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MOTIVATIONAL DRIVERS FOR SPECIALISATION PURSUIT AMONG PUBLIC MEDICAL PRACTITIONERS IN TERENGGANU: AN SDT APPROACH

SITI NOOR AIN GHAZALI[1] AND MOHD RAHIMI ABDUL HALIM[2]*

[1]Department of Medical Care Quality Branch, Medical Division, Terengganu State Health Department, 5th Floor, Wisma Persekutuan, 20920 Kuala Terengganu, Terengganu, Malaysia. [2]Tourism Management Department, Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia.

**Corresponding author: m.rahimi@umt.edu.my*
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Abstract: This study investigates the factors influencing Malaysian public medical practitioners' intentions to pursue specialisation, focusing on healthcare services in Terengganu. Using Self-Determination Theory (SDT) as a theoretical framework, the research examines the relationships between intrinsic motivation, extrinsic motivation, job satisfaction, Family-Supportive Supervisory Behaviour (FSSB), and Intention to Pursue (ITP) specialisation with Work-Life Balance (WLB) as a moderating variable. The study employed a quantitative approach, with purposive sampling targeting medical officers in the Terengganu public healthcare system. A structured questionnaire was distributed to eligible practitioners across regional hospitals and clinics, yielding 105 responses. One hundred complete responses were filtered for final analysis, representing a response rate of 95%. Analysis using Structural Equation Modelling (SEM) revealed that intrinsic motivation and FSSB significantly influence specialisation intention. WLB was revealed to moderate the relationship between extrinsic motivation and specialisation intention. However, contrary to expectations, neither extrinsic motivation nor job satisfaction demonstrated a significant direct relationship with specialisation intention. These findings provide valuable insights for healthcare administrators and policymakers in developing effective strategies to enhance the importance of fostering intrinsic motivation and providing strong supervisory support while maintaining WLB.

Keywords: Self-Determination Theory (SDT), public healthcare services, intention to pursue, work-life balance.

Introduction

The provision of public medical services is fundamental to healthcare accessibility, particularly in nations implementing universal health coverage systems. Within Malaysia's healthcare framework, public institutions serve as primary providers of essential medical services, offering subsidised care across various specialities (Endeshaw, 2021). Despite the system's comprehensive nature, maintaining adequate specialist coverage presents persistent challenges, especially in regional areas (Rashvinjeet S, 2024).

Terengganu state exemplifies these challenges within Malaysia's healthcare landscape. The current state of public service healthcare faces a critical disparity, as its medical specialities are limited to 69, while the nation has expanded to 127 specialities over the past five years (Health Informatics Centre Planning Division, 2024). This significant gap creates tangible consequences for patients, including extended waiting periods often exceeding six months for specialised consultation and the financial burden to neighbouring states for essential treatments (Endeshaw, 2021). Recent patient outcome data indicate that this limited specialist coverage directly contributes to poorer health outcomes in conditions requiring specialised intervention, particularly in cardiology, neurosurgery, and oncology (Institute Medical Research, 2023).

The situation influencing medical officers' decision to pursue specialisation in Terengganu warrants urgent and systematic investigation. Evidence from comparable regional healthcare systems demonstrates that workload intensity, financial considerations, and institutional support structures significantly impact career advancement decisions in speciality medicine (Neto *et al*., 2019). For instance, hospitals offering structured mentorship programmes and protected research time demonstrate 42% higher speciality training enrolment rates compared to institutions without such a support system (Sangkong *et al*., 2024). In this research context, the Self-Determination Theory (SDT) provides a robust theoretical framework for examining these motivational dynamics, encompassing both intrinsic factors (personal fulfilment, professional growth) and extrinsic factors (compensation, recognition) that drive professional development choices.

The study addresses a critical research gap by examining the determinants of specialisation intention among medical offices in the public healthcare context of Terengganu. A previous study has focused mainly on urban medical centres or university-level hospitals with established speciality programmes, overlooking the distinct challenges faced by public medical professionals in the East Coast regional setting. By investigating how Work-Life Balance (WLB) moderates the relationships between the motivational factors and specialisation intention, this research acknowledges the complex interplay of professional ambition and personal well-being in career decision making (Jeljeli *et al*., 2023). The inclusion of family supportive supervisory behaviour as a key variable reflects emerging evidence that organisational culture significantly influences retention and professional development in public healthcare settings.

