
ORIGINAL ARTICLE

Burnout Syndrome and Work Passion among Thai Nurses: A Study from Bangkok**Vatanya Chiewvattanakul, M.D., Nattha Saisavoey, M.D., Sirirat Kooptiwoot, M.D., Varaporn Sripirom, B.N.S.**

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ABSTRACT

BACKGROUND: Nurse burnout has increased substantially following the COVID-19 pandemic, affecting the mental health and work performance of professional nurses. Work passion, a positive emotional and cognitive state reflecting meaningful professional engagement, may serve as a protective factor against burnout.

OBJECTIVES: This study examined the relationship between burnout and work passion, as well as factors supporting work passion, among professional nurses at Siriraj Hospital, Bangkok, Thailand, during the period from September 2024 to June 2025.

METHODS: A descriptive cross-sectional study was conducted among 363 nurses using a self-administered questionnaire assessing demographic data, burnout, and work passion. Data were analyzed using descriptive statistics, Chi-square tests to examine associations between demographic variables and levels of burnout or work passion. Spearman's rank correlation coefficient to explore relationships among burnout, work passion, and related subfactors.

RESULTS: Burnout was most prevalent in surgical, obstetric, and internal medicine units. Work passion differed significantly by age and education level, with nurses aged over 40 years and those holding a master's degree reporting higher levels of passion. Work passion was negatively correlated with burnout ($r=-0.296$, $p<0.01$). Factors most strongly associated with lower burnout included autonomy, fairness, work-life balance, psychological support, collaboration, role model, recognition and spirituality.

CONCLUSIONS: Work passion helps mitigate burnout among nurses by enhancing psychological resilience and overall well-being. Promoting fairness, supportive work environments, and meaningful collaboration—particularly in high-acuity units—can reduce burnout and foster long-term professional retention and sustainable, high-quality patient care.

KEYWORDS: burnout, nurses, work engagement, psychological factors

INTRODUCTION

Work passion refers to a state of well-being derived from positive cognitive and emotional experiences toward one's organization and professional role. It reflects an individual's genuine interest and affection for their work, along with a sense of meaning, value, and importance attached to their job. This affection functions as an internal driving force that motivates individuals to achieve successful work performance¹. Previous research has highlighted the significance of work passion for enhancing job performance². For example, work passion has been shown to be positively associated with job control, customer service behavior, and constructive organizational behavior³. Building upon this foundation, Kamoltip Lertchaisataporn, M.D., proposed the Physician's Work Passion Model, which was adapted from Zigarmi's conceptualization of work passion⁴. The model identifies key factors influencing physicians' work passion, including: 1. job-related factors, 2. organizational factors, 3. relational factors and 4. individual factors⁵. In contrast, burnout syndrome is defined as a psychological state resulting from chronic occupational stress⁶. Burnout has become increasingly prevalent among healthcare professionals, particularly nurses, due to rising workloads, heightened stress and the demands of working in high-pressure environments. These conditions lead to physical and emotional exhaustion, ultimately contributing to higher levels of burnout⁷.

Based on the literature reviewed above, the importance of organizational strategies to retain nurses has become increasingly evident, particularly in the context of workforce shortages, deteriorating mental health and rising levels of burnout among

nurses following the COVID-19 pandemic. Previous studies have identified several factors that positively influence nurses' work outcomes—including work participation, organizational support, mutual respect, and effective communication—which have been shown to reduce stress and enhance nurses' intention to remain in their organizations⁸⁻¹⁰. However, to date, no studies have specifically examined work passion or investigated the relationship between work passion and burnout among nurses in Thailand. Given evidence suggesting that burnout is closely associated with decreased work passion, as well as with adverse mental health and reduced job performance, further exploration of these constructions is essential. Therefore, the primary objective of this study was to examine the relationship between work passion and burnout among professional nurses. The secondary objective was to identify factors that support work passion to provide empirical evidence for the development of organizational strategies aimed at promoting well-being and reducing burnout among nurses at Siriraj Hospital. In addition, this research is expected to provide valuable insights for nursing administrators at Siriraj Hospital in developing evidence-based strategies to promote nurse retention, enhance work effectiveness and support nurses' well-being. In addition, the researchers applied a conceptual framework illustrating the relationship between burnout syndrome and work passion as the main framework of the study to explain and analyze the relationships among the study variables. This framework was developed based on a review of relevant literature and was informed by the conceptual work of Dr. Kamoltip Lertchaisataporn and Associate Professor Dr. Wasita Boonsathorn.

