



# Violence against women and its effects on mental health and quality of life: A study of Myanmar migrant workers in Central Thailand

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## ARTICLE INFO

### Keywords:

Violence against women  
Mental health  
Quality of life  
Myanmar women migrant workers  
Central Thailand

## ABSTRACT

**Background:** Women migrant workers are vulnerable to violence. Violence against women is a pervasive public health problem, violates women's rights, and may adversely affect women's quality of life (QoL) and mental health. However, few studies have focused on this problem among migrant women workers from Myanmar.

**Objective:** This study aimed to use structural equation modeling to investigate the effect of violence against migrant women workers from Myanmar on their QoL and mental health.

**Methods:** This study was a cross-sectional study of 378 migrant women workers from Myanmar in Central Thailand, conducted by multistage sampling. The authors collected the data through a face-to-face structured interview using standard questionnaires and then investigated the effects of violence on QoL and mental health mediated by social support while considering the effects of socioeconomic status on violence.

**Results:** More than half the women had experienced violence within 12 months (58.7 %). Violence had a direct negative impact on their QoL and a direct positive association with mental health problems. Social support did not mediate these effects but did have a direct positive impact on QoL and a direct negative association with mental health problems. Socioeconomic status was directly affected by violence and had an indirect impact on QoL and mental health mediated by violence.

**Conclusion:** The study raises awareness about violence's impact on the QoL and mental health of migrant women workers from Myanmar in Thailand. We highlight the urgent need for comprehensive initiatives to provide social support mechanisms and promote socioeconomic empowerment. Collaborative efforts among government, nongovernment organizations, and communities are crucial for ensuring legal protections and safe working conditions, with regular monitoring and evaluation to gauge effectiveness in preventing violence and promoting these women's QoL and mental health.

## 1. Introduction

### 1.1. Background

Violence against women (VAW) is a pervasive public health problem worldwide (United Nations General Assembly 2019). VAW is defined as "any act of gender-based violence that results in, or is likely to result in, physical, sexual, or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life (United Nations 1993)," of which

intimate partner violence (IPV) and non-intimate partner violence (N-IPV) are the two major types (World Health Organization 2021). Globally, one in three women has experienced one or more forms of physical, psychological, and/or sexual violence (World Health Organization 2021). VAW is a violation of human rights that interrupts the accomplishment of the Sustainable Development Goals and has serious negative effects on physical, mental, and social health and well-being (World Health Organization 2021; United Nations Women 2016; Williams et al., 2019; United Nations Development Programme 2023).

A migrant worker is a person who migrates from one country to

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<https://doi.org/10.1016/j.jmh.2024.100272>

Received 3 November 2023; Received in revised form 20 September 2024; Accepted 2 October 2024

Available online 9 October 2024

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another with the intention of being employed (International Labour Organization 1999). In Thailand, there are approximately 4–5 million international migrant workers, of whom approximately 2.3 million originate from Myanmar, constituting the largest migrant worker group in Thailand. Notably, nearly half of migrant workers from Myanmar in Thailand are women and girls employed in low-skilled sectors, including manufacturing, domestic work, and agriculture. Central Thailand, especially Bangkok and Samut Sakhon Provinces, is a main target destination for Myanmar migrants because of its economic opportunities, established peer communities, and proximity to Myanmar (International Labour Organization 2022; International Organization for Migration 2016; Sarapirom et al., 2020).

Women migrant workers are vulnerable to violence because of their social and migration status (United Nations Women 2021; United Nations Women 2020). Although women migrant workers from Myanmar contribute significantly to Thailand's economy, they have experienced several forms of violence. Furthermore, they receive low pay with little social security and have barriers to accessing legal protections (International Labour Organization 2022; International Organization for Migration 2021). Moreover, economic downturns in Thailand during the COVID-19 pandemic increased their vulnerabilities owing to the loss of employment and documentation status (United Nations Network on Migration 2021). In addition, violence among women migrant workers was underreported in Thailand because of fears related to legal concerns (United Nations Women 2021; Segrave and Tan, 2021).

Quality of life (QoL) is the subjective well-being of an individual. QoL is defined as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (World Health Organization 2012). Studies on the QoL of migrant workers from Myanmar in Thailand have found it was poor to moderate for those with inadequate socioeconomic situations (Sarapirom and Muensakda, 2019; Promphakping et al., 2019; Tongprasert et al., 2010). Mental health is a condition of mental well-being that allows individuals to manage life's stressors, recognize their potential, study and work productively, and contribute to their surroundings (World Health Organization 2022). Mental health problems have been commonly observed among migrant workers (Hasan et al., 2021; Kesornsri et al., 2014; Anjara et al., 2017; Van Bortel et al., 2019). Among migrant workers from Myanmar in Thailand, they experienced mental health problems including depression, anxiety, and stress (Meyer et al., 2016; Khai and Asaduzzaman, 2022).

