4.7% (**Table 1**).

Furthermore, the correlation between the four types is presented in **Table 2** to illustrate the degree of similarity between each type. With the correlation between types ranging from  $r = \pm 0.10$  to 0.66, there found moderate to high levels of similarity which appear to be relatively independent (**Table 2**).

**Table 1.** Types, eigen values, variance, cumulative, factor weight, and demographic characteristics for P-sample (N = 40).

Type	Eigen values, variance (%), cumulative	P No.	Factor weight	Age	Years of experiences	Gender	Has experience in contemplating workplace spirituality	Dept.	Job satisfaction (Nurse)	Religion
Type 1 (N = 18)	Eigen values 10.78 Variance 26.9 Cumulative 0.26	5	0.93	30	9	F	Y	ER	Satisfied	Christian
		18	0.66	29	2	M	Y	Ward	Satisfied	Christian
		25	0.93	47	22	F	Y	ICU	Satisfied	No religious affiliation
		27	0.53	34	11	F	Y	ICU	Satisfied	Christian
		38	0.66	27	4	F	Y	ICU	Average	Catholic
		1	0.18	35	14	F	Y	ICU	Satisfied	Christian
		11	0.59	28	6	F	Y	ICU	Satisfied	Christian
		15	0.29	29	6	F	Y	ICU	Average	Christian
		16	1.01	30	5	F	Y	ICU	Average	Christian
		22	0.16	43	18	F	Y	Outpatient	Satisfied	No religious affiliation
		36	1.01	44	18	F	Y	Ward	Satisfied	Buddhism
		4	0.78	30	5	F	Y	ER	Satisfied	Buddhism
		7	1.29	24	1	F	Y	Ward	Satisfied	Won-Buddhism
		9	0.65	30	1	M	Y	Ward	Satisfied	Christian
		10	0.22	41	19	F	Y	Ward	Satisfied	Christian
		13	0.29	32	10	F	Y	NR	Average	No religious affiliation
		29	0.65	24	1	F	Y	Ward	Satisfied	Christian
		33	1.29	23	1	F	Y	DR	Satisfied	Christian
Type 2 (N = 12)	Eigen values 6.15 Variance 15.3 Cumulative 0.42	2	0.17	32	11	F	Y	Ward	Satisfied	No religious affiliation
		3	0.79	30	7	F	Y	ER	Satisfied	No religious affiliation
		6	0.48	28	5	F	Y	ICU	Average	No religious affiliation
		12	1.92	32	8	F	N	ICU	Satisfied	No religious affiliation
		14	1.34	23	1	F	N	ICU	Satisfied	Christian
		17	0.92	30	3	F	Y	Ward	Satisfied	Christian
		19	0.83	31	10	F	N	ER	Average	Christian
		26	0.48	30	7	F	N	ICU	Average	Christian
		30	0.24	28	5	F	Y	ICU	Satisfied	Christian
		32	1.92	35	6	M	N	ICU	Average	Buddhism
		37	0.92	24	1	F	Y	ICU	Satisfied	Christian
		39	0.83	46	2	F	Y	Ward	Satisfied	Christian

**Table 1.** (Continued).

Type	Eigen values, variance (%), cumulative	P No.	Factor weight	Age	Years of experiences	Gender	Has experience in contemplating workplace spirituality	Dept.	Job satisfaction (Nurse)	Religion
Type 3 (N = 7)	Eigen values 2.79 Variance 7.00 Cumulative 0.49	8	0.16	27	2	F	Y	ICU	Satisfied	Buddhism
		28	0.38	40	15	F	N	ICU	Average	Christian
		20	1.04	24	2	F	N	ICU	Satisfied	Buddhism
		21	0.22	27	2	F	Y	AKU	Satisfied	No religious affiliation
		23	0.42	28	1	F	N	ICU	Satisfied	No religious affiliation
		24	0.37	41	20	F	Y	Ward	Satisfied	No religious affiliation
		40	1.04	28	5	F	N	ICU	Average	Christian
Type 4 (N = 3)	Eigen values 1.88 Variance 4.72 Cumulative 0.54	31	0.53	27	2	M	N	ICU	Satisfied	Buddhism
		34	0.26	24	1	F	Y	Ward	Satisfied	Catholic
		35	0.29	39	17	F	N	AKU	Satisfied	Catholic

