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ORIGINAL

Conscience Intelligence and Its Relationship to Quality of Work Life Among Registered Nurses: A Cross-Sectional Analytical Study

Conciencia, Inteligencia y su Relación con la Calidad de Vida Laboral entre Enfermeras Registradas: Un Estudio Analítico Transversal

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ABSTRACT

Introduction: quality of work life (QWL) plays a central role in nursing satisfaction and retention. Conscience intelligence (CI) reflecting ethical awareness and cognitive abilities may influence workplace experiences, yet their relationship with QWL remains unclear.
Aim: to examine the relationship between conscience intelligence and QWL among registered nurses and identify which dimensions of conscience intelligence are most strongly associated with overall work-life quality.
Method: a cross-sectional analytical design was used. A convenience sample of 293 registered nurses from a major healthcare institution completed self-report questionnaires assessing demographic characteristics, (CI), and (QNWL). Data was analyzed using descriptive statistics and Pearson correlation coefficients.
Results: nurses reported moderate-to-high levels of CI (Mean = 3,29) and QNWL (Mean = 3,83). There was no significant correlation between total CI and total QNWL ($r = -0,004$, $p > 0,05$). However, some dimensional relationships emerged. The spiritual direction and psychological dimensions of CI showed significant negative correlations with the work design dimension of QNWL ($r = -0,241$, $p < 0,01$; $r = -0,260$, $p < 0,01$), while both were positively correlated with the work world dimension.
Conclusions: the findings indicate that the overall relationship between CI and QWL is limited. The absence of a direct association suggests that personal capacities such as CI may not outweigh organizational and systemic conditions affecting QNWL. Still, the significant dimensional links point to a more complex dynamic: nurses with greater spiritual and psychological awareness may be more critical of job design yet find more meaning and connection within the broader professional environment.

Keywords: Conscience Intelligence; Quality of Work Life; Registered Nurses; Cross-Sectional Study; Job Satisfaction; Moral Distress; Organizational Factors; Work Design.

RESUMEN

Introducción: la calidad de vida laboral (QWL) es esencial para la satisfacción y retención de las enfermeras. La conciencia y la inteligencia que reflejan la conciencia ética y las capacidades cognitivas pueden influir en las experiencias laborales de las enfermeras, aunque su relación con la QWL no está bien estudiada.
Objetivo: explorar la relación entre la inteligencia de la conciencia y la QWL, e identificar qué dimensiones de la inteligencia de la conciencia se asocian más fuertemente con la calidad global de vida laboral.

Método: se utilizó un diseño analítico transversal. Una muestra por conveniencia de 293 enfermeras completó cuestionarios autoadministrados sobre características demográficas, Inteligencia de la Conciencia (CI) y Calidad de Vida Laboral de Enfermería (QNWL). Los datos se analizaron mediante estadísticas descriptivas y correlaciones de Pearson.
Resultados: las enfermeras mostraron niveles moderados a altos de CI (Media = 3,29) y QNWL (Media = 3,83). No se encontró correlación significativa entre CI total y QNWL total ($r = -0,004$, $p > 0,05$). Sin embargo, las dimensiones de dirección espiritual y psicológica de la CI se correlacionaron negativamente con la dimensión de diseño del trabajo de QNWL ($r = -0,241$, $p < 0,01$; $r = -0,260$, $p < 0,01$) y positivamente con la dimensión del mundo laboral.
Conclusiones: la relación general entre inteligencia de la conciencia y QWL es limitada, lo que sugiere que los rasgos personales por sí solos pueden no contrarrestar la influencia organizacional sobre la QNWL. No obstante, los hallazgos dimensionales muestran un patrón más complejo: las enfermeras con mayor conciencia espiritual y psicológica pueden ser más críticas con el diseño del trabajo, pero encuentran mayor sentido en el entorno profesional más amplio.

Palabras clave: Inteligencia de la Conciencia; Calidad de Vida Laboral; Enfermeras Tituladas; Estudio Transversal; Satisfacción Laboral; Angustia Moral; Factores Organizativos; Diseño del Trabajo.