### 1.2. Literature review and theoretical framework

The literature has consistently found that women who experienced violence were more likely to have lower QoL and poorer mental health than women who did not (Lucena et al., 2017; Leung et al., 2005; Hisasue et al., 2020; Malik et al., 2021; Demaris and Kaukinen, 2005; Oram et al., 2017; Delara, 2016). Studies have also identified the positive effects of social support among survivors of violence; social support improved mental health and QoL (Sapkota et al., 2022; Mahapatro et al., 2021). Another study also showed the mediating role of social support on lowering the adverse effects of violence on QoL and mental health (Beeble et al., 2009). Moreover, sociodemographic characteristics, such as education, occupation, and income, have been associated with violence (Abramsky et al., 2011; Dabaghi et al., 2023; Ribeiro et al., 2017).

According to *social disorganization theory*, violence is more likely to occur in areas with weak social structures and disorganized communities where survivors may feel fearful and lose confidence in their capacity to participate in social activities. Consequently, violence may adversely affect their general sense of well-being and QoL (Michalos and Zumbo, 2000). *Social cognitive theory* suggests that individuals learn from their experiences and observations of others, shaping their beliefs and expectations about themselves and their environment. Therefore,

individuals who experience violence may develop negative feelings, which can lead to mental health problems (Heloniak and McLaughlin, 2020; Su et al., 2010). According to *social support theory*, social support is important in decreasing the negative effects of violence. Therefore, people who receive greater social support may recover from violence more effectively and have better QoL and mental health (Kort-Butler, 2017).

Because VAW and its consequences are preventable (World Health Organization 2021), identifying its prevalence and complex relationships is necessary. However, the literature on the unique associations between these topics among migrant women workers from Myanmar in Central Thailand is limited. Owing to their distinctive sociocultural and demographic characteristics, they often experience several forms of violence along with inadequate QoL and mental health problems, as aforementioned. Therefore, understanding the population-specific data on the effects of VAW is important.

Accordingly, we developed a theoretical framework (Fig. 1) based on the literature review and assessed the structural relationships among VAW, socioeconomic status, social support, QoL, and mental health. The objective of our study was to investigate the effect of violence against migrant women workers from Myanmar on their QoL and mental health by using structural equation modeling (SEM). SEM is an appropriate statistical approach for investigating multifaceted relationships. The findings of this study are expected to facilitate the development and effective implementation of prevention and response services regarding VAW and rehabilitation programs for survivors, enhancing the support and protection of this vulnerable population.

## 2. Methods

### 2.1. Study design and participants

This study was a cross-sectional study using a multistage sampling method in Central Thailand. First, we performed a purposive selection of Bangkok and Samut Sakhon Provinces, where there was an estimated high population of migrant workers from Myanmar (International Organization for Migration 2019). Second, we used snowball sampling to recruit the participants in each province because the population parameters were unknown owing to their irregular migration. We included migrant women workers from Myanmar who were willing to participate and fulfilled the following inclusion criteria: (1) being female; (2) being at least 18 years old so that we could obtain their verbal informed consent; (3) having Myanmar as their country of origin; (4) had resided in the study areas for at least 1 year; and (5) obtained employment in Thailand. Individuals residing in the study areas for other purposes, such as studying or social affairs, and/or who did not complete the survey were excluded.

### 2.2. Measures

We reviewed the measurement tools of violence, QoL, mental health, and social support to use in our study. A supplementary table in Appendix A provides a detailed comparison of the reviewed tools for each measurement purpose. The table outlines the advantages and disadvantages of each tool, including their demonstrated reliability and validity and suitability for the target population. It also explains the rationale for selecting each specific questionnaire based on its alignment with our research objectives.

For the questionnaire on VAW, a standard tool, the World Health Organization VAW instrument (World Health Organization 2005) was applied to investigate the women's experiences of current violence within 12 months: psychological violence (4 items), physical violence (6 items), and sexual violence (3 items) (Table 1). A woman's experiences of IPV and N-IPV were ranked separately on a 4-point scale (1 = never, 2 = 1–2 times, 3 = 3–5 times, 4 = more than 5 times). The reliability coefficients (Cronbach's alpha values) were high in this study ( $\alpha = 0.92$

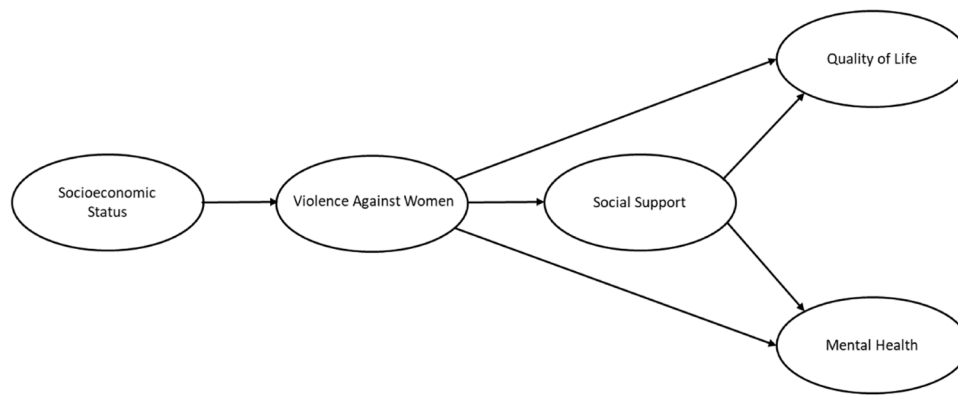


Fig. 1. Theoretical framework of the study.

