

**AN ANALYSIS OF STRESS FACTORS AMONG NURSES USING  
FERMATEAN FUZZY STEPWISE WEIGHT ASSESSMENT  
RATIO (SWARA)**

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**Thesis submitted in fulfilment  
of the requirement for the degree of  
Bachelor of Science (Hons.)  
Mathematical Modelling and Analytics**

**College of Computing, Informatics and Mathematics  
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**February 2025**

## **ABSTRACT**

This study investigates the stress factors affecting nurses at Tuanku Ja'afar Hospital, Seremban, utilizing the Fermatean Fuzzy Stepwise Weight Assessment Ratio Analysis (SWARA) methodology. Nurses face various stressors, including low salaries, workloads, workplace inequality, and neglect of rights, which contribute significantly to burnout and reduced job satisfaction. Data were collected from six experts from nurses through interviews and questionnaires to evaluate and rank eight of identified stress factors. The findings reveal that low salary, with a weight of 0.1657, is the most significant stressor, followed by workload 0.1406 and neglect of rights 0.1303. Personal problems, ranked as the least significant factor. This study demonstrates the usefulness of Fermatean Fuzzy SWARA in managing decision-making under uncertainty and provides actionable insights for developing targeted stress management interventions. By addressing these stressors, the research aims to improve nurse's well-being, enhance job satisfaction, and ultimately contribute to better patient care outcomes.

## **ACKNOWLEDGEMENT**

With heartfelt gratitude, I begin by praising Allah for the strength and blessings that have enabled me to complete this research, a key milestone in fulfilling the requirements for the Bachelor of Science in Mathematical Modelling and Analytics (Hons.). This achievement would not have been possible without the invaluable support and encouragement of many individuals, both directly and indirectly.

I extend my deepest appreciation to my supervisor, Miss Nur Solihah Khadhiah binti Abdullah, for her steadfast guidance and insightful advice throughout this journey. I am also grateful to Dr. Atikah binti Salahudin, our Final Year Project (MSP600) lecturer, for her valuable advice and direction, which have greatly contributed to the success of this project.

Lastly to my parents, family, and friends, I am profoundly thankful for their unwavering support and belief in me. Finally, I wish to acknowledge myself for persevering and staying committed to this journey despite the challenges, obstacle and determination.

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