INTRODUCTION

The world's healthcare system faces an unprecedented crisis: a critical shortage of registered nurses, culminating in alarming rates of burnout and turnover. This problem transcends staffing; it threatens the very foundations of patient safety and the viability of our healthcare systems.[1,2] Projections for the US healthcare system are particularly alarming, pointing toward a potential shortage of over 200 000 nurses annually by the end of the 2030s.[3] Compounding this issue of turnover is the widespread problem of burnout, a condition marked by exhaustion, cynicism, and a sense of being unaccomplished that affects the well-being and performance of nurses.[4] The immense expense of this turnover necessitates a deeper and more comprehensive understanding of the professional nurse's experience to develop practical, large-scale strategies.[5]

Central to this experience is the concept of Quality of Nursing Work Life (QNWL), an inclusive construct that extends beyond job satisfaction to focus on the nurse's overall satisfaction with their job, the work environment, and the balance between professional and personal life.[6] A nurse with a high QNWL demonstrates greater job commitment, lower turnover intention, and, most importantly, delivers better patient outcomes.[7,8] Research indicates that better work environments affect rates of mortality and failure-to-rescue,[9] highlighting that improving QNWL is not just an employee well-being activity; it is an absolute patient safety requirement.[10]

Traditionally, research and interventions have emphasized external, organizational factors contributing to QNWL, such as leadership and staffing patterns.[11] While undeniably important, this focus may have led to the neglect of equally important internal, subjective aspects of being a nurse. One such under-researched internal factor could be Conscience Intelligence (CI). CI encompasses the broad aspects of meaningfully incorporating spirituality, empathy, and psychological-resilience skills, guided by a universal moral principle.[12,13] It represents the internal infrastructure and decision-making pattern of the nurse's conscience. While allied with emotional and moral reasoning, CI appears distinctively more 'whole nurse' oriented.

A natural assumption is that nurses with an advanced conscience possess a higher quality of work life. An empathic nurse with self-control and an advanced moral conscience might better manage the external turbulence of their job and derive meaning from their daily tasks.[14] Nevertheless, this plausible relationship remains unexplored, creating a significant void in the literature that this research aims to fill.

Quality of Nursing Work Life (QNWL)

Quality of Nursing Work Life is a complex phenomenon, defined as an individual nurse's perception of how well their working environment enables them to attain personal and professional goals, satisfy their needs, and contribute to their organization and community.[6] Poor QNWL is a central contributor to the combined epidemics of nurse burnout and turnover.[7,11]

Based on the framework adapted from Brooks et al.[6] QNWL is typically broken into four key dimensions. The first is Work Life, which captures general job satisfaction and perceived work-life balance.[15] The second, Work Design, refers to structural aspects like workload, staffing, and autonomy, which are major sources of stress.[8] The third dimension, Work Context, encompasses the immediate social environment, including relationships

with supervisors and colleagues.[6] The final dimension, Work World, relates to the broader context of nursing as a profession, including its societal image and professional pride, which is tied to professional identity.[16] While determinants like age and experience are studied,[17] the role of the nurse's inner psychological and moral world remains largely uncharted.

Conscience Intelligence (CI)

Conscience Intelligence is an emergent idea in nursing, defined as an advanced form of personal resources that directs behavior based on an internal locus of ethics and empathy. In nursing, it signifies not just knowing the right action, but the determination to do it under pressure. CI comprises four domains, each well-grounded in literature. The first is Spiritual Directions, which involves seeking meaning and purpose in one's work and is a key mechanism for preventing burnout.[14,18,19] The second, the Emotional and Social domain, encompasses the established concept of emotional intelligence (EI), which correlates with enhanced patient care.[20] The third domain is Psychological, referring to personality traits that develop intrinsic problem-solving skills under pressure.[21,22] The final domain, Moral Universal, involves the development of ethical practice and moral courage, which is linked to nursing autonomy and performance,[23,24,25,26] though it can also be associated with experiences of moral distress.[25]

Theoretical Link between Conscience Intelligence and Quality of Work Life

Though empirical research connecting CI and QNWL is rare, a sound theoretical justification exists. The Job Demands-Resources (JD-R) Model argues that well-being depends on the balance between job demands and resources.[27] CI can be viewed as a valuable individual resource that helps nurses cope with demands and capitalize on opportunities, a concept well-supported by the JD-R model.[28] However, the relationship may be complex. A nurse with a highly developed conscience might be more aware of system failures and ethical compromises, leading to increased frustration and lower QNWL.[24,29] They may be intolerant of average performance due to their higher awareness. This complexity necessitates an empirical examination to avoid relying on theoretical presumptions, a gap this research aims to address.

