

**THE MODERATING EFFECT OF EMOTIONAL
SUPPORT ON THE RELATIONSHIP BETWEEN
SOCIAL CONSTRAINTS AND POSTPARTUM
DEPRESSION AMONG MALAYSIAN WOMEN**

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by

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TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS.....	iii
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
LIST OF APPENDICES	xiii
ABSTRAK	xv
ABSTRACT	xvii
CHAPTER 1 INTRODUCTION	1
1.1 Background of Study	1
1.2 Cultural Differences	3
1.2.1 Perceptions towards PPD	3
1.2.2 Coping Strategies	4
1.3 Emotional Support	5
1.4 Problem Statement	8
1.5 Research Questions	9
1.6 Research Objectives	10
1.7 Significant of Study	10
1.7.1 Postpartum Women	10
1.7.2 Health Care Services	10
1.7.3 Healthcare Professionals	11
1.7.4 Community Support	11
1.8 Scope of Study	12
1.9 Definition of Terms.....	13
1.9.1 Social Constraints.....	13

1.9.2	Emotional Support.....	13
1.9.3	Postpartum Depression.....	14
1.9.4	Living Arrangement	14
1.9.5	Parity	15
1.9.6	Mode of Delivery	15
CHAPTER 2 LITERATURE REVIEW		17
2.1	Postpartum Depression	17
2.1.1	Negative Consequences.....	19
2.1.2	Factors Associated With PPD	21
2.1.3	Cross-Cultural Differences in Views of PPD.....	31
2.2	Social Constraints	36
2.2.1	Social Constraints and PPD.....	38
2.3	Coping Styles	40
2.3.1	Emotion-Focused	40
2.3.2	Problem-Focused.....	41
2.3.3	Avoidance-Focused.....	43
2.4	Social Support	45
2.4.1	Structural Support	45
2.4.2	Functional Support	49
2.4.3	Cultural Differences in Coping Strategies.....	56
2.4.4	Why Emotional Support?.....	61
2.5	Moderators	62
2.5.1	Moderating Role of Emotional Support on Relationship between Social Constraints and PPD	62
2.5.2	Ethnicity: A Potential Moderator	64
2.6	Theoretical Framework	66
2.6.1	Social-Cognitive Processing Model	66
2.6.2	Social-Cognitive Processing Model with PPD.....	68

2.7	Instrumentation Review	70
2.7.1	Social Constraints.....	72
2.7.2	Postpartum Depression.....	72
2.7.3	Emotional Support.....	84
2.8	Hypotheses	89
2.9	Conceptual Framework	90
CHAPTER 3 MATERIALS AND METHODOLOGY		91
3.1	Research Design and Participants	91
3.1.1	Sample Size Estimation.....	91
3.1.2	Inclusion and Exclusion Criteria	93
3.1.3	Sampling Method	95
3.2	Location of the Study	95
3.3	Instruments.....	96
3.3.1	Demographics Variables	96
3.3.2	Scales.....	96
3.3.3	Scales Adaptation.....	98
3.3.4	Translation Procedure of the Scales	99
3.4	Procedure.....	100
3.5	Pilot Study.....	101
3.5.1	Validity of EPDS.....	103
3.6	Actual Study.....	103
3.7	Statistical Analyses	104
3.7.1	Descriptive Analysis	104
3.7.2	Testing for Direct Influence of Social Constraints on PPD	105
3.7.3	Testing for Moderating Effect of Emotional Support on Social Constraints and PPD	105
3.7.4	Testing for Moderating Effect of Ethnicity on Emotional Support on Social Constraints and PPD	106