**Table 2.** Correlation matrix between types (N = 40).

Variables	Type I	Type II	Type III	Type IV
Type I	1			
Type II	0.66	1		
Type III	0.38	0.41	1	
Type IV	0.16	0.35	0.10	1

### 3.2. Characteristics of the P-sample

The demographic characteristics and factor weights of the P-sample are shown as in **Table 1**. Within each type, individuals with higher factor weights represent the prototype of that type, displaying the typical characteristics of that specific type. The participants in type 1 amounted to a total of 18 individuals, with an average age of 32 years and an average clinical experience of 8.5 months. 14 of the participants expressed satisfaction with their nursing profession, and all of them responded affirmatively to having experiences in contemplating spirituality. In type 2, there were 12 subjects, with an average age of 30 years and an average clinical experience of 5.5 months. 8 of them were confirmed to be satisfied with their nursing profession, while 7 acknowledged contemplating spirituality. There were 7 participants in type 3, with an average age of 30 and an average clinical experience of 6.7 months. It was confirmed that 5 of them expressed satisfaction with their nursing profession, and 3 responded positively to having contemplated spirituality. In the case of type 4 participants, there were 3 individuals with an average age of 30 and an average clinical experience of 6.6 months. It was observed that all of them were satisfied with their nursing profession, while only 1 responded affirmatively to having contemplated spirituality.

### 3.3. Characteristics by type

In this study, to analyze the perception of workplace spirituality among nurses in terms of subjectivity by types, characteristics were interpreted focusing on statements where strong positivity (items with Z score +1 or higher) and strong negativity (items with Z score -1 or lower) were evident from a set of 40 statements.

The characteristics of each type were presented, focusing on items where the standard scores for a specific type exhibited notable differences compared to the standard scores of other types for individual statements. To conduct a type-specific analysis of nurses' perceptions of workplace spirituality, the 40 statements described in **Table 3** were presented. The types of perceptions of nurses regarding workplace spirituality confirmed by the above analysis criteria are as follows (**Table 3**).

**Table 3.** Q-statements and Z-scores.

No	Q-statements	Z-score			
		Type I (n = 18)	Type II (n = 12)	Type III (n = 7)	Type IV (n = 3)
Q1	My spirituality helps in resolving nursing issues.	0.515	-0.212	-0.418	0.020
Q2	My spirituality influences my life.	0.738	-0.188	-0.262	-0.112
Q3	I make important decisions through spirituality.	0.663	0.490	0.175	-0.244
Q4	I pray when I encounter nursing issues.	0.665	-0.234	0.378	-0.110
Q5	I strive to shape my identity through spirituality.	0.520	0.210	0.460	0.291
Q6	I receive love, strength, and resources from spirituality.	0.767	0.329	-0.314	0.219
Q7	I live my life through spirituality.	0.554	-0.377	0.353	-0.396
Q8	I make efforts to reflect on life's issues or mediate regularly.	0.676	-0.328	-0.352	-0.123
Q9	I am embraced by the love of God.	0.857	-0.158	0.136	-0.220
Q10	When I provide nursing care, my spirituality becomes stronger.	0.522	-0.287	-0.12	-0.083
Q11	I read literature related to spirituality for my spiritual development.	0.654	-0.478	-0.211	0.199
Q12	I talk to others about my spirituality.	0.270	0.656	-0.303	-0.229
Q13	I have a close relationship with God.	0.544	-0.546	-0.108	-0.257
Q14	I believe in the existence of God.	0.239	0.701	-0.163	-0.131
Q15	My inner strength is accompanied by spirituality.	0.697	-0.245	-0.140	0.030
Q16	My spirituality gives me strength when facing challenges in nursing.	0.531	-0.483	0.018	0.384
Q17	My spirituality fosters a sense of unity among colleagues in the workplace.	0.475	0.611	-0.129	-0.005
Q18	I share the purpose and meaning of nursing through spirituality with my colleagues.	0.613	0.121	0.109	0.363
Q19	I recognize being a part of the community through nursing with spirituality.	0.430	0.681	0.034	0.015
Q20	I empathize with the suffering of my colleagues.	-0.505	-0.143	-0.538	0.165
Q21	I can understand and consider others' perspectives well through spirituality.	0.020	0.019	-0.284	0.026
Q22	I resolve conflicts with colleagues in a positive way through spirituality.	0.532 -0.222 -0.218 -0.024	-0.222	-0.218	-0.024
Q23	My spirituality is connected to the goals of the nursing organization.	-0.121	-0.050	-0.296	0.198
Q24	I frequently reflect on and examine whether I am living rightly.	0.065	-0.063	-0.328	0.189
Q25	I strive to find meaning and purpose in life.	0.520	0.210	0.460	0.291