Aim of the Study

To examine the relationship between conscience intelligence and quality of work life among registered nurses and to identify which dimensions of conscience intelligence are most strongly associated with overall work-life quality.

METHOD

Research Design

This study employed a quantitative research approach, utilizing a descriptive-correlational design. This methodology was deemed appropriate for systematically describing the characteristics of the study variables and examining the relationships among them.

Participants and Sampling

A convenience sampling method was utilized to recruit participants from the population of licensed nursing leaders and staff nurses at Kafr Elsheikh University Hospitals in Egypt. Inclusion criteria stipulated that participants be actively employed at the hospital and possess a minimum of one year of professional work experience. Exclusion criteria encompassed nurses who were on leave, completing an internship, or had terminated their employment.

The required sample size was determined as a priori using G*Power software version 3.1.9.4 [30] for a regression analysis. The analysis was based on an effect size of 0,02 (small), a significance level (α) of 0,05, and a statistical power (1-ß) of 0,80,[31] which indicated a minimum sample of 271 participants. A total of 293 nurses from various hospital departments provided complete and usable questionnaires for the final analysis.

Instruments

Data were collected using a self-administered questionnaire comprising three distinct sections. The first section elicited participants' demographic information, including age, gender, marital status, number of children, educational background, and years of professional experience.

The second section employed the Conscientious Intelligence Scale developed by Aktı et al.[32] This 32-item instrument is designed to measure individuals' awareness of and behaviors related to their ethical, moral, and social responsibilities; the developers identified four distinct sub-dimensions of conscientious intelligence: Spiritual Direction (9 items); Emotional/Social Conscientiousness (9 items); Psychological Conscientiousness (8 items); Moral/Universal Conscientiousness (6 items). It utilizes a 5-point Likert scale

(1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree). Higher scores indicate a higher level of conscientious intelligence. The scale demonstrated high internal consistency in the present study (Cronbach's α = 0,888).

The CIS has demonstrated robust psychometric properties in its initial development and validation studies. The internal consistency of the scale is excellent. The original study reported Cronbach's alpha coefficient of .888 for the total 32-item scale. The alpha coefficients for the four sub-dimensions were also reported to be satisfactory, ranging from 0,71 to 0,84. The construct validity of the scale was established through exploratory and confirmatory factor analyses, which confirmed the four-factor structure. The scale has also shown convergent and discriminant validity with related constructs.

The third section utilized the Quality of Nursing Work Life (QNWL) Scale to evaluate nurses' perceptions of their work environment and professional satisfaction. This instrument consists of 42 items organized into four domains: Work Life/Home Life (10 items); Work Design (11 items); Work Context (12 items); Work World (9 items), it uses a 6-point Likert scale (e.g., 1 = Strongly Disagree to 6 = Strongly Agree). This format provides a wider range of responses than a 5-point scale, potentially increasing measurement sensitivity. with higher scores indicating a more favorable perception of the quality of nursing work life. The scale has demonstrated robust psychometric properties, with Cronbach's alpha coefficients for the subscales ranging from 0,88 to 0,92 and has been validated in international contexts.

Data Collection Procedure

After the Ethical approval, an administrative approval obtained from Kafr Elsheikh University Hospital. Data was collected between June 15 and August 2, 2025. A trained research assistant approached eligible nurses in their respective units to explain the study's objectives and procedures.

Informed consent was obtained from all participants prior to their involvement. The voluntary nature of participation and the guarantees of confidentiality and anonymity were emphasized. Consenting nurses were provided with a sealed envelope containing the questionnaire packet, which they completed independently during their work shift. The process took approximately 12–15 minutes. To ensure anonymity, completed questionnaires were returned directly to the research team in sealed envelopes.