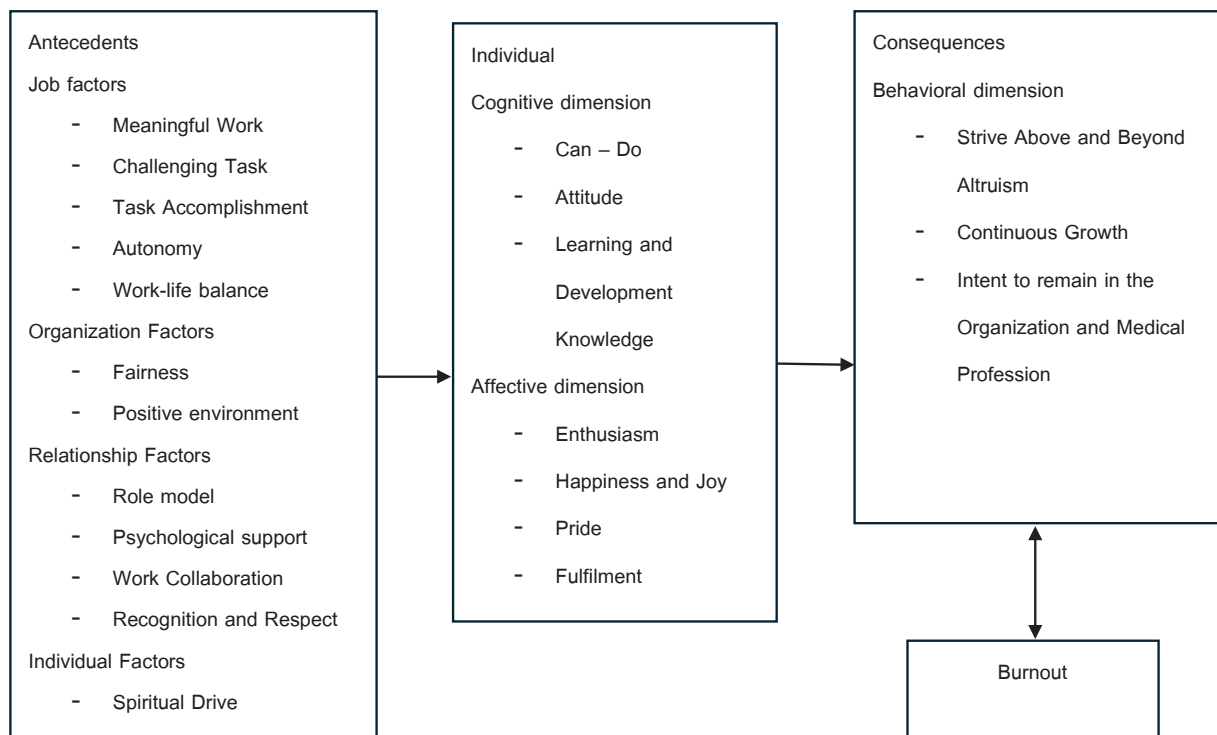


Figure 1 Conceptual Framework Illustrating the Relationship between Burnout Syndrome and Work Passion, Adapted by the Researchers from a Review of Relevant Literature¹².

METHODS

This was a cross-sectional study targeted registered nurses working at Siriraj Hospital, Bangkok. This study was approved by the Siriraj Institutional Review Board (IRB), in compliance with approval document No. Si 678/2024.