**Table 1**  
Items of questionnaire on psychological, physical, and sexual violence.

Psychological violence	Physical violence	Sexual violence
Insulted you or made you feel bad about yourself	Slapped you or threw something at you that could hurt you	Physically forced you to have sexual intercourse when you did not want to
Belittled or humiliated you in front of other	Pushed you or shoved you	Had sexual intercourse you did not want because you were afraid of what that person might do
Did things scare or intimidate you on purpose	Hit you with a fist or with something else that could hurt you	Forced you to do something sexual that you found degrading or humiliating
Threatened to hurt you or someone you care about	Kicked you, dragged you, or beat you up	
	Choked or burned you on purpose	
	Threatened to use or actually used a gun, knife, or other weapons against you	

for IPV;  $\alpha = 0.87$  for N-IPV). For the statistical analysis conducted in this study, we calculated the total scores for each type of violence—psychological, physical, and sexual—by aggregating the item scores of both IPV and N-IPV within each aspect, the higher scores indicate higher violence experiences. This approach was employed because our hypothesized theoretical model of associations between the constructs remains the same, irrespective of the perpetrator of the violence.

We used a standardized questionnaire, WHOQOL-BREF (World Health Organization 2012), to assess the women’s QoL in the past 2 weeks. The questionnaire comprised 26 items in four domains: physical, psychological, social relationships, and environment. Each item was on a 5-point rating scale (1–5). We conducted the reverse coding of scores for negative items (items 3, 4, and 26). The mean score of items within each domain was calculated to obtain each domain score, which was then transformed to a 0–100 scale as instructed by the instrument’s user manual; higher scores reflect a better QoL (World Health Organization 2012). The Cronbach’s alpha value for this tool was 0.88 in our study.

We used the depression, anxiety, and stress scale—21 items (DASS-21) of (Lovibond & P, 1995) (Lovibond and P, 1995), a standardized questionnaire to evaluate the women’s mental health status in the past week. Twenty-one items measure three aspects of mental health: depression, anxiety, and stress, each of which was assessed by 7 items. The scale for each item is as follows: 0 = did not apply to me at all; 1 = applied to me to some degree or some of the time; 2 = applied to me to a considerable degree or a good part of the time; and 3 = applied to me very much or most of the time. By following the instrument’s guidelines,

the scores for the 7 items in each aspect were summed to calculate the total score for depression, anxiety, and stress, and these total scores were then multiplied by 2 to obtain the final scores, with a higher score reflects greater mental health problems (Lovibond and P, 1995). The alpha coefficient for reliability was 0.93 in this study.

The Medical Outcome Study Social Support Survey (Sherbourne and Stewart, 1991) was used as a social support questionnaire. It has been validated and widely used as a standard tool to measure social support and comprises 19 items in four subscales: emotional support (8 items), tangible support (4 items), affectionate support (3 items), and positive social interaction (3 items). The women were asked to what extent, on a 5-point scale (1 = none of the time, 2 = a little of the time, 3 = some of the time, 4 = most of the time, and 5 = all of the time), they received each item of social support when they required it. The score for each subscale was calculated by combining the relevant item scores and transformed into 0–100 scale as instructed by guidelines of the instrument; a higher score denotes a higher level of social support (Sherbourne and Stewart, 1991). In this study, Cronbach’s alpha was 0.91 for this tool.

We considered education, occupation, income, and emergency finance as measured variables reflecting the women’s socioeconomic status. Education was divided into six groups: 1 = no education, 2 = primary school, 3 = middle school, 4 = high school, 5 = college or university, and 6 = postgraduate. Occupation was grouped into four categories: 1 = unemployed, 2 = manual workers, 3 = nonmanual workers, and 4 = high professionals. Average monthly income was divided into four groups based on minimum wages in Thailand: 1 = less than THB 9000, 2 = THB 9001–18,000, 3 = THB 18,001–27,000, and 4 = THB 27,001 and above. For emergency finance, we asked, “Is it easy or difficult for you to find 3000 baht in a case of emergency, e.g., health problems?” and it had four categories: 1 = very difficult, 2 = difficult, 3 = easy, and 4 = very easy.

### 2.3. Data collection

Data collection was performed in one province after another in 2023 after the research was approved by the Research Ethics Review Committee at Chulalongkorn University (certificate of approval No. 221/65). There were five research assistants who were female native Burmese with at least a bachelor’s degree and had experience communicating with migrant workers from Myanmar in community-based research. The principal investigator provided standardized training to all research assistants, applying the training manual of the World Health Organization’s women’s health and domestic violence study (Jansen et al., 2004). The training included a brief explanation of gender-based violence, gender, cultural, and interpersonal sensitivity, research ethics, and interviewing techniques and skills for questionnaire administration. In each province, we approached “Migrant workers from Myanmar organizations” to recruit potential participants. We shared the eligibility

criteria with these organizations to invite women from different working sectors. To maximize the involvement of diverse groups, we used initial participants as seeds to spread information about the research within their networks; accordingly, additional willing participants joined this study.