The findings from this research will directly inform evidence-based policy development aimed at enhancing specialist workforce capacity in Terengganu and similar regional healthcare systems. By identifying the most influential factors in specialisation decisions, health authorities can strategically allocate resources to address existing barriers and create targeted incentives that effectively increase specialist retention. Furthermore, understanding the moderating effect of WLB will enable the development of sustainable workforce planning that addresses both healthcare delivery needs and the well-being of medical professionals (Ogba *et al*., 2022). As regional systems worldwide face similar challenges in specialist distribution, this study contributes valuable insights to the broader discourse on healthcare equity and workforce development in underserved regions (Zhang *et al*., 2020).

Self-Determination Theory (SDT)

The theory offers a valuable framework for examining human motivation and its effects on personal development and well-being. Developed by Deci and Ryan (2008), SDT highlights three essential psychological needs, including autonomy, competence, and relatedness, that significantly shape both internal and external motivation. However, while researchers have applied SDT extensively in education (Krettenauer & Curren, 2020) and organisational management, its application to healthcare career development decisions remains limited (Jeljeli *et al*., 2023).

The theory is particularly relevant to this study as it helps explain the complex motivational processes that influence medical officers' career choices. Therefore, by addressing both internal drives and external factors, SDT provides an appropriate framework for examining the various elements affecting specialisation intention within healthcare settings.

Intention to Pursue Specialisation (ITP)

The Intention to Pursue (ITP) specialisation reflects a medical professional's commitment to advanced training, shaped by motivational factors, perceived feasibility, and career goals. Studies consistently demonstrate that intention serves as a strong predictor of actual behaviour, particularly in professional development

(Miniard & Cohen, 1981). In this study, the ITP is defined as an individual's deliberate plan or motivation to acquire advanced knowledge, skills, and expertise in a specific field or discipline (Neto *et al*., 2019). This concept is often studied in the context of career development (Rahman, 2020), medical education (Boulton & Farquharson, 2024), and professional training (Jia *et al*., 2023), where individuals commit to deepening the competencies in a niche area. Therefore, understanding this intention is crucial for healthcare workforce planning and development.

Intrinsic Motivation and Specialisation Intention

Intrinsic motivation, characterised by internal drive and personal satisfaction, plays a crucial role in medical officers' career decisions (Sukri *et al*., 2023). Furthermore, previous research indicates that intrinsically motivated healthcare professionals demonstrated more substantial commitment to advancing their medical expertise (Wang *et al*., 2019). Therefore:

H1: Intrinsic motivation positively influences medical officers' intention to pursue speciality training.

Extrinsic Motivation and Specialisation Intention

External rewards and incentives, comprising extrinsic motivation, can significantly impact career decisions (Chaurasia *et al*., 2019). Research by Jia *et al*. (2023) demonstrated that extrinsic motivators complement intrinsic factors in shaping professional development choices. Thus:

H2: Extrinsic motivation positively influences medical officers' intention to pursue speciality training.

Job Satisfaction and Specialisation Intention

Job satisfaction encompasses emotional responses to various workplace aspects, including professional growth opportunities and work environment (Ladelsky & Lee, 2023). Higher satisfaction levels typically correlate with increased career commitment (Sangkong *et al*., 2024). Hence:

H3: Job satisfaction positively influences medical officers' intention to pursue speciality training.

Family-Supportive Supervisory Behaviour and Specialisation Intention

Family-Supportive Supervisory Behaviour (FSSB) encompasses leadership actions that facilitate work-family balance (Gull *et al*., 2023). Research indicates that FSSB positively affects career advancement intentions (Han & McLean, 2020). Hence:

H4: Family-supportive supervisory behaviour positively influences medical officers' intention to pursue speciality training

Moderating Role of Work-Life Balance

WLB represents the effective management of professional and personal responsibilities (Yang & Jo, 2022). This study proposes WLB as a crucial moderator in the relationship between motivational factors and specialisation intention:

H5a: Work-life balance strengthens the positive relationship between intrinsic motivation and specialisation intention.