3.8	Ethical Considerations	106
3.8.1	Risks and Possible Benefits of Participation.....	107
3.8.2	Confidentiality.....	108
3.8.3	Voluntary Participation	108
3.8.4	Honorarium and Incentives	109
CHAPTER 4 RESULTS.....		110
4.1	Descriptive Statistics.....	110
4.2	Assumptions of Inferential Analyses	112
4.2.1	Outliers Detection	112
4.2.2	Normality Tests	113
4.2.2(a)	Histograms.....	113
4.2.2(b)	Skewness and Kurtosis Tests	113
4.2.2(c)	Q-Q Plots	113
4.2.2(d)	Kolmogorov-Smirnov Normality Test	113
4.2.2(e)	Shapiro-Wilk tests	113
4.2.3	Linearity of Residual, Normality of Residual and Homoscedasticity	115
4.2.4	Multicollinearity.....	116
4.2.5	Independent Errors	117
4.3	Correlation between Four Types of Support and EPDS	118
4.4	Inferential Analyses	119
4.4.1	Hierarchical Linear Regression Analysis for Direct Influence of Social Constraints on PPD	119
4.4.2	Moderating Effect of Emotional Support on Social Constraints and PPD	124
4.4.3	Moderated-Moderation Analysis of Moderating Effect of Ethnicity on Emotional Support on Social Constraints and PPD	125
CHAPTER 5 DISCUSSION.....		128
5.1	Direct Influence of Social Constraints on PPD.....	127

5.2	Education Attainment and Postpartum Depression.....	134
5.3	Moderating Effect of Emotional Support on Social Constraints and PPD ..	135
5.4	Ethnicity as Moderator on the Moderating Effect of Emotional Support on Social Constraints and PPD.....	139
5.5	Implications of Findings	141
5.5.1	Theoretical Implications.....	141
5.5.2	Practical Implications	142
5.6	Strengths, Limitations and Future Research Directions.....	144
5.6.1	Strengths.....	144
5.6.2	Limitations	145
5.6.3	Recommendations for Future Research	146
5.7	Conclusion	147
REFERENCES.....		150
APPENDICES		
LIST OF PUBLICATIONS		

LIST OF TABLES

	Page
Table 3.1 Reliability of Scales	103
Table 3.2 Correlation Coefficients of SCS-15, PSQ with EPDS in English, Malay and Chinese	103
Table 4.1 Demographic Information of Participants with Frequency and Means (N = 311).....	111
Table 4.2 Skewness and Kurtosis.....	114
Table 4.3 Kolmogorov-Smirnov Normality Test.....	115
Table 4.4 Shapiro-Wilk Statistics	115
Table 4.5 Collinearity Statistic.....	117
Table 4.6 Correlations between Four Types of Support and EPDS.....	119
Table 4.7 Preliminary Linear Regression Estimates	122
Table 4.8 Hierarchical Linear Regression Estimates	123
Table 4.9 Summary of The Moderation Model Results (Model 1)	124
Table 4.10 Summary of The Moderated-Moderation Model Results (Model 3)	126

LIST OF FIGURES

	Page
Figure 2.1 Moderated-Moderation Model of "The moderating effect of emotional support on the relationship between social constraints and PPD among Malaysian women"	90
Figure 3.1 Model 1 (Moderation Model)	105
Figure 3.2 Model 3 (Moderated-Moderation Model)	106
Figure 4.1 Standardized Residuals Scatterplot	116

LIST OF ABBREVIATIONS

BDI	Beck Depression Inventory
BPDS	Bromley Postnatal Depression Scale
CES-D	Center for Epidemiological Studies Depression Scale
CIS	Clinical Interview Schedule
DSM-III-R	Diagnostic and Statistical Manual of Mental Disorders: Third Edition-Revised
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition
DSM-5	Diagnostic and Statistical Manual of Mental Disorders: Fifth Edition
DSM-5-TR	Diagnostic and Statistical Manual of Mental Disorders: Fifth Edition Text Revision
EPDS	Edinburgh Postnatal Depression Scale
FSSQ	Duke-UNC Functional Social Support Questionnaire
G-SCS	The Social Constraints Scale: Greek Version
HADS	Hospital Anxiety and Depression Scale
HAMD	Hamilton Rating Scale for Depression
HARS	Hamilton Depression Rating Scale
ICD-10	International Classification of Diseases
IPV	Intimate Partner Violence
ISEL-12	Interpersonal Support Evaluation: Short Form
JEPeM	Jawatankuasa Etika Penyelidikan Manusia USM/ The Human Research Ethics Committee of USM