The research assistant briefly explained the study, requested verbal informed consent, and administered screening questions to each participant. Next, a face-to-face interview was conducted with the eligible participant in a separate, private setting to ensure her safety and confidentiality. Participants had the option to pause, skip, or terminate the interview based on their decision. Because data collection was conducted on mobile tablets by using an online form, incomplete answers could not be submitted. The principal investigator promptly addressed any problems during data collection by providing leadership, monitoring, and support. Each participant received an information sheet on the contacts of research assistants, the principal investigator, and service providers in each province (hotline call centers, shelter houses, psychological counseling, hospitals, or social support organizations) to seek support if required. Furthermore, if research assistants identified participants in immediate need, they were promptly referred to the appropriate services.

#### 2.4. Statistical analysis

We performed data analysis using STATA version 16.0 (Stata Corporation, College Station, Texas, USA). For descriptive statistics, mean,

standard deviation (SD), median, and interquartile range for continuous variables and frequency and percentage for categorical variables were reported. We analyzed the SEM to achieve the research objective. SEM is a statistical technique that combines factor analysis with multiple regression equations to evaluate the direct and indirect effects of variables on an outcome (Kline, 2016).

There are two components in SEM: a measurement model and a structural model. The measurement model explains the relationship between measured variables and latent constructs, and the structural model identifies the relationships between the latent constructs. Ovals denote latent variables; rectangles denote measured variables; and the error term, epsilon ( $\epsilon$ ), represents the residual that the SEM model is unable to explain. Fig. 2 illustrates our hypothesized SEM model which consists of 5 latent constructs, namely, socioeconomic status (SES), violence against women (Violence), social support (Social), quality of life (QoL), and mental health (Mental).

For sample size calculation, we used the method with a ratio of “observations” to “number of parameters to be estimated” (N:q) of 5:1, which is commonly applied in studies using SEM analysis, as this method directly accounts for model complexity by linking the sample size to the number of estimated parameters and is suitable for less complex models (Kline, 2016; Schreiber et al., 2006). Because there were 47 parameters to be estimated (factor loadings = 18, regression coefficients = 6, residual variances = 22, covariance = 1, total = 47) in our initial model (details of parameters in Fig. 2), the minimum sample size should be 235. Therefore, the number of women ( $n = 378$ ) in this study was