H5b: Work-life balance strengthens the positive relationship between extrinsic motivation and specialisation intention.

H5c: Work-life balance strengthens the positive relationship between job satisfaction and specialisation intention.

H5d: Work-life balance strengthens the positive relationship between family-supportive supervisory behaviour and specialisation intention.

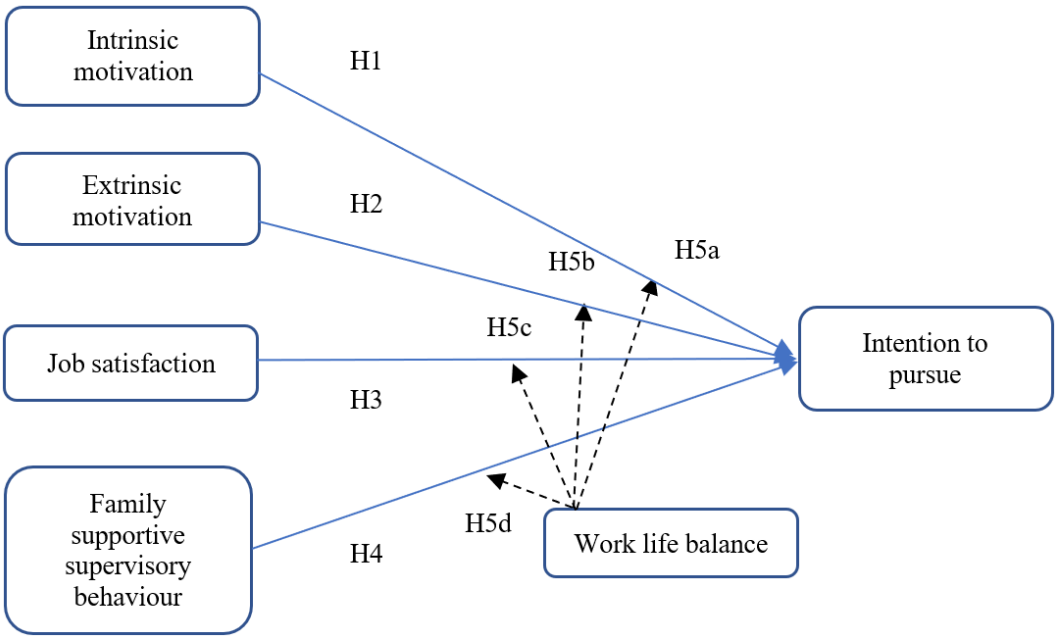

Figure 1: Research framework

Methodology

This study employed a quantitative research design using a structured questionnaire to examine the relationships between motivational factors and ITP specialisation among medical officers. The research instrument was developed to measure six key constructs: Intrinsic motivation, extrinsic motivation, job satisfaction, FSSB, WLB, and ITP specialisation. Note that each construct was measured using validated scales adapted from previous research, with intrinsic motivation comprising five items from (Kuvaas *et al*., 2017), job satisfaction utilising five items from (Maloni *et al*., 2019), and other constructs similarly employing established measurement scales. Consequently, all items were measured on a 5-point Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (5), except for the dependent variable – ITP specialisation – which employed a 7-point scale to enhance response sensitivity.

The study focuses on medical officers working in government hospitals throughout Terengganu public healthcare facilities. Using purposive sampling to ensure appropriate participants, the filtering criteria were designed to select the respondents. Furthermore, the participant was predetermined to be only those medical officers with a minimum of five years of professional experience and a position grade of UD44 and higher who qualified to be the respondent. This sampling approach allows for the collection of data from medical officers with sufficient professional experience relevant to this research context, ensuring the data's validity, reliability, and actual perception.

The data was collected through both online and self-administered approaches. The questionnaire was distributed through the internal organisation's WhatsApp group, email, and direct approach to the respondent. This combined approach improved accessibility and participation rate among respondents. Notably, both distribution methods incorporated strict protocols to safeguard respondent privacy and encourage honest responses. The study generated participation with 105 total submissions received. After reviewing, only 100 responses were valid for the study and represented a 95.2% response rate.