MARDS	Montgomery-Asberg Depression Rating Scale
MENTARI	Community Mental Health Center
MDD	Major Depressive Disorder
M.I.N.I	Mini-International Neuropsychiatric Interview
MOH	Ministry of Health
MOS-SS	Medical Outcome Study Social Support Survey
MREC	Medical Research and Ethics Committee
NICU	Neonates Intensive Care Unit
PDS	Pitt Depression Scale
PDSS	Postpartum Depression Screening Scale
PEPSS	Perceived Emotional Personal Support Scale
PhD	Doctor of Philosophy
PHQ-9	Patient-Health Questionnaire-9
PPD	Postpartum Depression
P-PTSD	Postpartum Posttraumatic Stress Disorder
PROMIS-SS	Patient-Reported Outcome Measurement Information System Social Support
PSE	Present State Examination
PSE-ID-Catego	PSE-Index of Definition- Catego
PSQ	Postpartum Support Questionnaire
PSSQ	Postpartum Social Support Questionnaire
PSSS	Postpartum Social Support Scale
Q-Q	Quantile-Quantile
RDS	Research Diagnostic Criteria
RM	Ringgit Malaysia

SADS	Schedule of Affective Disorders and Schizophrenia
SCID	Structured Clinical Interviews for DSM-IV-TR
SCP	Social Cognitive Processing Model
SCS-15	The Social Constraints Scale
SIDS	Sudden Infant Death Syndrome
SNS	Social Networking Sites
SPI	Standard Psychiatric Interview
SPM	Sijil Pelajaran Malaysia/ Malaysian Certificate of Education
SPSS	Statistical Package for the Social Sciences
SSI	Social Support Inventory
STPM	Sijil Tinggi Persekolahan Malaysia/Malaysian Higher School Certificate
TTBQ	Two-Track Bereavement Questionnaire
UCLA-SSI	UCLA Social Support Inventory
USM	Universiti Sains Malaysia
ZSDS	Zung Self-Rating Depression Scale

LIST OF APPENDICES

APPENDIX A	PERMISSION TO USE POSTPARTUM SUPPORT QUESTIONNAIRE
APPENDIX B	PPD PREVELANCE CALCULATION
APPENDIX C	POPULATION PROPORTION SAMPLE SIZE CALCULATION BASED ON DANIEL AND CROSS FORMULA
APPENDIX D	SOCIAL CONSTRAINTS SCALE
APPENDIX E	POSTPARTUM SUPPORT QUESTIONNAIRE
APPENDIX F	EDINBURGH POSTNATAL DEPRESSION SCALE
APPENDIX G	PARTICIPANTS INFORMATION SHEET AND CONSENT FORM
APPENDIX H	ETHICAL APPROVAL OF THE HUMAN RESEARCH ETHICS COMMITTEE OF UNIVERSITI SAINS MALAYSIA (JEPER) (USM/JEPER/22010061)
APPENDIX I	ETHICAL APPROVAL OF THE MEDICAL RESEARCH AND ETHICS COMMITTEE (MREC), MINISTRY OF HEALTH MALAYSIA (MOH) (NNMR ID-22-00644-7DT)
APPENDIX J	DEBRIEF FORM
APPENDIX K	BOXPLOTS
APPENDIX L	TABLE OF MAHALANOBIS VALUE BY BARNETT AND LEWIS (1978)
APPENDIX M	HISTOGRAMS

APPENDIX N Q-Q PLOTS

**PERANAN SOKONGAN EMOSI TERHADAP HUBUNGAN ANTARA
KEKANGAN SOSIAL DAN KEMURUNGAN SELEPAS BERSALIN DALAM
KALANGAN WANITA MALAYSIA**