Ethical Considerations

Ethical approval for the study was granted by the Research Ethics Committee (KFSIRB400-67) on May 27, 2025. The study was conducted in full accordance with the ethical principles outlined in the Declaration of Helsinki. Official permission was secured from both the Institutional Review Board and the hospital administration. Participants were fully informed about the nature and purpose of the study, and their right to withdraw at any time without consequence was affirmed. All data were anonymized to protect participant privacy and confidentiality.

Statistical Analysis

All statistical analyses were performed using SPSS version 27,0 (IBM Corp., Armonk, NY, USA). Descriptive statistics, including frequencies, percentages, means, and standard deviations (SD), were calculated to summarize participant demographics and the main study variables. The internal consistency reliability of the measurement scales was assessed using Cronbach's alpha coefficient, with values above 0,7 considered acceptable.[33]

Inferential statistics were employed to test the study hypotheses. Independent samples t-tests and one-way analysis of variance (ANOVA) were conducted to examine differences in study variables based on demographic characteristics. Pearson's correlation coefficient (r) was used to explore the bivariate relationships between the primary variables. Finally, a multiple linear regression analysis was performed to determine the predictive capacity of the independent variables on turnover intention. The absence of multicollinearity in the regression model was confirmed through tolerance values (0,46–0,63) and variance inflation factor (VIF) scores (1,58–2,17), which were within acceptable limits. The threshold for statistical significance was set at a p-value of less than 0,05.

RESULTS

This chapter presents a detailed analysis of the data collected from 293 registered nurses to investigate the relationship between conscience intelligence and quality of work life. The findings are organized to first describe the demographic profile of the participants, followed by an examination of the primary levels of the study variables. The chapter then delves into the correlational analyses conducted to explore the relationships between demographic factors, conscience intelligence, and quality of work life, directly addressing the study's research questions.

Table 1. Descriptive statistics of personal characteristics of the study participants

Items		Frequency	Percent	Cumulative Percent
Gender	Male	78	26,6	26,6
	Female	215	73,4	100,0
Marital Status	Single	93	31,7	31,7
	Married	164	56,0	87,7
	Divorced	19	6,5	94,2
	Widowed	17	5,8	100,0
Education	Diploma	60	20,5	20,5
	Bachelor	158	53,9	74,4
	Master	55	18,8	93,2
	PhD	20	6,8	100,0

Table 2. Descriptive statistics of personal characteristics and the study variables

Items		Minimum	Maximum	Mean	Std. Deviation
Age		22	59	33,33	7,086
Children No.		0	5	1,77	1,886
Years of Experience		1	25	10,10	5,606
Conscience Intelligence (CI)	Spiritual Direction	1,89	4,67	3,4626	0,50359
	Emotional Social	1,33	4,44	3,2435	0,46532
	Psychological	2,00	4,38	3,2474	0,46690
	Moral Universal	1,33	4,67	3,1359	0,58894
Total CI		2,22	3,94	3,2859	0,26521
Quality of nursing work life (QNWL)	Work Life	2,40	5,20	3,7382	0,56427
	Work Design	1,91	6,00	3,7971	0,59978
	Work Context	2,33	5,08	3,7193	0,46506
	Work World	2,44	5,67	4,1350	0,59208
QNWL		3,07	4,45	3,8333	0,25129

The demographic characteristics of the sample reveal a predominance of female nurses, who constituted 73,4 % (n=215) of the participants, while males made up 26,6 % (n=78). Regarding marital status, the majority of the nurses were married (56,0 %), followed by those who were single (31,7 %). A smaller percentage of the samples were divorced (6,5 %) or widowed (5,8 %). In terms of educational background, over half of the participants held a bachelor's degree as their highest qualification (53,9 %). This was followed by nurses with a Diploma (20,5 %), a master's degree (18,8 %), and finally, those with a PhD (6,8 %). The ages of the participants ranged from 22 to 59 years, with a mean age of 33,33 years. On average, the nurses had 10,10 years of professional experience and 1,77 children (tables 1 and 2).