The sample size meets the minimum threshold determined through G-power analysis, which indicated that a minimum of 98 respondents would be sufficient to detect the medium effect sizes with 80% statistical power at

a 0.05 significance level (Hair & Sarstedt, 2019). The total of 100 respondents provides appropriate statistical strength for further analysis. At the same time, the questionnaire was structured to establish valid data from the research construct. The items measuring the intrinsic motivation constructs examined the respondent's internal perception of the intention, and the extrinsic motivation construct assessed how external incentives may influence the outcome behaviour (Krettenauer & Curren, 2020).

Furthermore, job satisfaction items examined contentment with professional roles and FSSB captured the extent of supervisor support in balancing work and family responsibilities. WLB items reflected participants' ability to manage professional and personal demands, while the ITP specialisation measured respondents' aspirations and concrete plans for career advancement through speciality training.

Findings Analysis

The data analysis employed multiple statistical tools to ensure robust results. Initial demographic analysis was conducted using the Statistical Package for the Social Sciences (SPSS) for descriptive statistics. The primary analysis utilised Structural Equation Modelling (SEM) through Smart Partial Least Squares (Smart PLS), chosen for its suitability in predictive studies and theory development (J. F. Hair *et al*., 2019; Ngah *et al*., 2021). To address potential Common Method Variance (CMV) from single-source data collection, procedural remedies were implemented. Procedurally, different anchor scales were used for construct measurement (Podsakoff *et al*., 2012b).

Validity Assessment

The validation process followed a comprehensive 2-step approach (J. Hair *et al*., 2017; Ngah *et al*., 2022), examining both measurement and structural models. Convergent validity was established through factor loadings and composite reliability ($\geq$ 0.7) and Average Variance Extracted (AVE $\geq$ 0.5) assessments. Discriminant validity was confirmed using the Heterotrait-Monotrait (HTMT) ratio of correlations method (Henseler *et al*., 2015), with all values falling below the 0.85 threshold. Moreover, the structural model testing employed bootstrapping with 5,000 resamples to ensure stable estimates of standard errors and confidence intervals for path coefficients (J. Hair *et al*., 2017).

Demographic Profile

The study analysed responses from 100 medical officers in Terengganu's public healthcare system. The demographic profile revealed a predominantly female sample (63%), with the majority of respondents (44%) falling within the age of 26-35. A significant proportion (80%) of the participants were married. Regarding professional experience, the largest segment (33%) reported 11 to 15 years of service, followed by those with more than 15 years (25%), suggesting a sample with substantial clinical experience.

Table 1: Profile demography

Measure	Items	Frequencies	Percentage (%)	Cumulative Percentage (%)
Age	26-35 Years	44	44.0	44.0
	36-45 Years	33	33.0	77.0
	46-55 Years	17	17.0	94.0
	> 55 Years	6	6.0	100.0
Gender	Male	37	37.0	37.0
	Female	63	63.0	100.0

Marital status	Single	20	20.0	20.0
	Married	80	80.0	100.0
Working experience	1-5 Years	19	19.0	19.0
	6-10 Years	23	23.0	42.0
	11-15 Years	33	33.0	75.0
	> 15 Years	25	25.0	100.0
	Total	**100**	**100.0**	

Measurement Model Assessment

The analysis employed a 2-step approach following (J. F. Hair *et al*., 2019), beginning with the measurement model evaluation before proceeding to the structural model. Convergent validity assessment revealed satisfactory results across all constructs. Note that factor loading predominantly exceeded the 0.7 threshold, with composite reliability values ranging from 0.862 to 0.959, well above the recommended 0.7 cutoff. The AVE value surpassed the minimum threshold of 0.5, ranging from 0.612 to 0.855, indicating strong convergent validity. One item (JS3) was removed due to insufficient loading, enhancing the overall measurement model fit.

Discriminant validity was established using the HTMT ratio of correlations method, as recommended by J. F. Hair and Sarstedt (2021). All HTMT values remained below the conservative threshold of 0.85, confirming that each construct captured unique phenomena distinct from other variables in the model. Notably, this analysis provided strong evidence for the discriminant validity of the measurement model.