Participants

The total nursing population was 3,873 individuals. The sample size was calculated using the formula $n = N / (1 + Ne^2)$, where n represents the sample size, N represents the population size, and e denotes the margin of error, set at 0.05. Substituting the values into the formula yields: $3873 / [1 + 3873(0.05)^2] = 362.56$. Based on this calculation, the required sample size for professional nurses working at Siriraj Hospital was rounded up to 363 participants. Eligible participants were registered nurses working at Siriraj Hospital who voluntarily agreed to participate in the survey. There were no exclusion criteria. Participants had the right to withdraw

from the study at any time without consequence.

Measurement

The instruments used in this study included the Physician Work Passion Inventory and a questionnaire on factors influencing work passion, both developed by Kamoltip Lertchaisataporn, M.D., and Assoc. Prof. Wasita Boonsathorn, Ph.D., and the Burnout Assessment Tool–12 (BAT-12), adapted from the original student-focused BAT by Suttichainimit and Tuikampee.¹¹ Although the instrument has not been formally validated in a working adult population, expert consultation with the instrument's developer confirmed that the BAT-12 conceptual framework is applicable to professional nurses. Minor wording adaptations were made to reflect the nursing context while preserving the original conceptual structure, supporting its suitability for assessment burnout in this study. Permission to use all instruments was obtained prior to data collection. Work passion scores were categorized

based on the overall mean value of all participants ($M=3.55$) ($M=3.6$), following the method of Assoc. Prof. Wasita Boonsathorn¹². Participants scoring <3.55 were classified as having low work passion, whereas those scoring ≥ 3.55 were classified as having high work passion. Burnout levels were classified according to the cut-off values recommended by Schaufeli, De Witte, and Desart¹³. Scores ≤ 2.53 indicated no burnout, scores between 2.54–2.95 indicated risk of burnout, and scores ≥ 2.96 indicated high likelihood of burnout.

Data were collected using self-administered questionnaires distributed between September 2024 and June 2025. The survey was disseminated electronically via Google Forms through internal communication platforms, including SiVwork, official Line groups, institutional social media pages, and official e-mail channels, as well as through paper-based questionnaires. No identifiable personal information was collected.

Statistical analysis

Data were analyzed using descriptive statistics. Chi-square tests were used to examine the associations between demographic variables, burnout and work passion. Spearman's correlation was performed to assess the relationships among burnout, work passion and their related subcomponents. All statistical analyses were conducted using IBM SPSS Statistics version 26, with statistical significance set at $p < 0.01$.

RESULTS

Internal consistency was assessed for all three questionnaires among the 363 participating nurses. The Work Passion Inventory demonstrated a Cronbach's alpha of 0.908, the questionnaire assessing factors influencing work passion yielded a Cronbach's alpha of 0.974, and the Burnout Assessment Tool yielded a Cronbach's alpha of 0.858. These values indicate high internal consistency for all instruments used in this study.

Table 1 Baseline Demographic Variables of Nurses

Variables	Total n=363(%)
Gender, n (%)	
Male	20 (5.5)
Female	343 (94.5)
Age, n (%)	
21-30	126 (34.7)
31-40	77 (21.2)
41-50	114 (31.4)
51+	46 (12.7)
Educational level, n (%)	
Bachelor's degree	285 (78.5)
Master's degree	78 (21.5)
Department, n (%)	
Paediatric	44 (12.1)
Ophthalmology and ENT	17 (4.7)
Primary health care	3 (0.8)

Table 1 Baseline Demographic Variables of Nurses (Continue)

Variables	Total n=363(%)
Operating room nursing	26 (7.2)
Special Patient Care Nursing	19 (5.2)
Cardiovascular	16 (4.4)
Surgical	56 (15.4)
Geriatric medicine	2 (0.6)
Obstetric	67 (18.5)
Internal medicine	64 (17.6)
Human resource	2 (0.6)
Outpatient	15 (4.1)
Radiology	14 (3.9)
Research and information	2 (0.6)
Nursing assistant training	16 (4.4)

The general characteristics of the study sample, comprising 363 professional nurses from Siriraj Hospital. Most respondents were female, with ages ranging from 21 to 61 years. The most prevalent age groups were 21–30 years and 41–50

years. The majority held a bachelor's degree and were employed across various hospital departments. The departments with the highest proportions of professional nurses were internal medicine, obstetrics and gynecology, and pediatric department (Table 1).