**Table 3.** (Continued).

No	Q-statements	Z-score			
		Type I (n = 18)	Type II (n = 12)	Type III (n = 7)	Type IV (n = 3)
Q26	I believe my nursing encompasses a broader societal meaning.	0.767	0.329	-0.314	0.219
Q27	I believe nursing is connected to spirituality.	0.160	0.226	0.112	0.391
Q28	I behave ethically and morally.	0.198	-0.345	-0.208	-0.302
Q29	When I feel difficulty and distress, I pray.	-0.857	-0.158	0.136	-0.220
Q30	I strive to become a mature person.	0.167	0.100	-0.260	-0.041
Q31	I pursue a meaningful life even in the face of crises.	0.222	-0.570	-0.051	0.151
Q32	Nursing through my spirituality is meaningful and valuable in my life.	0.270	0.656	-0.303	-0.229
Q33	I collaborate with others.	0.544	-0.546	-0.108	-0.257
Q34	I am a good listener to other people's stories.	-0.027	-0.139	0.297	0.052
Q35	I continually seek new values related to nursing.	-0.274	-0.251	-0.023	0.0383
Q36	I am grateful for everything when nursing.	0.531	-0.483	0.018	0.384
Q37	I experience joy through nursing.	0.475	0.611	-0.129	-0.05
Q38	I am satisfied with my life.	0.613	0.121	0.109	0.363
Q39	My spirituality influences my nursing practice.	0.430	0.681	0.034	0.015
Q40	I sometimes get absorbed in nursing.	-0.505	-0.143	-0.538	0.165

#### 1) Type 1: 'Reflective' type

The items for which type 1 exhibited the strongest agreement were 'Q24. I frequently reflect on and examine whether I am living rightly ( $Z = 2.02$ )' and 'Q8. I make efforts to reflect on life's issues or mediate regularly ( $Z = 1.69$ ).' On the other hand, the items where type 1 showed the most negative agreement were 'Q28. I behave ethically and morally ( $Z = -1.94$ )' and 'Q1. My spirituality helps in resolving nursing issues ( $Z = -1.93$ )' (Table 4).

**Table 4.** The Q-statements and Z-scores ( $\pm 1.0$ ) by the parenting types ( $N = 40$ ).

Type	Q-statement	Z-score
Type 1 Reflective type	Q24. I frequently reflect on and examine whether I am living rightly.	2.02
	Q8. I make efforts to reflect on life's issues or mediate regularly.	1.69
	Q4. I pray when I encounter nursing issues.	1.28
	Q9. I am embraced by the love of God.	1.19
	Q14. I believe in the existence of God.	1.16
	Q32. Nursing through my spirituality is meaningful and valuable in my life.	1.07
	Q30. I strive to become a mature person.	1.06
	Q10. When I provide nursing care, my spirituality becomes stronger.	-1.07
	Q11. I read literature related to spirituality for my spiritual development.	-1.28
	Q16. My spirituality gives me strength when facing challenges in nursing.	-1.32
	Q7. I live my life through spirituality.	-1.77
	Q3. I make important decisions through spirituality.	-1.82
	Q1. My spirituality helps in resolving nursing issues.	-1.93
	Q28. I behave ethically and morally.	-1.94