Table 2: Measurement model

Construct	Items	Loading	CR	Ave.
Intrinsic Motivation (IM)	IM1	0.813	0.947	0.75
	IM2	0.836		
	IM3	0.868		
	IM4	0.927		
	IM5	0.90		
	IM6	0.846		
Extrinsic Motivation (EM)	EM1	0.664	0.862	0.612
	EM2	0.762		
	EM3	0.775		
	EM4	0.908		
Job Satisfaction (JS)	JS1	0.89	0.92	0.853
	JS2	0.956		
Family Supportive Supervisory Behaviour (FSSB)	FS1	0.869	0.959	0.854
	FS2	0.945		
	FS3	0.949		
	FS4	0.931		
Intention to Pursue (ITP)	IP1	0.846	0.918	0.79
	IP2	0.92		
	IP3	0.898		
Work Life Balance (WLB)	WB1	0.95	0.922	0.855
	WB2	0.899		

Note: JS3 was removed due to low loading

Table 3: Discriminant validity (HTMT ratio)

	EM	FSSB	ITP	IM	JS	WLB
EM						
FSSB	0.121					
ITP	0.246	0.35				
IM	0.201	0.36	0.544			
JS	0.184	0.513	0.503	0.843		
WLB	0.119	0.357	0.242	0.411	0.654	

Structural Model

The structural model analysis, conducted through bootstrapping with 5,000 resamples, revealed several significant findings. Intrinsic motivation emerged as a strong predictor of speciality pursuit intention ($\beta = 0.412$, $p < 0.008$, CI [0.166, 0.738]), supporting H1. FSSB also demonstrated a significant positive relationship with pursuit intention ($\beta = 0.184$, $p < 0.047$, CI [0.023, 0.385]), confirming H4. However, contrary to expectations, neither extrinsic motivation ($\beta = 0.138$, $p < 0.090$) nor job satisfaction ($\beta = 0.014$, $p < 0.470$) demonstrated significant relationships with speciality pursuit intention, leading to the rejection of H2 and H3.

Furthermore, the examination of moderating effects yielded mixed results. WLB significantly moderated the relationship between extrinsic motivation and speciality pursuit intention ($\beta = 0.214$, $p < 0.035$, CI [0.032, 0.400]), supporting H5b. This finding suggests that the influence of extrinsic motivation on speciality pursuit intention strengthens when medical officers experience a better WLB. Nonetheless, WLB did not significantly moderate the relationships between speciality pursuit intention and other predictors (intrinsic motivation, job satisfaction, and FSSB), leading to the rejection of H5a, H5c, and H5d.

On the other hand, Table 4 below reveals that intrinsic motivations ($\beta = 0.412$, $p = 0.008$) have a moderate to strong positive effect on the ITP specialisation. This finding emphasises the role of internal value and interest in guiding long-term career decisions. This suggests the medical officers are more likely to consider specialisation when they find the work personally meaningful and aligned with their professional goals. Therefore, the hospital administrators should focus on creating an environment that fosters autonomy, skill development, and a sense of purpose. This can be achieved through initiatives such as mentorship programmes, involvement in clinical decision-making, and opportunities for academic and research engagement.

In contrast, extrinsic motivation ($\beta = 0.138$, $p = 0.09$) did not positively influence the specialisation intention. Although the direction of the relationship was positive, the effect size was small and not statistically meaningful. Hence, this suggests that while external incentives like salary increments and promotion prospects are important, they may not be sufficient on their own to motivate medical officers to undertake the demanding journey of specialisation. This finding reflects the unique nature of the medical profession, where decisions about further training often involve significant time and emotional investment that may outweigh the perceived value of financial benefits.

Similarly, job satisfaction ($\beta = 0.014$, $p = 0.47$) exhibited a minimal and adverse effect on the intention to specialise. This result indicates that satisfaction with current job roles or work environments does not necessarily translate into a desire to pursue specialisation. Medical officers may view specialisation as a long-term professional goal that is independent of their present satisfaction. As such, initiatives aimed solely at improving job satisfaction, such as better facilities, staff recognition, or working conditions, may not directly increase the rate of specialisation among public sector doctors.