Table 2 Prevalence of Burnout by Department

Department	No burnout n=193 (%)	Risk of burnout n=90 (%)	Burnout likely n=80 (%)
Surgical	20 (35.7)	16 (28.5)	20 (35.7)
Obstetric	38 (56.7)	15 (22.3)	14 (20.8)
Internal medicine	40 (62.5)	12 (18.7)	12 (18.7)
Operating room nursing	16 (61.5)	5 (19.2)	5 (19.2)
Special Patient Care Nursing	10 (52.6)	5 (26)	4 (21)
Cardiovascular	8 (50)	4 (25)	4 (25)
Paediatric	28 (63.6)	13 (29.5)	3 (6.8)
Geriatric medicine	1 (50)	0 (0)	1 (50)
Ophthalmology and ENT	9 (52.9)	3 (17.6)	5 (29.4)
Primary health care	1 (33.3)	1 (33.3)	1 (33.3)
Human resource	1 (50)	1 (50)	0 (0)
Outpatient	8 (53.3)	4 (26.6)	3 (20)
Radiology	4 (28.5)	5 (35.7)	5 (35.7)
Research and information	1 (50)	0 (0)	1 (50)
Nursing assistant training	8 (50)	6 (37.5)	2 (12.6)

The highest proportion of nurses with a high likelihood of burnout (20–30%) was observed among those working in surgical, obstetric, and medical units, although differences across units were not statistically significant. Chi-square tests were conducted to examine associations between demographic variables, burnout, and work passion, it was found that younger nurses (aged 21–40 years) reported significantly lower levels of work passion

compared to older age groups ($p<0.05$). High work passion was observed in 36% of nurses aged 21–30 years and 40% of those aged 31–40 years, compared with 69% in the 41–50-year group and 65% among those aged over 51 years. In addition, nurses holding a master's degree demonstrated significantly higher levels of work passion than those with a bachelor's degree (73% vs. 45%, $p<0.05$) (Table 2).

Table 3 Factors Associated with Burnout and Work Passion

	Work passion	Job factors			
		VA	TA	AU	WB
Burnout	0.296**	-0.22**	0.299**	0.362**	0.322**
Work passion		0.546**	0.488**	0.485*	0.382**
		Organization factors			
		FA	CO		
Burnout		0.323**	0.377**		
Work passion		0.475**	0.416**		
		Relational factors			
		PSY	RM	RR	
Burnout		0.344**	0.362**	0.399**	
Work passion		0.372**	0.477**	0.498**	
		Individual factors			
		SP			
Burnout		0.346**			
Work passion		0.580**			

** p -value<0.01

Abbreviations: VA=Valuable work; TA=Task accomplishment; AU=Autonomy; WB=Work-life balance; FA=Fairness; CO=Collaborative environment; PSY=Psychological support; RM=Role model; RR=Recognition and respect, SP=Spiritual drive.

The correlations between burnout and factors associated with work passion. Spearman's correlation analysis demonstrated significant negative relationships between burnout and all components of work passion. The strongest inverse correlations were observed for autonomy ($r=-0.362$), work-life balance ($r=-0.322$), collaborative environment ($r=-0.377$), fairness ($r=-0.323$), recognition and respect ($r=-0.399$), role model ($r=-0.362$),

psychological support ($r=-0.344$), and spiritual drive ($r=-0.346$) (Table 3).

Spearman's correlation analysis also revealed significant positive associations between overall work passion and its related factors. Among the job-related factors, valuable work demonstrated the strongest positive correlation with work passion ($r=0.546$), while other factors within the domains of job characteristics, organizational environment, and interpersonal

relationships showed moderate positive correlations. Within the individual factor domain, spiritual drive exhibited the strongest positive association with work passion ($r=0.580$).