**Table 4.** (Continued).

<b>Type</b>	<b>Q-statement</b>	<b>Z-score</b>
Type 2 Nursing-oriented type	Q36. I am grateful for everything when nursing.	1.68
	Q37. I experience joy through nursing.	1.61
	Q33. I collaborate with others.	1.56
	Q24. I frequently reflect on and examine whether I am living rightly.	1.39
	Q25. I pursue a meaningful life even in the face of crises.	1.25
	Q28. I behave ethically and morally.	1.24
	Q32. Nursing through my spirituality is meaningful and valuable in my life.	1.04
	Q12. I talk to others about my spirituality.	-1.10
	Q15. My inner strength is accompanied by spirituality.	-1.22
	Q14. I believe in the existence of God.	-1.23
Type 3 Relationship-oriented type	Q13. I have a close relationship with God.	-1.55
	Q7. I live my life through spirituality.	-1.68
	Q19. I recognize being a part of the community through nursing with spirituality.	-1.76
	Q40. I sometimes get absorbed in nursing.	-1.77
	Q33. I collaborate with others.	1.82
	Q34. I am a good listener to other people's stories.	1.69
	Q22. I resolve conflicts with colleagues in a positive way through spirituality.	1.64
	Q22. I empathize with the suffering of my colleagues.	1.50
	Q14. I believe in the existence of God.	1.44
	Q30. I strive to become a mature person.	1.29
Type 4 Spirituality-oriented type	Q35. I continually seek new values related to nursing.	1.24
	Q27. I believe nursing is connected to spirituality.	-1.33
	Q11. I read literature related to spirituality for my spiritual development.	-1.48
	Q12. I talk to others about my spirituality.	-1.57
	Q22. I resolve conflicts with colleagues in a positive way through spirituality.	-1.59
	Q3. I make important decisions through spirituality.	-1.60
	Q9. I am embraced by the love of God.	2.09
Q14. I believe in the existence of God.	1.84	
Q13. I have a close relationship with God.	1.75	
Q23. My spirituality is connected to the goals of the nursing organization.	1.48	
Q2. My spirituality influences my life.	1.32	
Q24. I frequently reflect on and examine whether I am living rightly.	1.30	
Q25. I strive to find meaning and purpose in life.	1.25	
Q15. My inner strength is accompanied by spirituality	1.02	
Q26. I believe my nursing encompasses a broader societal meaning.	-1.12	
Q40. I sometimes get absorbed in nursing.	-1.30	
Q10. When I provide nursing care, my spirituality becomes stronger.	-1.52	
Q18. I share the purpose and meaning of nursing through spirituality with my colleagues.	-1.58	
Q19. I recognize being a part of the community through nursing with spirituality.	-1.61	
Q6. I receive love, strength, and resources from spirituality.	-1.63	

Given these results of type 1, it can be interpreted that nurses allocate time to evaluate and reflect on their actions and decisions. They reflect on their experiences in patient care, identify areas for improvement, and provide professional nursing care. Moreover, nurses engage in self-assessment to enhance their own behavior and attitudes. They strive to improve interactions with patients and uphold medical ethical principles. Therefore, the designation of 'reflective' is attributed to the pivotal role that nurses' ethical judgment and behavior play in both their professional responsibilities and patient care.

#### 2) Type 2: 'Nursing-oriented' type

Type 2 showed the highest agreement on items of 'Q36. I am grateful for everything when nursing ( $Z = 1.68$ )' and 'Q37. I experience joy through nursing ( $Z = 1.61$ ).' Conversely, the items with the most negative agreement for type 2 were 'Q40. I sometimes get absorbed in nursing ( $Z = -1.77$ )' and 'Q19. I recognize being a part of the community through nursing with spirituality ( $Z = -1.76$ )' (Table 4).

These findings indicate that type 2 recognizes the workplace spirituality as a nurse, acknowledging its significance beyond religious beliefs and emphasizing the importance of considerations in interactions with patients. Nurses expressing gratitude in interactions with patients and conveying words or sentiments of gratitude to them have been confirmed to provide a sense of comfort and enhance the quality of care. In addition, nurses, not only in providing patient care but also through collaboration with patients' families, other healthcare professionals, and the care team, exhibit a sense of community awareness, designating type 2 as 'nursing-oriented.'