To address the initial research questions, the levels of conscience intelligence and quality of work life were assessed. The overall mean score for Conscience Intelligence (CI) was 3,29 (SD=0,27), suggesting a moderate to high level among the sample. When examining the dimensions of CI, Spiritual Direction was the most highly reported dimension (M=3,46, SD=0,50), followed closely by the Psychological (M=3,25 SD=0,47) and Emotional Social (M=3,24 SD=0,47) dimensions. The Moral Universal dimension had the lowest mean score (M=3,14 SD=0,59). For Quality of Nursing Work Life (QNWL), the overall mean score was 3,83 (SD=0,25), indicating a generally positive perception of work-life quality. The dimension of Work World received the highest mean score (M=4,14, SD=0,59), followed by Work Design (M=3,80, SD=0,60), Work Life (M=3,74 SD=0,56), and Work Context (M=3,72 SD=0,47) (table 2).

Table 3. Correlations between personal and professional characteristics and total conscience intelligence

		Age	Gender	Marital Status	Children No.	Experience Years	Education	Spiritual Direction	Emotional Social	Psychological	Moral Universal
Gender	Pearson Correlation	-0,022	1								
	Sig. (2-tailed)	0,704									
Marital Status	Pearson Correlation	0,106	-0,016	1							
	Sig. (2-tailed)	0,070	0,779								
Children No.	Pearson Correlation	0,084	0,065	0,434**	1						
	Sig. (2-tailed)	0,154	0,266	0,000							
Experience Years	Pearson Correlation	0,888**	-0,029	0,156**	0,069	1					
	Sig. (2-tailed)	0,000	0,624	0,007	0,240						
Education	Pearson Correlation	0,351**	-0,140*	0,174**	0,162**	0,341**	1				
	Sig. (2-tailed)	0,000	0,016	0,003	0,005	0,000					
Spiritual Direction	Pearson Correlation	0,124*	-0,007	-0,089	-0,041	0,129*	-0,171**	1			
	Sig. (2-tailed)	0,033	0,902	0,127	0,482	0,027	0,003				
Emotional Social	Pearson Correlation	0,005	0,002	-0,019	0,001	0,088	0,032	0,019	1		
	Sig. (2-tailed)	0,938	0,977	0,741	0,988	0,134	0,589	0,745			
Psychological	Pearson Correlation	0,122*	0,051	-0,122*	-0,114	0,158**	-0,140*	0,264**	0,099	1	
	Sig. (2-tailed)	0,036	0,389	0,037	0,051	0,007	0,017	0,000	0,092		
Moral Universal	Pearson Correlation	-0,003	0,060	0,011	0,029	0,041	0,017	-0,105	0,046	-0,124*	1
	Sig. (2-tailed)	0,958	0,302	0,854	0,627	0,484	0,768	0,073	0,429	0,035	
CI	Pearson Correlation	0,121*	0,044	-0,106	-0,060	0,199**	-0,130*	0,616**	0,566**	0,579**	0,329**
	Sig. (2-tailed)	0,038	0,449	0,069	0,307	0,001	0,026	0,000	0,000	0,000	0,000

Note: **. Correlation is significant at the 0,01 level (2-tailed); *. Correlation is significant at the 0,05 level (2-tailed).

Table 4. Correlations between personal and professional characteristics and total of QNWL

		Age	Gender	Marital Status	Children No.	Experience Years	Education	Work Life	Work Design	Work Context	Work World
Gender	Pearson Correlation	-0,022	1								
	Sig. (2-tailed)	0,704									
Marital Status	Pearson Correlation	0,106	-0,016	1							
	Sig. (2-tailed)	0,070	0,779								
Children No.	Pearson Correlation	0,084	0,065	0,434**	1						
	Sig. (2-tailed)	0,154	0,266	0,000							
Experience Years	Pearson Correlation	0,888**	-0,029	0,156**	0,069	1					
	Sig. (2-tailed)	0,000	0,624	0,007	0,240						
Education	Pearson Correlation	0,351**	-0,140*	0,174**	0,162**	0,341**	1				
	Sig. (2-tailed)	0,000	0,016	0,003	0,005	0,000					
WorkLife	Pearson Correlation	0,132*	-0,025	-0,132*	-0,026	0,112	-0,039	1			
	Sig. (2-tailed)	0,024	0,671	0,024	0,661	0,056	0,511				
Work Design	Pearson Correlation	-0,206**	-0,014	-0,007	0,022	-0,166**	-0,072	-0,133*	1		
	Sig. (2-tailed)	0,000	0,809	0,906	0,703	0,004	0,220	0,023			
Work Context	Pearson Correlation	0,000	0,010	0,001	-0,023	0,033	-0,002	-0,092	0,093	1	
	Sig. (2-tailed)	0,997	0,864	0,986	0,698	0,569	0,968	0,117	0,111		
Work World	Pearson Correlation	0,019	0,082	0,072	0,015	0,032	-0,188**	0,048	-0,260**	0,011	1
	Sig. (2-tailed)	0,744	0,159	0,219	0,800	0,587	0,001	0,412	0,000	0,852	
QNWL	Pearson Correlation	-0,049	0,025	-0,038	-0,004	-0,010	-0,162**	0,427**	0,472**	0,544**	0,374**
	Sig. (2-tailed)	0,405	0,673	0,519	0,941	0,862	0,006	0,000	0,000	0,000	0,000