ABSTRAK

Model Pemprosesan Kognitif Sosial (SCP) mencadangkan bahawa penyesuaian yang berlaku dalam persekitaran yang mengekang secara sosial menghalang pemprosesan kognitif trauma, dan membawa kepada tekanan psikologi dan sebaliknya. Tingkah laku kekangan secara sosial dikaitkan dengan hasil negatif yang memberi impak kepada kesihatan mental dengan fokus utama diletakkan kepada golongan pesakit kanser dan berduka tetapi tidak kepada golongan lain, misalnya wanita selepas bersalin. Oleh itu, mempertimbangkan kepelbagaian prevalens kemurungan selepas bersalin (PPD) dan latar belakang pelbagai budaya dalam konteks Malaysia, kajian keratan rentas ini mengkaji sama ada kesan penyederhanaan sokongan emosi terhadap perkaitan antara kekangan sosial dan PPD berbeza-beza merentas tiga kumpulan etnik utama (iaitu Melayu, Cina dan India). Persampelan bertujuan dan bola salji digunakan untuk merekrut 311 orang ibu selepas bersalin yang menghadiri temu janji selepas bersalin atau neonatal di empat buah hospital di Semenanjung Malaysia dan melalui soal selidik dalam talian di Malaysia Timur. Soal selidik dalam talian turut diedarkan kepada ibu-ibu di Facebook, Instagram, WhatsApp dan *Xiaohongshu*. Data dikumpul menggunakan pelbagai skala termasuk Skala Kekangan Sosial (SCS-15), Soal Selidik Sokongan Selepas Bersalin (PSQ), dan Skala Kemurungan Selepas Bersalin Edinburgh (EPDS). Data dianalisis menggunakan statistik deskriptif, regresi linear hierarki, dan Makro PROSES. Dapatan menunjukkan bahawa kekangan sosial menjelaskan 28.4% daripada jumlah varians dalam PPD

dalam kalangan peserta. Penemuan menunjukkan bahawa simptom kemurungan diburukkan oleh tahap kekangan sosial yang lebih tinggi. Antara pelbagai kovariat, hanya pencapaian pendidikan dikaitkan secara signifikan dengan PPD. Khususnya, ibu yang berpendidikan rendah ke bawah menunjukkan kecenderungan yang tinggi kepada PPD, manakala ibu yang mencapai pendidikan pasca siswazah menunjukkan kecenderungan yang lebih rendah untuk mengalami PPD. Tiada kesan penyederhanaan yang signifikan secara statistik oleh sokongan emosi atau etnik ditemui. Pengenalpastian faktor penyumbang kepada PPD dalam kalangan ibu di Malaysia boleh membantu dalam pembangunan strategi pencegahan PPD untuk ibu selepas bersalin. Penyelidikan secara mendalam diperlukan untuk memeriksa aspek positif dan negatif interaksi sosial secara berasingan berdasarkan interaksi kompleks antara kekangan sosial dan sokongan emosi yang disokong oleh penemuan dalam kajian ini. Akhir sekali, pembangunan program latihan khusus untuk profesional kesihatan yang memberi mereka pengetahuan dan kemahiran diperlukan untuk menjamin ibu menerima rawatan berkualiti tinggi, terutamanya berkaitan kesihatan mental.

**THE MODERATING EFFECT OF EMOTIONAL SUPPORT ON THE
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ABSTRACT

The Social Cognitive Processing (SCP) Model suggests that adjustment occurring in a socially constraining environment impedes cognitive processing of trauma, which leads to psychological distress and vice versa. Socially constraining behaviors are associated with negative outcomes impacting mental health, with a predominant focus regarding its impact being placed on cancer patients and bereaved populations, neglecting other populations, such as postpartum women. Thus, considering the wide variation of postpartum depression (PPD) prevalence and the multicultural background in the Malaysian context, this cross-sectional study examines whether the moderating effect of emotional support on the association between social constraints and PPD varies across three major ethnic groups (i.e., Malays, Chinese, and Indians). Purposive and snowball sampling was used to recruit 311 women who attended postpartum or neonatal appointments at four hospitals in Peninsular Malaysia and via online questionnaire in East Malaysia. An online questionnaire was also distributed to mothers on Facebook, Instagram, WhatsApp and *Xiaohongshu*. Data were collected using self-reported instruments which included Social Constraints Scale (SCS-15), Postpartum Support Questionnaire (PSQ), and Edinburgh Postnatal Depression Scale (EPDS). Data were analyzed using descriptive statistics, hierarchical linear regression, and PROCESS Macro. Results showed that social constraints explain 28.4% of the total variance in PPD among the participants. Findings suggest that depressive symptoms were aggravated by higher levels of social

constraints. Among the various covariates, only education attainment was significantly associated with PPD. Specifically, mothers with primary education or below displayed an elevated susceptibility to PPD, whereas mothers who attained postgraduate education exhibited a reduced likelihood of experiencing PPD. No statistically significant moderating effect of emotional support or ethnicity was found. Identification of the PPD contributors among Malaysian mothers may help in the developing of PPD prevention strategies for postpartum mothers. More research is needed to examine the positive and negative aspects of social interactions independently based on the complex interaction between social constraints and emotional support supported by findings of this study. Last but not least, the creation of healthcare professionals-specific training programs that give them the knowledge and skills necessary to guarantee mothers receive high-quality treatment, especially with regard to mental health.