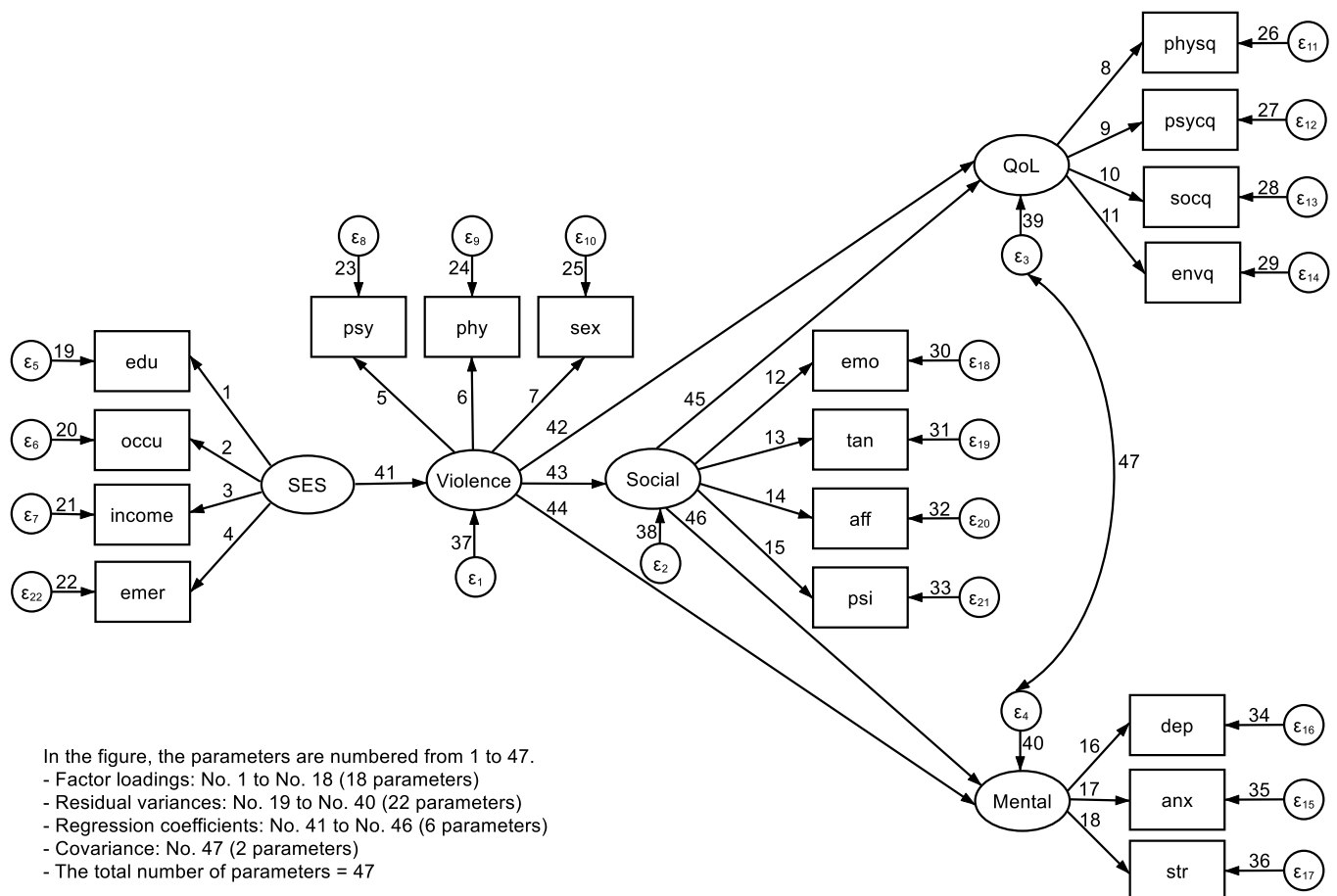


Fig. 2. Hypothesized SEM with its measurement and structural components.

regarded as appropriate, considering the model complexity and the additional parameters in the final model.

We performed model identification to ensure our hypothesized model was suitable for parameter estimation. For a model to be “identified,” there must be an equal or smaller number of parameters than non-redundant elements in the covariance matrix (i.e., degree of freedom  $\geq 0$ ). “DF =  $[P + 1]/2$  - number of parameters to be estimated” where DF = degree of freedom, and  $P$  = the number of observed variables. In this study,  $P = 18$ , number of parameters to be estimated = 47, and  $DF = [18(19)/2] - 47 = 124$ . Therefore, our model was considered “Identified.”

Multivariate normality was checked, and parameters were estimated by maximum likelihood by using the “Satorra-Bentler” method, correcting for non-normal distributions. We analyzed the standardized estimates to identify the correlation between the measured variables and the latent constructs. The standardized regression coefficient ( $\beta$ ) was analyzed to identify the direct and indirect effects of the latent constructs (Kline, 2016). Parameter values with  $p < 0.05$  were considered statistically significant.

Several model fit indices were evaluated to indicate the good fit of our model by using the robust method of model fit estimation considering the non-normal distribution of data (Langer, 2019). Because chi-square ( $\chi^2$ ) fit statistics is sensitive to sample size (Peugh and Feldon, 2020), we used root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker Lewis index (TLI), and standardized root mean squared residual (SRMR).

For model re-specification, we used the “estat mindices” command to find the modification indices (MIs) of the initial model. The MIs indicate the extent to which the fitness of the entire model improves when a restricted parameter is allowed to be estimated without constraints. Model modifications were performed according to the covariance suggested by statistical MIs if the MI was greater than 10 and there was a theoretical relevance (Brown, 2015).

### 3. Results

#### 3.1. Descriptive statistics

There were 378 migrant women workers from Myanmar in the sample of this study, with an average age (mean  $\pm$  SD) of  $23.45 \pm 8.89$  years. The most common education category was primary education (34.1 %), and 88.9 % worked as manual workers. The average monthly income of 65.1 % of the women was THB 9001–18,000. About one-third of women (33.1 %) reported that it was easy to find the emergency finance (Table 2).

As shown in Fig. 3, the overall prevalence of current violence within 12 months was 58.7 % (95 % CI = 53.6–63.7). More than half of the women experienced at least one form of psychological violence (54.2 %, 95 % CI = 49.1–59.3), 14.3 % experienced at least one form of physical violence (95 % CI = 10.9–18.2), and 10.3 % experienced at least one form of sexual violence within 12 months (95 % CI = 7.4–13.8).

The descriptive statistics of the measured variables included in the SEM analysis are shown in Table 3. The social support score (mean  $\pm$  SD) was highest for affectionate support ( $59.94 \pm 27.81$ ) and lowest for emotional support ( $54.03 \pm 23.55$ ). Among the dimensions of QoL, the physical domain had the highest average score ( $67.86 \pm 15.15$ ), while the environment domain had the lowest ( $59.41 \pm 14.58$ ). For mental health, the stress score was the highest, with an average of  $8.57 \pm 8.43$ .

#### 3.2. Results of SEM

Fig. 4 shows the results of the analysis of the final SEM model and its parameters. Regarding the measurement components of socioeconomic status (SES), violence, social support, QoL, and mental health, all factor loadings were statistically significant at  $p < 0.05$ . For SES, emergency finance had the highest factor loading (0.60), indicating that it most

**Table 2**  
Sociodemographic characteristics of participants ( $n = 378$ ).

Participants' Characteristics	Number	%
Age in years (mean $\pm$ SD)	23.45 $\pm$ 8.89	
Age in years (minimum–maximum)	18 – 60	
Education level		
No education	25	6.6
Primary school	129	34.1
Middle school	110	29.1
High school	75	19.8
College/university	35	9.3
Postgraduate	4	1.1
Occupation		
Unemployed	28	7.4
Manual workers	336	88.9
Nonmanual workers	9	2.4
High professionals	5	1.3
Average monthly income (THB)		
Less than 9000	118	31.2
9001–18,000	246	65.1
18,001–27,000	11	2.9
Above 27,000	3	0.8
Emergency finance		
Very difficult to find	71	18.8
Difficult to find	96	25.4
Easy to find	125	33.1
Very easy to find	86	22.7