#### 3) Type 3: 'Relationship-oriented' type

The items where type 3 showed the strongest agreement were 'Q33. I collaborate with others ( $Z = 1.82$ )' and 'Q34. I am a good listener to other people's stories ( $Z = 1.69$ ).' On the other hand, the items where type 3 participants showed the most negative agreement were 'Q3. I make important decisions through spirituality ( $Z = -1.60$ )' and 'Q22. I resolve conflicts with colleagues in a positive way through spirituality ( $Z = -1.59$ )' (Table 4).

The results of type 3 demonstrate that nurses collaborate with various healthcare professionals to provide comprehensive care for patients. Through spirituality, nurses and other professionals share and respect the spiritual needs and beliefs of patients when providing care to patients. Nurses, in collaboration with other experts, offer assistance in incorporating spiritual values and beliefs into ongoing treatment plans or medical decisions for patients and their caregivers.

The workplace spirituality of nurses influences the relationship between patients and nurses. It has been confirmed that nurses firmly establish spiritual values and beliefs to make the relationship with patients more meaningful and deeply formed. Therefore, type 3 is designated as 'relationship-oriented.'

#### 4) Type 4: 'Spirituality-oriented'

For type 4, the items that showed the strongest agreement were 'Q9. I am embraced by the love of God ( $Z = 1.84$ )' and 'Q14. I believe in the existence of God ( $Z = 1.84$ ).' On the other hand, the item that exhibited the most negative agreement in type 4 was 'Q6. I receive love, strength, and resources from spirituality ( $Z = -1.63$ ).' and 'Q19. I recognize being a part of the community through nursing with spirituality ( $Z = -1.61$ )' (Table 4).

The results of type 4 indicate that nurses provide care to patients through the love of God. Guided by their religious beliefs, nurses strive to provide patients with unconditional love and care, while spirituality empowers them with love and strength. Their spiritual beliefs offer hope and courage even in challenging times, conveying strength and reassurance to patients. When nurses embrace religious or spiritual beliefs, they are able to accentuate the presence of God, conveying faith in God's care and support while also instilling trust and hope in patients.

Nurses holding such perspectives can be seen to form relationships with patients, provide care, and offer nursing with the foundation of their religious or spiritual beliefs. This allows patients to receive assistance in recovery through faith and love. Hence, type 4 is designated as 'spirituality-oriented.'

### 3.4. Common findings between types

Based on the above results, the perception types of nurses regarding workplace spirituality can be categorized into four distinct types, each displaying clear characteristics corresponding to its type. However, there were statements that received common agreement or disagreement among nurses corresponding to the four types of workplace spirituality, and these are presented in **Table 5**. The item that showed strong agreement was 'I believe in the existence of God.' In other words, nurses' workplace spirituality is predominantly shaped around belief in God, and it helps provide hope and reassurance to patients.

**Table 5.** Consensus items and average Z-scores ( $N = 40$ ).

Q-statement	Z-scores
Q14	I believe in the existence of God. 1.46

## 4. Discussion

This study was conducted using the Q methodology to ascertain perceptions of workplace spirituality among nurses, identify the characteristics of each type, and provide foundational data to assist in promoting holistic nursing care and developing programs based on the types of workplace spirituality. As a result of the study, perceptions of workplace spirituality among nurses were categorized into four types: 'reflective,' 'nursing-oriented,' 'relationship-oriented,' and 'spirituality-oriented.' and characteristics of each type are discussed as follows.

Type 1 is labeled as 'reflective,' as it centers on self-reflection regarding workplace spirituality. Nurses participating in the study acknowledged that workplace spirituality entails ongoing improvement by addressing deficiencies and delivering professional nursing care through continuous self-evaluation and reflection on their nursing practices. Such characteristics are supported by the study of Do et al. (2021), where contemplation led to reflection on the meaning of nursing actions, fostering a sense of fulfillment in nursing by having a purpose in nursing, and enhancing nursing competence. Similarly, in the study by Jang and Kim (2014), reflection among nurses was identified as a crucial factor in self-assessment, enabling nurses to solidify their beliefs and convictions. According to Patel and Metersky (2022), reflection among nurses involves learning through experiences and integrating those experiences into

patient care. In fact, the process of self-reflection involves discovering and understanding the purpose of one's life, leading to the pursuit of meaning (Hong and Choi, 2021).