CHAPTER 1

INTRODUCTION

This chapter provides an overview of the study, whilst also outlining the research questions and objectives of the study. Besides that, this chapter also addresses several issues that the current research aimed to tackle and the importance of the present study within academic, clinical, and societal contexts. The operational definitions of various variables studied are also included in this chapter.

1.1 Background of Study

Becoming a mother is both a time of joy and a stressful time. Previous findings have shown that the major physical and psychological changes associated with pregnancy and childbirth impose enormous stress on women and expose them to a traumatic experience depending on birth-related, individual differences, and psychosocial factors (Bailham & Joseph, 2003; Greenfield et al., 2019; Johansson et al., 2020; Yildiz et al., 2017). The sense of lack of control, increased perceived pain, and unmet expectations have led women to view childbirth as a traumatic event (McKelvin et al., 2021). Concerning this, previous studies also highlighted that a traumatic birth experience in women is often associated with postpartum posttraumatic stress disorder (P-PTSD) and postpartum depression (PPD), with P-PTSD and PPD being highly correlated (McKelvin et al., 2021).

In Malaysia, approximately 5.1% to 48.6% of mothers suffer from PPD (Hairol et al., 2021; Janting et al., 2023; Najid et al., 2023; NHMS, 2022; Thiagarajah et al., 2023). The increasing trend of PPD has raised public concern, due to its harmful consequences. Women suffering from PPD may experience PPD as feelings of intense sadness, anxiety, irritability, and sleep disturbance (American Psychiatric Association, 2022). Mothers with PPD also experience a deterioration in the quality of life,

increased risk for health problems, and impairment in social functioning (McCall & Kintziger, 2013; Slomian et al., 2019). Additionally, the quality of intimate relationships and sexual intimacy would also decline for women with PPD (Fenech & Thomson, 2014; Woolhouse et al., 2012).

Apart from the adverse effects observed in the mothers, significant adverse effects on the child itself have been recorded in the literature. A poor mother-infant attachment due to a lack of interest in the child is commonly documented (Eitenmüller et al., 2022; Maxwell et al., 2018). In the worst cases, the mother's depressive symptoms may eventually progress into thoughts of self-harm (Lee et al., 2022; Praetorius et al., 2020) or harm to the child (Maxwell et al., 2018; Păunescu et al., 2017; Razali et al., 2019). Notably, PPD also associated with a greater risk of sudden infant death syndrome (SIDS), infanticide (Iancu et al., 2023; Sanderson et al., 2002), and infant developmental delay in language, cognitive and psychological aspects (Lubotzky-Gete et al., 2021).

Therefore, considering the adverse consequences of PPD, early detection is necessary to recognize the potential case and provide the necessary treatment. However, the lack of awareness and stigma prevents women around the world from recognizing their depressive symptoms and seeking help (Daehn et al., 2022). To illustrate, a study found that women felt shame and guilt about their PPD symptoms (Dunford & Granger, 2017; Johansson et al., 2020). In addition to the feeling of shame and guilt, mothers also rarely get positive responses from their social network when they attempted to disclose their PPD symptoms owing to the existing stigma (Dennis & Chung-Lee, 2006). The few positive responses that mother received have evolved into ignorance and downplaying of the mothers' feelings, which is now conceptualized as 'social constraints'. Social constraints that often ignore, minimize, or belittle

mothers' emotions would cause mothers to feel isolated and withdraw themselves from seeking help (McLeish & Redshaw, 2017). Unfortunately, a similar phenomenon is observed in Malaysia, as studies indicated that Malaysian women displayed low awareness of PPD, and neither trying to be sensible about the PPD symptoms other than somatic symptoms (Ab Razak, 2017; Khan et al., 2011), indicating a worrisome condition of PPD in the Malaysian context. However, the prevalence of PPD varies among different ethnic groups, with Indians generally reported as the most depressed group (Ahmad et al., 2018; Grace et al., 2001). In this regard, culture is considered to have a significant influence in shaping perception, attitude, and particularly stigma towards PPD.