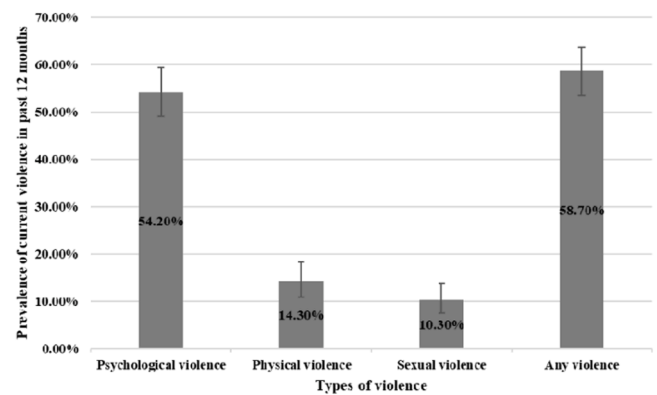


Fig. 3. Prevalence of types of violence within 12 months ( $n = 378$ ).

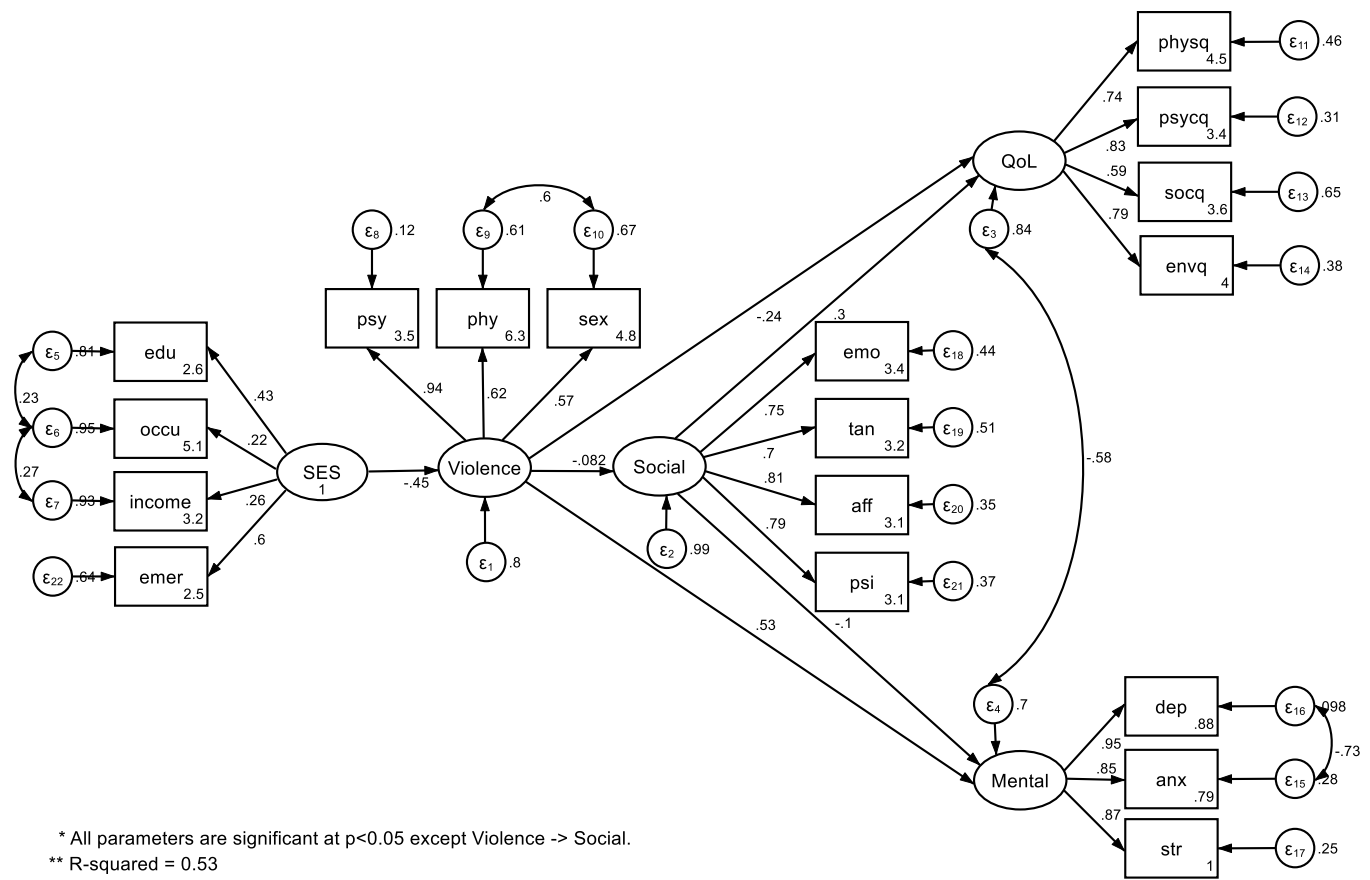
strongly reflects this construct. In the violence construct, psychological violence was the most reflective of violent experiences (factor loading = 0.94). Affectionate support was the greatest reflective dimension in social support (factor loading = 0.81). For QoL, the psychological domain had the highest factor loading (0.83), while depression was the most reflective in the mental health construct (factor loading = 0.95).