Note: **. Correlation is significant at the 0,01 level (2-tailed); *. Correlation is significant at the 0,05 level (2-tailed).

Table 5. Correlations between total means of the study variables (No. 293)

		Spiritual Direction	Emotional Social	Psychological	Moral Universal	CI	Work Life	Work Design	Work Context	Work World
Emotional/Social	Pearson Correlation	0,019	1							
	Sig. (2-tailed)	0,745								
Psychological	Pearson Correlation	0,264**	0,099	1						
	Sig. (2-tailed)	0,000	0,092							
Moral Universal	Pearson Correlation	-0,105	0,046	-0,124*	1					
	Sig. (2-tailed)	0,073	0,429	0,035						
CI	Pearson Correlation	0,616**	0,566**	0,579**	0,329**	1				
	Sig. (2-tailed)	0,000	0,000	0,000	0,000					
Work Life	Pearson Correlation	-0,006	-0,059	0,100	-0,026	0,001	1			
	Sig. (2-tailed)	0,914	0,310	0,088	0,660	0,993				
Work Design	Pearson Correlation	-0,241**	-0,011	-0,260**	0,185**	-0,171**	-0,133*	1		
	Sig. (2-tailed)	0,000	0,853	0,000	0,001	0,003	0,023			
Work Context	Pearson Correlation	0,035	0,078	-0,049	-0,056	0,012	-0,092	0,093	1	
	Sig. (2-tailed)	0,549	0,184	0,403	0,340	0,833	0,117	0,111		
Work World	Pearson Correlation	0,236**	0,041	0,178**	-0,083	0,190**	0,048	-0,260**	0,011	1
	Sig. (2-tailed)	0,000	0,490	0,002	0,156	0,001	0,412	0,000	0,852	
QNWL	Pearson Correlation	-0,016	0,023	-0,045	0,031	-0,004	0,427**	0,472**	0,544**	0,374**
	Sig. (2-tailed)	0,780	0,695	0,447	0,602	0,942	0,000	0,000	0,000	0,000

Note: **. Correlation is significant at the 0,01 level (2-tailed); *. Correlation is significant at the 0,05 level (2-tailed).

Further analysis explored the correlations between personal and professional characteristics and the main study variables. For Conscience Intelligence, several significant relationships emerged. Both age and years of experience, which were strongly correlated with each other, showed significant positive correlations with the Spiritual Direction and Psychological dimensions, as well as with the total CI score. This suggests that as nurses get older and gain more experience, their sense of spiritual direction and psychological awareness within the context of conscience intelligence may increase. Interestingly, higher educational attainment was significantly negatively correlated with the total CI score and the Spiritual Direction dimension, implying that nurses with higher degrees reported slightly lower levels in these areas (table 3).

In contrast, the correlations between demographic factors and Quality of Nursing Work Life (QNWL) were less pronounced. Education was the only variable significantly correlated with the total QNWL score, and this relationship was negative, indicating that nurses with higher education levels reported a slightly lower quality of work life. Age and years of experience showed a mixed association with the QNWL dimensions; they were positively correlated with the Work Life dimension but negatively correlated with Work Design, suggesting that older, more experienced nurses may feel better about their general work life but less satisfied with the structural design of their jobs (table 4).