1.2 Cultural Differences

1.2.1 Perceptions towards PPD

Globally, previous studies have found cultural differences in perceptions towards PPD across various countries, including Singapore, Malaysia, Austria, Brazil, Bangladesh, Korea, and more (Halbreich & Karkun, 2006; Hanely & Brown, 2014; Mohd Arifin et al., 2018; Williams et al., 2017). Given Malaysia's multiculturalism and multi-ethnicity, such cultural differences in view of PPD was also observed through diverse ethnicity, with Indians were found to attribute mental illness to the cause of supernatural (Loo & Furnham, 2013), holding a traditional view towards mental illness, while Malays displayed a negative attitude towards PPD by terming it as “Gila meroyan” or “meroyan”, which means crazy or madness (Ab Razak, 2017; Haji Hasbullah & Nik Hassan, 2017). Moreover, the Islamic religious doctrine of possession by evil spirits as the cause of mental illness has further shaped their negative perception of mental illness (Ab Razak, 2017). In contrast to the Malays and Indians' superstitious belief in mental illness, Chinese have shown an acceptance, and

open attitude towards mental illness, implying a greater awareness among Chinese (Hanafiah & Bortel, 2015). Furthermore, the Chinese also displayed a greater willingness to report and get diagnosed with depression compared to Malays and Indians, suggesting a higher level of mental literacy and help-seeking tendency among the Chinese (Khan et al., 2011).

Apart from the different perspectives of PPD in different ethnic groups, Chinese and Indians are also suffering from PPD owing to their traditional belief of son preference. Male offspring are desired in traditional Chinese and Indian culture as only sons are considered capable of contributing to the family economy and taking care of their parents (Nasir & Kalla, 2006; Ye et al., 2020). Thus, Chinese and Indian women who give birth to a girl against the family's expectations are less likely to receive social support from family members (Ye et al., 2020).

1.2.2 Coping Strategies

Given the negative consequences of PPD, therefore, the use of adaptive coping strategies is crucial to smooth the transition to motherhood. It is important to note that people from various cultural backgrounds have different preferences in their utilisation of coping strategies. To illustrate, people from an individualist culture would perceive social support that validates emotional disclosure as the most beneficial (Taylor et al., 2007; Wong & Lu, 2017), as it affirms the recipient's thoughts and feelings without jeopardizing their sense of autonomy and competence (Chen et al., 2012).

Conversely, people from collectivist cultures tend to benefit most from the social support that emphasizes interdependence and less emotional disclosure (Taylor et al., 2007; Wong & Lu, 2017). The overt emotional support that goes against societal expectations of emotional expression and modesty would make the recipient uncomfortable rather than comforting (Burleson, 2003). Therefore, in a collectivist

culture, problem-focused support would be more advantageous since it fosters interpersonal accommodation and social interdependence (Chen et al., 2012). Interestingly, people from an interdependent culture also appreciate emotional support to improve their well-being as much as people from an independent culture, because it affirms their important sense of self as interdependent (Uchida et al., 2008), despite they benefited more from problem-focused support in coping with negative life events (Chen et al., 2012).

The rich cultural background in Malaysia has also reflected in the significant variation in help-seeking tendencies and coping strategies for mental illness (Yeap & Low, 2009). For instance, Malays highly endorsed religious activities as their primary treatment for depression; despite the fact that they have also considered counselors, psychiatrists, and psychologists as their source of help in dealing with depression (Swami et al., 2010). Malays would seek help from folk healers (*bomoh*) or religious-spiritual healers (*using Quranic chant*) when they first recognize their PPD symptoms (Ab Razak, 2017). However, religious activities that are highly embraced by Malay women may not apply to Chinese and Indian women in dealing with PPD (Mohd Arifin, 2016; Mohd Arifin et al., 2021; Edman & Teh, 2000). Indian women recognize social support from family and friends as their primary choice in dealing with mental illness, albeit the stigma associated with mental illness among Indians (Loo & Furnham, 2013). Meanwhile, the Chinese are most in favor of endorsed standard treatment such as seeing psychologists, medication, and counseling to treat depression (Loo & Furnham, 2012).