For the structural paths, all regression coefficients except for the path from violence to social support were statistically significant at  $p < 0.05$ . Table 4 presents the direct, indirect, and total effects of the latent variables in the SEM analysis. SES had a significant direct effect on violence ( $\beta = -0.45, p < 0.001$ ). The indirect effect of SES on QoL and mental health mediated by violence was significant ( $\beta = 0.12, p < 0.01$  for QoL and  $\beta = -0.24, p < 0.01$  for mental health), respectively. Violence had significant effects on QoL (direct effect:  $\beta = -0.24, p < 0.001$  and total effect:  $\beta = 0.26, p < 0.001$ ) and mental health (direct effect:  $\beta = 0.53, p < 0.001$  and total effect:  $\beta = 0.54, p < 0.001$ ). Social support had significant direct effects on QoL ( $\beta = 0.30, p < 0.001$ ) and mental health ( $\beta = -0.10, p < 0.05$ ).

Model fit indices of our final model after model modification showed that  $RMSEA = 0.048$ ,  $CFI = 0.962$ ,  $TLI = 0.953$ , and  $SRMR = 0.065$ . These values were within the acceptable range of  $RMSEA \leq 0.08$ ,  $CFI \geq 0.95$ ,  $TLI \geq 0.95$ , and  $SRMR \leq 0.08$ , showing a good model fit (Kline, 2016; Hair et al., 2019).

**Table 3**  
Description of variables in SEM analysis (n = 378).

Latent Constructs	Measured Variables	Mean	Standard deviation	Median	Interquartile range	Minimum – Maximum
Violence	Psychological violence	9.57	2.75	9	8–11	4–26
	Physical violence	12.08	1.91	12	12–12	6–32
	Sexual violence	6.09	1.28	6	6–6	3–23
Social support	Emotional support	54.03	23.55	53.13	37.50–71.88	0–100
	Tangible support	59.44	26.39	62.50	43.75–81.25	0–100
	Affectionate support	59.44	27.81	58.33	41.67–83.33	0–100
	Positive social interaction	58.49	26.59	66.67	41.67–75.00	0–100
Quality of life	Physical domain	67.86	15.15	67	60–78	0–100
	Psychological domain	59.42	17.28	62	50–70	0–100
	Social relationships domain	65.15	17.82	66	58–75	8–100
	Environment domain	59.41	14.58	59	50–68	6–100
Mental Health	Depression	7.51	8.51	4	2–12	0–42
	Anxiety	5.63	7.17	2	0–8	0–38
	Stress	8.57	8.43	6	2–12	0–42



**Fig. 4.** Factor loadings and standardized coefficients of final SEM model.

**4. Discussions**

According to our review of the literature, our research is one of few scientific studies on violence and its complex relationships among migrant women workers from Myanmar in Central Thailand who are marginalized and difficult to reach.

In this study, 58.7 % of migrant women workers from Myanmar in Central Thailand had been subjected to one or more forms of violence within the last 12 months. This prevalence is higher than the lifetime

prevalence of VAW among the general population in Myanmar (20.6 %) and Thailand (15.4 %) (Larsen et al., 2021; Chuemchit et al., 2018). The reasons for the high prevalence might be the vulnerabilities of women migrants, especially gender-specific discrimination, limited access to social services, and inadequate legal protection (United Nations General Assembly 2019). In the context of Thailand, lockdown measures and labor exploitation against women migrant workers during the COVID-19 pandemic may also be related to this finding (United Nations Network on Migration 2021; Chuemchit et al., 2024).

**Table 4**  
Standardized direct, indirect, and total effects of variables in SEM analysis.

Variables	Standardized direct effect	Standardized indirect effect	Standardized total effect
Socioeconomic status → Violence	-0.45 ***	-	-0.45 ***
Socioeconomic status → Social support	-	0.04	0.04
Socioeconomic status → Quality of life	-	0.12 **	0.12 **
Socioeconomic status → Mental health	-	-0.24 **	-0.24 **
Violence → Social support	-0.08	-	-0.08
Violence → Quality of life	-0.24 ***	-0.02	-0.26 ***
Violence → Mental health	0.53 ***	0.01	0.54 ***
Social support → Quality of life	0.30 ***	-	0.30 ***
Social support → Mental health	-0.10 *	-	-0.10 *

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .“-” denotes the path not included in the model.

Our study revealed that experiences of violence among migrant women workers from Myanmar in the last 12 months significantly affected their QoL. Specifically, violence adversely affected QoL. This finding is comparable with those from other countries that found negative associations between VAW and QoL (Hisasue et al., 2020; Malik et al., 2021). Moreover, we investigated beyond the impact of violence on QoL to understand its direct influence on women’s mental health. We found that the experiences of violence among the women in the last 12 months had a significant direct influence on mental health: women with higher experiences of violence were more likely to have reported mental health problems. The association between experiences of violence and poor mental health supports the results of related studies (Oram et al., 2017; Delara, 2016).