The central analysis focused on the relationship between conscience intelligence and quality of work life to test the primary hypothesis. Contrary to Hypothesis H_1, which proposed a positive relationship, the Pearson correlation between the total Conscience Intelligence score and the total Quality of Nursing Work Life score was not statistically significant ($r=-0,004$, $p>0,05$). This key finding indicates that, at a holistic level, there is no direct linear relationship between a nurse's overall conscience intelligence and their overall perceived quality of work life (table 5).

However, a more nuanced picture emerged when examining the relationships between the specific dimensions of the two constructs. Several significant correlations were found, revealing a complex interplay. For instance, the Spiritual Direction and Psychological dimensions of CI were both significantly and negatively correlated with the Work Design dimension of QNWL, suggesting that nurses with higher spiritual or psychological conscience may be more critical of their job's design. Conversely, these same two CI dimensions were positively correlated with the Work World dimension, indicating that higher scores in these areas were associated with a more positive perception of the broader work environment and context. Furthermore, the Moral Universal dimension of CI was positively correlated with Work Design. These dimensional findings, while not supporting the main hypothesis, highlight that specific aspects of conscience intelligence are indeed linked to specific facets of a nurse's work life quality. In summary, while the overall constructions of CI and QNWL are not directly related, their underlying components exhibit significant and meaningful associations that warrant further exploration (table 5).

DISCUSSION

The primary goal of the study is to provide a comprehensive understanding of the complex relationship between conscience intelligence and quality of work life among registered nurses. The results indicated that nurses reported moderate to high levels of both constructs. However, no statistically significant relationship was found between the total CI and total QNWL scores. Instead, the analysis revealed a more intricate picture, with significant correlations emerging between specific dimensions of CI and QNWL, as well as notable relationships with demographic variables like age, experience, and education. The central, and perhaps most critical, finding is the disconnect between an individual's internal moral compass and their perception of the external work environment.

The finding that nurses reported a high level of Spiritual Direction as a dimension of CI ($M=3,46$) aligns with the nature of the nursing profession. Nursing is often viewed as a vocation, a calling that extends beyond technical tasks to encompass holistic care and human connection.[13] This spiritual dimension may not necessarily be religious but could reflect a deep-seated search for meaning and purpose in their work, which is a crucial coping mechanism in high-stress healthcare environments.[14] Similarly, the moderate-to-high levels of Psychological and Emotional Social intelligence suggest that nurses are generally self-aware and adept at navigating the interpersonal demands of their role.

For QNWL, the highest-rated dimension was Work World ($M=4,14$), which typically encompasses factors like professional pride, relationships with colleagues, and the societal image of nursing. This is a positive indicator, suggesting that despite systemic challenges, nurses derive a strong sense of identity and community from their profession.[34,35] However, the lower scores for Work Design ($M=3,80$) and Work Context ($M=3,72$) hint at underlying issues with structural and organizational factors, such as staffing, policies, and workflow efficiency, which are consistently cited as major sources of nurse dissatisfaction in the literature.[8]

The most significant and unexpected finding was the non-significant correlation between total Conscience Intelligence and total Quality of Nursing Work Life. This directly refutes H_1 and challenges the intuitive assumption that a more conscientious nurse would naturally experience a better work life. A potential explanation lies in

the distinction between personal resources and job demands, as conceptualized in the Job Demands-Resources (JD-R) model.[27] Conscience intelligence can be viewed as a powerful internal asset that helps individuals manage their work. However, QNWL is heavily dependent on job resources such as autonomy and supportive leadership, and job demands such as workload and emotional strain. It is plausible that a nurse can possess a highly developed conscience but still work in an environment with overwhelming demands and insufficient resources, leading to a poor QNWL despite their personal attributes. The system may simply be too powerful a factor for individual conscience to overcome.

While the overall constructs were unrelated, the significant correlations between their dimensions provide deeper insight. The negative correlation between the Spiritual and Psychological dimensions of CI and the Work Design dimension of QNWL is particularly revealing. This suggests that nurses who are more spiritually attuned and psychologically aware are *more critical* of their work environment's design. This finding can be interpreted through the lens of moral distress. A nurse with a highly developed conscience may be more acutely aware of the gap between the ethical care they aspire to provide, and the realities imposed by a poorly designed system (e.g., unsafe staffing ratios, inefficient workflows).[24] Their heightened awareness makes them less tolerant of systemic flaws, resulting in a lower rating of Work Design.