On the other hand, family supportive supervisor behaviour (β = 0.184, *p* = 0.047) had a moderate and statistically significant effect. This suggests that supervisors who support their staff's family and personal needs can positively influence their decision to specialise. These findings emphasise the value of a supportive management style in public hospitals. Supervisors who understand the personal challenges medical officers face can play a key role in encouraging long-term career development, especially in balancing work and family responsibilities. Therefore, a training programme for supervisors should include communication skills, empathy, and family supportive practices.

In Table 5, the analysis also explored WLB influences between these relationships. However, while it did not positively moderate the relationships between intrinsic motivation, job satisfaction, or supervisory support and specialisation intention, it did demonstrate a positive and moderate interaction effect with extrinsic motivation (β = 0.214, *p* = 0.035). Thus, this means that financial or external rewards are more effective in encouraging specialisation when medical officers experience a good balance between their work and personal lives. Without this balance, external motivators may lose their appeal as the additional demand of specialisation training could further disrupt already strained personal lives.

In short, the effect sizes reveal that intrinsic motivation and supervisory support are key drivers of specialisation intention, while extrinsic motivation becomes influential only in supportive work-life conditions. Conversely, job satisfaction appears unrelated to specialisation choices in this study context. Thus, these findings suggest that encouraging specialisation requires more than just financial rewards or improving job satisfaction. It demands a deeper investment in workplace culture, leadership, and personal development opportunities.

Table 4: Hypothesis testing (direct effect)

Hypothesis		Beta	SE	T-value	P-value	CI LL	CI UL	Decision
H1	IM → ITP	0.412	0.171	2.408	0.008	0.166	0.738	Supported
H2	EM → ITP	0.138	0.103	1.339	0.09	-0.213	0.248	Unsupported
H3	JS → ITP	0.014	0.189	0.076	0.470	-0.321	0.302	Unsupported
H4	FSSB → ITP	0.184	0.110	1.676	0.047	0.023	0.385	Supported

Table 5: Hypothesis testing (indirect Effect moderation analysis)

Hypothesis		Beta	SE	*t*-value	*p*-value	CI LL	CI UL	Decision
H5a	WLB*IM → ITP	0.042	0.188	0.222	0.412	-0.270	0.362	Unsupported
H5b	WLB*EM → ITP	0.214	0.118	1.814	0.035	0.032	0.400	Supported
H5c	WLB*JS → ITP	-0.169	0.191	0.884	0.188	-0.506	0.117	Unsupported
H5d	WLB*FSSB → ITP	-0.137	0.111	1.228	0.110	-0.359	0.012	Unsupported