In this study, the social support received by the women affected their QoL. Specifically, social support was directly associated with QoL: the more social support the women received, the higher their QoL. This result confirms the researchers’ hypothesis and supports conclusions from related studies (Sapkota et al., 2022; Mahapatro et al., 2021). Furthermore, our results demonstrated the significant effects of social support on women’s mental health. These findings not only validate our initial hypothesis but also paved the way for an exploration of social support’s broader impact on participants’ mental health, providing insights into its potential role in reducing the likelihood of mental health problems, as supported by the literature (Mahapatro et al., 2021; Machisa et al., 2018). However, the mediating effect of social support between violence and QoL and mental health was not significant in our SEM analysis, although another study identified this mediating effect among women survivors of violence (Beeble et al., 2009).

Similar to findings in the literature (Dabaghi et al., 2023; Company-Córdoba et al., 2020), our study’s findings showed that the socioeconomic status of the women had an indirect impact on their QoL and mental health, mediated by their experiences of violence. This implies that violence acts as a mediator between socioeconomic status and both QoL and mental health. Higher socioeconomic status is associated with a lower likelihood of experiencing violence, which is associated with a higher QoL and a lower likelihood of mental health problems. Therefore, our conclusion is that women migrant workers with lower socioeconomic status have multiple disadvantages: they have a higher risk of violence, a lower QoL, and mental health problems. However, we did not observe any direct effects of socioeconomic status on QoL and mental health.

#### 4.1. Strengths

This study is distinctive in the context of migrant women workers from Myanmar in Central Thailand, supporting the findings in the literature that VAW has profoundly detrimental impacts on their QoL and mental health. Because we conducted data collection in 2023, just after the COVID-19 pandemic, the women’s answers could reflect their experiences of violence during the pandemic. Moreover, our use of standardized questionnaires and interviews conducted by well-trained research assistants may have reduced bias and increased transparency. Using SEM allowed for the simultaneous effect of violence and social support on QoL and mental health while considering the correlation between QoL and mental health and modeling the effect of socioeconomic status as an exogenous variable affecting violence. In addition, using SEM with latent constructs allowed measurement error of the statistical model and improved the accuracy of the model estimation.

#### 4.2. Limitations

First, our findings may not fully represent migrant women workers from Myanmar in Central Thailand because of the nonprobability sampling. However, we included both women with valid legal documentation status (regular migrants) and those without valid legal documentation (irregular migrants), allowing anyone to join the study regardless of their migration status. Second, the cross-sectional design could not establish causality; thus, further research should consider longitudinal and intervention studies. The structured questionnaires prevented us from asking follow-up questions, which may have caused self-reporting and recall bias; thus, we recommend further mixed-method studies for a more comprehensive understanding than we have provided. In addition, caution should be used when interpreting the results. Using the same scoring weighting for items of physical, psychological, and sexual violence may not adequately account for the distinct types and varying severity of violence observed in our study. We included only four variables, education, occupation, income, and emergency finance to reflect the broad concept of socioeconomic status. Finally, although the women were asked about their experiences of violence in the past 12 months, their QoL and mental health were assessed for the last two weeks and last week, respectively, limiting the temporal relationships.

#### 5. Policy implications and recommendations

This study highlights the urgent need for comprehensive initiatives to protect migrant women workers from Myanmar in Thailand. These programs should prioritize raising awareness about violence’s impact on their QoL and mental health and offering accessible resources for reporting and assistance. Establishing strong social support networks and services tailored to their unique challenges is also crucial. Moreover, socioeconomic empowerment, such as education and job opportunities, can reduce vulnerability to violence and enhance well-being. The policies and services must be culturally sensitive to respect their migration status and cultural backgrounds. In addition, collaboration among the government, nongovernmental organizations, and communities is essential for strengthening legal protections and ensuring safe working conditions. Finally, regular monitoring and evaluation are recommended to ensure the effectiveness of these efforts in reducing violence and improving the QoL and mental health of migrant women workers from Myanmar.

#### 6. Conclusion

This study contributes to the growing body of literature related to violence among migrant women workers from Myanmar in Central Thailand. This study identifies the profound impact of violence on QoL and mental health and the significance of socioeconomic status and

social support in relation to violence. These findings provide valuable insights to support policymakers and stakeholders emphasizing violence prevention and support mechanisms for improving the QoL of this vulnerable population.

### Funding source

This study is funded by the 90th Anniversary Chulalongkorn University Ratchadaphiseksomphot Endowment Fund (1/2566). The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

### Data availability

Data will be made available on request.

### CRediT authorship contribution statement

**Nyan Linn:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Visualization, Writing – original draft. **Montakarn Chuemchit:** Conceptualization, Funding acquisition, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Writing – review & editing. **Aye Sandar Mon:** Conceptualization, Methodology, Supervision, Validation, Writing – review & editing. **Chaweewon Boonshuyar:** Methodology, Supervision.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Acknowledgements

We would like to thank all participants in the dissertation seminars at the College of Public Health Sciences, the research assistants participating in this research and focal points who helped to recruit the participants.

### Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.jmh.2024.100272](https://doi.org/10.1016/j.jmh.2024.100272).

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