DISCUSSION

This study identified several psychosocial and organizational factors that significantly influenced burnout among nurses. Eight key factors demonstrated the strongest negative associations with burnout: autonomy ($r=-0.362$), work-life balance ($r=-0.322$), collaborative environment ($r=-0.377$), fairness ($r=-0.323$), recognition and respect ($r=-0.399$), role model ($r=-0.362$), psychological support ($r=-0.344$), and spiritual drive ($r=-0.346$), with the latter reflecting a sense of meaning and moral value in one's work⁵. The findings of this study are consistent with previous research indicating that several protective factors such as work-life balance¹⁴ and mutual respect in the workplace¹⁵ are inversely associated with burnout. Moreover, the results align with Zigarmi's conceptual framework, which outlines four primary domains influencing work passion: job-related factors, organizational factors, relational factors, and individual factors. These domains correspond closely with the significant factors identified in the present study. Further analysis revealed that the departments with the highest levels of burnout were obstetrics, surgery, and internal medicine—units typically characterized by heavy workloads and staffing limitations. These conditions likely contribute to the heightened emotional exhaustion experienced by nurses in these settings. In contrast to previous studies, reporting higher burnout has been reported among physicians working in minor units, the present study greater burnout among nurses in major departments¹⁶. This discrepancy may reflect differences in organizational hierarchy, workload distribution, and workplace

culture between physicians and nurses, which may shape their experiences of occupational stress and burnout in distinct ways. In addition, the study found that demographic factors such as older age and higher educational attainment were associated with greater work passion. This may be explained by the increased professional privileges commonly afforded to senior or more highly educated nurses, such as being assigned more meaningful responsibilities, greater autonomy, and improved work-life balance (e.g., reduced or no night-shift duties). This study has several limitations. First, its cross-sectional design does not allow for clear determination of causal relationships. Longitudinal or retrospective cohort studies may better elucidate the temporal relationships between influencing factors and burnout. In addition, this study did not apply exclusion criteria related to physical or mental health conditions among the participants, which may have influenced levels of burnout syndrome and work passion. The inability to control for these factors may affect the interpretation of the study findings. Additionally, the relatively small sample sizes in some departments may limit the robustness of chi-square analyses and affect the accuracy of the results. Also, the cut-off score used to classify levels of work passion in this study was based on the sample mean (3.55). Although this approach allows for preliminary interpretation, it may not fully capture nuanced differences across professional subgroups. Future research should aim to develop occupation-specific cut-off criteria particularly for nurses—to enhance the precision and applicability of work passion assessments and should also extend the study to include hospitals in other regions of Thailand to improve the generalizability of the findings. The findings suggest several recommendations for improving organizational structures within nursing units, especially in surgical,

obstetric, and internal medicine wards where burnout levels were found to be highest. Appropriate interventions should focus on increasing job resources and reducing excessive job demands to restore balance in the work environment. Examples include allocating personnel based on actual workload, providing clearer role responsibilities, implementing flexible scheduling systems, fostering a supportive and empathetic organizational climate, and promoting opportunities for advanced education and professional development. These strategies may strengthen work passion and subsequently reduce burnout among nurses, contributing to improved well-being and organizational sustainability.

In the conclusion, this study demonstrates that work passion is negatively associated with burnout among professional nurses and functions as a protective factor that enhances psychological resilience and occupational well-being. The findings support the study's primary objective of clarifying the relationship between work passion and burnout and highlight the importance of promoting fairness and supportive work environments—particularly in

high-workload units—to reduce burnout and foster sustainable workforce retention.

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This study was approved by the Siriraj Institutional Review Board (IRB) No. Si 678/2024, Faculty of Medicine Siriraj Hospital, Mahidol University.

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CONFLICTS OF INTEREST

The author declares no conflict of interest.