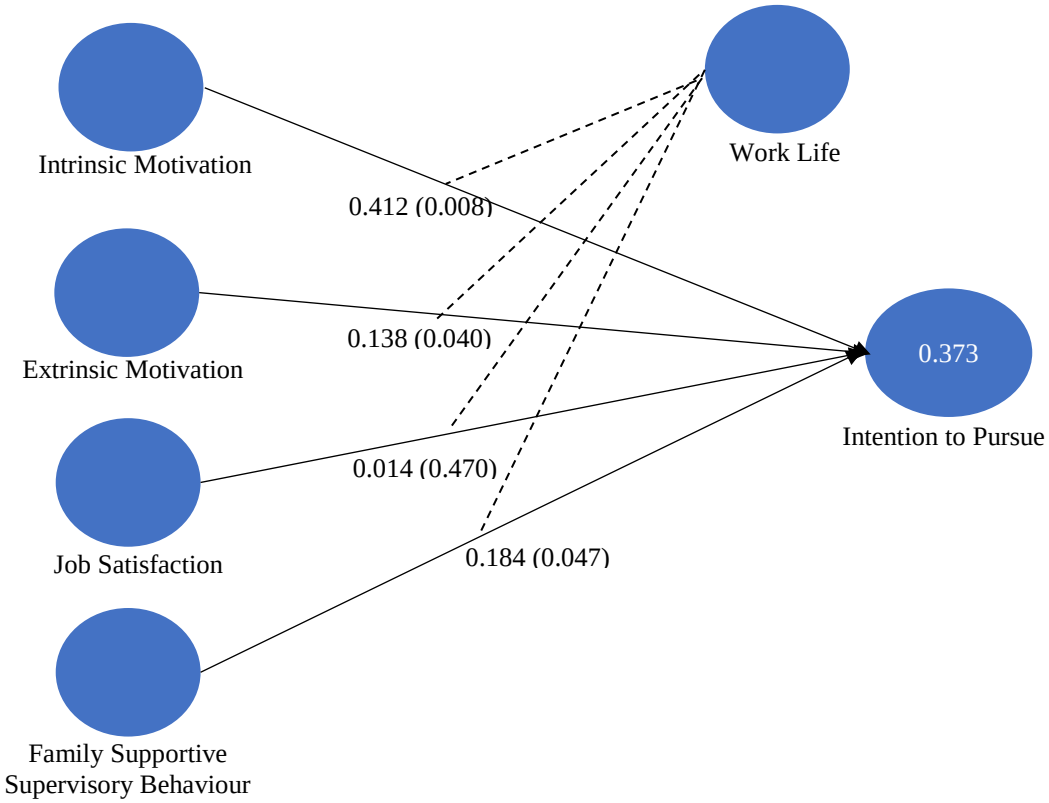

Figure 2: Results of direct effect and moderating effect

Discussion and Implication

The study reveals the crucial influence of intrinsic motivation and supportive supervision on medical officers' decisions to pursue specialist training. The strong positive relationship between intrinsic motivation and specialisation intention suggests that personal factors, such as professional growth, sense of purpose, and desire to improve patient care, significantly drive career development decisions. Additionally, these findings support the SDT understanding, which proposes that individuals are more likely to engage in activities that they find personally meaningful and fulfilling.

The result also demonstrates that family supportive supervisor behaviour substantially shapes specialisation intentions. Notably, supervisors who are understanding and supportive of family responsibilities help enhance medical officers' confidence and ability to pursue advanced training. Thus, these findings strengthen previous research by Sukri *et al.* (2023), which highlights how supportive workplace environments promote professional development.

A notable insight from the study is the moderating effect of WLB on the relationship between extrinsic motivation, such as salary, promotion, and specialisation intention. The findings indicate that external rewards prove more effective when medical officers maintain a healthy balance between professional and personal lives. This interaction suggests that extrinsic motivation alone may not be compelling without organisational policies that promote well-being, such as flexible working hours and family-friendly leave arrangements.

Notably, this study revealed that extrinsic motivation alone did not positively affect specialisation intention, contradicting some previous research by Chaurasia *et al.* (2019). This discrepancy may reflect the specific context of medical practice in Malaysia, where specialist

training often requires personal and financial sacrifices, including reduced pay during training and increased workloads. In this environment, external rewards may not adequately offset the perceived cost of specialisation, diminishing their influence on career decisions. This finding supports the view that medical officers' professional choices are guided more by personal values and long-term goals than by immediate financial benefits.

Furthermore, job satisfaction was also negatively related to specialisation intention. While satisfaction is often assumed to encourage professional development, this study suggests that medical professionals may pursue specialisation regardless of their current job satisfaction. This could be because specialisation is seen as a necessary step towards achieving long-term career goals such as higher professional status and increased autonomy rather than a response to current job conditions.

The study also revealed that WLB negatively moderates the effects of intrinsic motivations, job satisfaction, or supervisory support on specialisation intention. This may indicate that while WLB is valued, its influence may be limited in an environment where strong professional norms and structured training programmes shape career decisions. In the medical field, intrinsic motivation and professional identity may remain influential regardless of WLB conditions.

Study Limitation

Several limitations should be noted. First, the cross-sectional design limits the ability to conclude cause and effect, particularly in this kind of study related to public medical officers' response towards the ITP specialisation. Longitudinal studies would be more appropriate to explore how the public medical officers' motivations and intentions change over time, which may influence them to pursue specialisation.