Hence, in order for nurses to deliver holistic nursing care, it is essential for them to engage in self-reflection, contemplating life's challenges and bringing clarity to its inherent meaning. Through these results, there is a need for nurses to enhance their professionalism and engage in reflective practices. Therefore, it is deemed meaningful for nurses to allocate dedicated time for self-reflection, enabling them to evaluate and contemplate their own actions and decisions while establishing their workplace spirituality. Furthermore, it is essential to organize mentoring programs at the organizational level to encourage reflection in diverse nursing situations.

Reflecting on workplace spirituality can provide nurses with a sense of purpose in their profession, considering the care of patients as a calling, ultimately assisting nurses in redefining the purpose of life through nursing and fostering self-reflection. As such, it is necessary for nurses to engage in continuous reflection for self-examination, introspection, and gaining insights into their lives. Additionally, there is a necessity to cultivate a work environment conducive to nurses establishing workplace spirituality through reflection, coupled with the provision of educational programs to enhance their reflective abilities.

Type 2 is designated as 'nursing-oriented,' emphasizing the importance of expressing gratitude and experiencing joy in interactions with patients through workplace spirituality, thereby enhancing the quality of care. Such characteristics align with the findings of Lee and Wee's study (2023), which confirmed that nurses expressing gratitude in patient care can attribute positive meaning to their nursing actions and cultivate an optimistic perspective. Similarly, a study conducted on nurses in the intensive care unit (Park et al., 2021) highlighted that empathy is fundamental to patient care, emphasizing that deriving satisfaction from patient care can be achieved through a comprehensive understanding of the patient's surrounding environment. This is consistent with the findings of Song and Yang (2022) that nurses experience gratitude and a sense of happiness through nursing, and the positive impact received during the patient care process enhances the quality of nursing care. Song and Yang (2022) reported in their study with clinical nurses that training exercises such as writing gratitude journals or creating lists of things to be thankful for could contribute to improving one's disposition towards gratitude. From these findings, it becomes evident that nurse's express gratitude to patients through their nursing practices and, in doing so, experience positive impacts. Therefore, hospitals should create an atmosphere where nurses can express gratitude to patients, enabling them to provide care with a sense of gratitude. It is also essential for hospitals to conduct emotional support and communication training for nurses.

Type 3 is named as 'relationship-oriented,' and nurses of this type, through workplace spirituality, attribute meaning to the spiritual values and beliefs of patients, emphasizing the importance of collaborating with multidisciplinary healthcare professionals to provide holistic care for patients. Therefore, this type is perceived to have an impact on the relationship between nurses and patients through nurses' workplace spirituality. Kim and Lee (2018) demonstrated that collaboration among nurses involves having partnerships with the healthcare team, caring for patients

together, and forming companion relationships. Furthermore, in the study by Lee and Kim (2017), communication was identified as crucial in collaborative relationships, similar to the results indicating its impact on improving the quality of patient care. Furthermore, nurses identified themselves as integral community members through spiritual nursing practices. This observation is consistent with the results of Kim and Kim's study (2023), highlighting that nurses, through offering empathy and support to patients, not only enhanced interactions with patients but also demonstrated the impact of teamwork with the medical staff on patient care. Therefore, healthcare institutions need to create opportunities for various professions to come together to explore specific measures that enhance collaboration through programs aimed at strengthening relationships. Collaboration in healthcare services involves communicating and making decisions together for the well-being of patients (Coluccio and Maguire, 1983), while rude attitudes, negative, or bureaucratic language act as obstacles to collaboration. Because collaboration occurs when tasks are performed effectively, it is crucial to have clear task distribution, specific job introductions within the medical team, and training programs aimed at developing interpersonal skills. Therefore, to improve collaboration, it is crucial to develop a shared understanding of respective responsibilities and foster an attitude that values each other's expertise.