Conversely, the positive correlation between these same CI dimensions (Spiritual, Psychological) and the Work World dimension supports the idea that these nurses find profound meaning and connection in the core aspects of their profession. They value their relationships with patients and colleagues and feel a strong sense of professional identity, which buffers them against the negative aspects of their job.[12] This highlights a critical duality: a nurse may simultaneously love work (Work World) while detesting the job (Work Design).

The significant positive correlations between age, years of experience, and several dimensions of CI are logical and align with theories of professional maturation. As nurses age and gain experience, they encounter more complex ethical dilemmas and interpersonal situations, which can foster the development of their conscience, self-awareness, and moral reasoning.[34] Experience provides the context for refining one's internal ethical framework.

More puzzling, however, is the negative correlation between education and both total CI and total QNWL. One potential explanation is that higher education raises nurses' expectations and awareness of best practices. Nurses with advanced degrees (Master's, PhD) are trained in evidence-based practice, systems thinking, and leadership. This advanced knowledge may make them more critical of the discrepancies between theoretical ideals and the day-to-day realities of clinical practice.[17] They are more likely to recognize organizational inefficiencies and policy failures, leading to a lower perception of their work life quality. Similarly, their focus on empirical and scientific knowledge might lead them to undervalue or score lower on more introspective concepts like "Spiritual Direction" within a CI scale.

Implications for Nursing Practice and Management

The findings of this study have critical implications. For nurse leaders and hospital administrators, the key takeaway is that focusing solely on individual nurse attributes like "conscience" is insufficient to improve QNWL. The primary levers for improvement are systemic. The strong criticism of "Work Design" from even the most conscientious nurses signals an urgent need to address structural issues. This includes Redesigning Workflows, involving frontline nurses in the creation of more efficient and patient-centered workflows. Addressing Moral Distress, establishing ethics consultation services and creating a culture where nurses can voice concerns without fear of retribution. Enhancing Professional Practice, fostering the "Work World" by supporting professional governance, recognizing achievements, and promoting a positive practice environment.

For nursing education, the results suggest a need to go beyond teaching ethics. Curricula should also focus on developing resilience, advocacy skills, and systems leadership, preparing future nurses not just to be conscientious practitioners, but also to be effective agents of change within complex healthcare systems.

Limitations of the Study

Several limitations must be acknowledged. First, the cross-sectional design precludes any conclusions about causality. Second, the use of self-report measures may introduce social desirability bias, particularly concerning construction like "conscience." Third, the study was conducted in a single sample, which limits the generalizability of the findings to other settings, countries, or healthcare professions. Finally, the study did not account for other potentially influential variables, such as personality traits, organizational culture, or leadership style, which could confound the observed relationships.

Recommendations

Future research should build on these findings in several ways. Qualitative studies are needed to explore the "why" behind the quantitative results, such as why highly educated or spiritually minded nurses rate their work design lower. Longitudinal studies could track how CI and QNWL evolve over a nurse's career and how

major life or career events impact them. Experimental or intervention studies could test whether targeted training in specific CI dimensions (e.g., empathy, self-control) can mitigate the negative effects of a poor work environment. Finally, future quantitative studies should employ more complex statistical models, such as hierarchical regression or structural equation modeling, and including variables like shift type and unit type as moderators of the CI-QNWL relationship.

CONCLUSION

In conclusion, this study reveals that the relationship between conscience intelligence and quality of work life among nurses is not straightforward. The lack of a direct link between the total constructs challenges simplistic assumptions and underscores the powerful influence of organizational and systemic factors. While a nurse's conscience is a vital personal asset, it appears to be insufficient to guarantee a high quality of work life when the work environment itself is perceived as flawed. The most significant finding is the clear signal from nurses, especially those with heightened awareness—that improving the design of their work and the context in which they practice is paramount to enhancing their professional lives. The path forward lies not just in nurturing better nurses, but in building better systems for them to work in.

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