Moreover, the use of self-reported data may introduce bias as participants might report in a socially desirable way. Furthermore, the study was conducted in a specific national and cultural context in Malaysia. It caters only to public medical officers working in Terengganu state, which has less job pressure compared to major cities in Malaysia, such as Kuala Lumpur, Penang, and Johor Bharu. Therefore, the findings may not be directly applicable to other settings with different healthcare systems and professional structures, such as consultant status clinics, university-affiliated hospitals, and private hospitals.

Implications for Policy and Practices

The findings have important implications for public healthcare workforce planning and policy development. The conventional strategies that focus primarily on financial incentives may not be sufficient to encourage specialisation. Instead, the organisation should focus on enhancing intrinsic motivations through meaningful professional development opportunities and recognition of clinical contributions. To support this, the Ministry of Health Malaysia (MOH) should expand the opportunities for professional growth beyond clinical duties. This can include structured involvement in research, teaching, policy engagement and innovation projects. Recognising clinical contributions through awards, promotions, or public acknowledgements can further reinforce a sense of achievement and belonging, especially for those who choose to remain in the public sector.

Secondly, it is crucial to promote supportive and empathetic supervisory practices. Ministry of Health (MOH) should invest in a training programme that equips clinical leaders and supervisors with the skills to provide guidance and support that acknowledges both professional and personal challenges. Emphasising empathetic communication, flexibility in scheduling, and active career mentoring can help build a more inclusive and motivating work environment, crucial for officers balancing family responsibilities with career ambitions.

Thirdly, WLB policies should be integrated with an incentive programme. MOH should consider implementing flexible work arrangements, such as part-time training tracks or adaptable shift schedules. Additional support, such as on-site childcare or subsidies for family care, would also reduce barriers to specialisation, especially for early and mid-career officers. These policies can improve job satisfaction and retention while making incentive programmes more impactful.

Furthermore, rural and remote postings should be reframed as opportunities for professional growth. Rather than presenting rural service primarily as a requirement or hardship, it can be positioned as a valuable professional experience. Many doctors in rural areas gain broad clinical exposure, more autonomy, and the opportunity to make meaningful contributions to underserved populations. MOH can amplify these intrinsic rewards through communication campaigns, testimonies from rural practitioners, and linking rural service to fast-track specialisation or leadership roles. Hence, this approach aligns personal growth with national service needs.

Finally, expanding access to Continuing Professional Development (CPD) can help address the common barrier of limited access to structured career support, which often hinders specialisation. MOH can enhance CPD pathways by offering more scholarships, protected study leaves, and accessible mentorship networks. Moreover, introducing career planning services, especially in rural areas or smaller hospitals, would help medical officers map their specialisation journey. A centralised digital platform for CPD tracking, course applications, and progress monitoring could streamline access to opportunities and reduce administrative hurdles.

By aligning career development policies with the personal values and professional goals of medical officers, healthcare institutions can better support the development of a skilled and motivated specialist workforce. Thus, future research should build on these findings by exploring different healthcare settings, using longitudinal data, and incorporating perspectives from both medical officers and organisational leaders.

Conclusions

The study examined the factors influencing public medical officers' intentions to pursue specialisation in Terengganu, Malaysia. Guided by the Self- Determination Theory (SDT). The result demonstrated that the intrinsic motivations and supportive supervisory behaviour were significant predictors of specialisation intention.

In contrast, extrinsic motivation and job satisfaction did not have a direct impact, suggesting that financial rewards or general contentment at work may not be enough to drive decisions about specialist training. An important contribution of the study is the finding that WLB strengthens the effect of extrinsic motivation on specialisation intention. This means that external rewards, such as salary or promotion between opportunities, are more effective when medical officers feel that they have a healthy WLB. Without this balance, such incentives may have limited influence. Consequently, these findings suggest that healthcare organisations should prioritise creating supportive work environments that promote personal and professional growth. Conversely, financial incentives should be paired with policies that support WLB, such as flexible work arrangements and employee well-being programmes. This combination may be more effective in encouraging medical officers to pursue specialisation and ultimately in building a more capable and committed public healthcare workforce.

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Conflict of Interest Statement

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts, and declare the absence of conflicting interests with the funders.

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