Type 4 is 'spirituality-oriented,' where nurses with religious beliefs recognize workplace spirituality in nursing and exhibit a characteristic of providing care to patients based on their faith. Therefore, this type of workplace spirituality in nursing instills hope and courage in nurses, enabling them to provide trust and hope to patients. These characteristics resonate with the outcomes of Hong and Lim's (2017) study, indicating that workplace spirituality, by fostering the recognition of personal values and enhancing individual job competence through a sense of purpose, significantly impacts the quality of care. Religious beliefs play a role in reducing burnout among healthcare providers (Jo et al., 2010) and are associated with professional commitment. Furthermore, healthcare providers were found to be influenced by religion in their profession, recognizing a sense of professional commitment (Kim, 2010). Individuals, as they engage in work within the workplace, strive not only to shape their integrated values through meaningful endeavors but also to live purposefully within the community (Ashmos and Duchon, 2000). Consequently, it is necessary to provide workplace spirituality training programs for nurses to clarify the meaning of their work and to recognize themselves as part of the community through their relationships with colleagues as well as spiritual education programs to enhance the understanding of spiritual nursing. Moreover, hospitals should respect various religions, integrate different religions, and seek ways to support spiritual values, allowing nurses to integrate their own beliefs and the meaning of nursing.

The common belief among the four identified types in this study was found to be 'I believe in the existence of God.' Nurses recognized that workplace spirituality is formed around belief in God, providing nursing care that gives hope and comfort to patients. This suggests that spiritual beliefs are recognized as important elements in the establishment of nurses' workplace spirituality. Nurses should firmly establish their beliefs and convictions in the workplace and maintain collaborative relationships with healthcare professionals. Additionally, nurses need to engage in self-reflection, gain insights, express gratitude in patient care, and cultivate workplace spirituality

competencies to form integrated values. It is advisable to consider implementing a workplace spirituality program that integrates nurses' beliefs and values based on studies showing the correlation between nurses' workplace spirituality and nursing competence (Kim and Kim, 2022; Hong and Lim, 2017) and proposing methods such as regular reflection workshops (Hong and Lim, 2017) and spiritual nursing education programs (Jo et al., 2010).

## 5. Conclusion and recommendations

This study was conducted to explore the types of perceptions of workplace spirituality among nurses, analyze the characteristics of each type, and provide foundational data for the development of programs based on nurses' workplace spirituality. The research results revealed four types of nurses' perceptions of workplace spirituality: 'reflective type,' 'nursing-oriented type,' 'relationship-oriented type,' and 'spirituality-oriented type,' the four identified types in this study categorize nurses' perceptions of workplace spirituality, offering foundational insights for the planning of workplace spirituality programs. This study's significance lies in providing essential information for the development of programs designed to establish workplace spirituality and deliver comprehensive nursing care, taking into account each unique characteristic. The limitations of this study underscore the need for caution in generalizing findings, as it focused on the subjective aspects of workplace spirituality among nurses in a specific region.

Based on the results of this study, the following recommendations are suggested. First, there is a need for the development of differentiated intervention programs based on nurses' perception types of workplace spirituality, and further research to validate their effectiveness. Second, it is recommended to conduct repeated studies to confirm nurses' perceptions of workplace spirituality by distinguishing them according to their career stages. Third, a qualitative study is proposed to deeply explore nurses' workplace spirituality.

**Author contributions:** Conceptualization, JHC, SJP and JWS; methodology, JHC and SJP; software, SJP and JWS; validation, SJP, JHC and JWS; formal analysis, JHC and JWS; investigation, JHC and JWS; resources, JHC and SJP; data curation, JHC and SJP; writing—original draft preparation, JHC, SJP and JWS; writing—review and editing, JHC, SJP and JWS; visualization, JHC and JWS; supervision, JHC and JWS; project administration, JHC and SJP; funding acquisition, JHC, SJP and JWS. All authors have read and agreed to the published version of the manuscript.

**Conflict of interest:** The authors declare no conflict of interest.

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