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ORIGINAL ARTICLE

ความสัมพันธ์ของภาวะหมดไฟกับพลังขับเคลื่อนในการทำงานและปัจจัยสนับสนุนในพยาบาลวิชาชีพไทย: การศึกษาจากกรุงเทพมหานคร

วทันยา เชี่ยววัฒนะกุล, พ.บ., ญัฏฐา สายสวย, พ.บ., ศิริรัตน์ คุปติวุฒิ, พ.บ., วราพร ศรีภิรมย์, พย.บ.

จิตเวชศาสตร์ คณะแพทยศาสตร์ศิริราชพยาบาล

บทคัดย่อ

ที่มาของปัญหา: ภาวะหมดไฟในการทำงานของพยาบาลเพิ่มขึ้นอย่างมากหลังการระบาดของโควิด-19 ส่งผลกระทบต่อสุขภาพจิตและประสิทธิภาพในการทำงานของพยาบาลวิชาชีพ ความมุ่งมั่นและพลังขับเคลื่อนในการทำงานซึ่งเป็นภาวะทางอารมณ์และความคิดเชิงบวกที่สะท้อนถึงการมีส่วนร่วมในวิชาชีพอย่างมีความหมาย อาจทำหน้าที่เป็นปัจจัยปกป้องภาวะหมดไฟได้

วัตถุประสงค์: ศึกษาความสัมพันธ์ของภาวะหมดไฟกับความมุ่งมั่นและพลังขับเคลื่อนในการทำงานและปัจจัยที่สนับสนุนความมุ่งมั่นและพลังขับเคลื่อนในพยาบาลวิชาชีพ ณ โรงพยาบาลศิริราช กรุงเทพมหานคร ในช่วงระหว่างเดือนกันยายน พ.ศ. 2567 ถึงเดือนมิถุนายน พ.ศ. 2568

วิธีการศึกษา: การวิจัยเป็นแบบพรรณนาเชิงภาคตัดขวางในพยาบาลจำนวน 363 คน ใช้แบบสอบถามประเมินข้อมูลประชากร ภาวะหมดไฟ และความมุ่งมั่นและพลังขับเคลื่อนในการทำงาน วิเคราะห์ข้อมูลด้วยสถิติเชิงพรรณนา การทดสอบไคสแควร์ เพื่อหาความสัมพันธ์ระหว่างตัวแปรกับภาวะหมดไฟหรือความมุ่งมั่น และสหสัมพันธ์ของสเปียร์แมน เพื่อศึกษาความสัมพันธ์ระหว่างภาวะหมดไฟและความมุ่งมั่นในการทำงานและปัจจัยที่เกี่ยวข้อง

ผลการศึกษา: ภาวะหมดไฟสูงสุดในหน่วยศัลยกรรม สูติกรรม และอายุรกรรม ขณะที่อายุและระดับการศึกษามีความแตกต่างของความมุ่งมั่นอย่างมีนัยสำคัญ โดยพยาบาลอายุเกิน 40 ปีและระดับปริญญาโทรายงานว่ามีความมุ่งมั่นสูงกว่า ความมุ่งมั่นและพลังขับเคลื่อนมีความสัมพันธ์ทางลบกับภาวะหมดไฟ ($r=-0.296$, $p<0.01$) ปัจจัยที่สัมพันธ์กับระดับภาวะหมดไฟต่ำ ได้แก่ ความอิสระในการทำงาน ความเป็นธรรม สมดุลชีวิตการทำงาน การสนับสนุนทางจิตใจ สภาพแวดล้อมที่ร่วมมือ การมีแบบอย่างที่ดี การได้รับการยอมรับ และแรงผลักดันทางจิตวิญญาณ

สรุป: ความมุ่งมั่นและพลังขับเคลื่อนในการทำงานมีบทบาทสำคัญในการลดภาวะหมดไฟ โดยการส่งเสริมสภาพแวดล้อมที่เป็นธรรมและสนับสนุนจะช่วยเสริมสุขภาวะและการคงอยู่ในวิชาชีพอย่างยั่งยืน

คำสำคัญ: ภาวะหมดไฟในการทำงาน, พยาบาล, ความผูกพันในการทำงาน, ปัจจัยทางจิตใจ