1.3 Emotional Support

Remarkably, seeking social support is overlapped as both problem- and emotion-focused strategies (Folkman & Lazarus, 1985; Carver, 1989). Social support

is defined as the provision of assistance or comfort to others to help them cope with biological, psychological or social stressors (Sherbourne & Stewart, 1991). Previous studies have highlighted the crucial role of social support in PPD symptoms development (Ando et al., 2021; Coburn et al., 2016; Maguire et al., 2024; Zainal et al., 2011; Zheng et al., 2018b). Social support, as both a risk and protective factor for PPD, has been shown to reduce women's risk for PPD when provided adequate social support and vice versa (Ando et al., 2021; van Heumen et al., 2018; Zhang & Jin, 2014). Social support has been classified into two dimensions, namely structural social support, and functional social support, with three types of functional social support, have been widely studied, including informational support, instrumental support, and emotional support (Cutrona, 1984; Séguin et al., 1999; Sherbourne & Stewart, 1991). Specifically, emotional support, known as the manifestation of affection, caring, encouragement, and empathy, is the kind of social support that is most closely linked with mental health outcomes (Razurel et al., 2011; Watson-Singleton, 2017). To illustrate, the use of emotion-focused strategy in dealing with PPD is reported across various ethnic groups in Malaysia (Jaafor et al., 2014), implying the significance of emotion-focused coping among postpartum women. Perceived emotional support decreases psychological distress, burnout, and depression (Brinker & Cheruvu, 2017; McLuckie et al., 2018; Romano et al., 2021). Moreover, perceived emotional support also lowers women's risk for PPD, by boosting mothers' self-efficacy, and making them feel loved (Brazeau et al., 2018; Wahyuntari et al., 2017).

Consequently, a supportive social network that shows affection and empathy, or simply spends time together is crucial to mitigate the detrimental effects of social constraints on PPD. Although emotional support could not provide direct responses to mothers' disclosure of symptoms and feelings, emotional support does foster feelings

of being loved and cared for (Brazeau et al., 2018; Wahyuntari et al., 2017). In addition, talking with someone about the experience of PPD is assumed to facilitate the cognitive and emotional processing of birth and PPD experiences, consequently, resulting in the resolution of traumatic materials associated with the birth experience, which in turn lowers mothers' distress and depressive symptoms. As a result, emotional support could lead mothers to perceive the social constraints encountered as less destructive to their relational intimacy and enhance their self-esteem, which subsequently prevents the worsening of mothers' depressive symptoms.

Therefore, emotional support is crucial for mothers struggling with PPD, as it makes them feel loved, accepted, and supported, which enhances their confidence to face the existing problems (Wahyuntari et al., 2017). Meanwhile, studies that examine the ethnic differences of PPD in Malaysia through the lens of culture are relatively scarce, despite the widely documented racial differences in PPD prevalence, risk factors, protective factors, and the manifestation of symptoms in Western (Howell et al., 2005) and Middle East countries (Rouhi et al., 2013). Ethnicity, reflecting cultural influences, affects how individuals experience emotional support and its relationship with social constraints. Previous studies shown mixed results indicating ethnic differences in emotional processing, which may as well represent differences in emotional support among various ethnic groups. The conflicting findings on perceived support (Boersma & Vahratian, 2020; Kapadia et al., 2020; Khodarahimi et al., 2016), ability to benefit from support (Assaari & Lankarani, 2018), and emotional processing (Fekete et al., 2007; Rajhans et al., 2016) have highlighted the potential of ethnicity in moderating the buffering effect of emotional support in the relationship between social constraints and PPD. Given the awareness of social and cultural differences, it therefore raises concerns about the moderating role that emotional support may play

in reducing the deleterious effects of social constraints on PPD symptoms in Malaysian mothers.

1.4 Problem Statement

Previous studies have primarily concentrated on the protective effect of social support on PPD as a single structure (Cho et al., 2022; Farhana Kazmi et al., 2013; Tani & Castagna, 2016; Xie et al., 2010; Zainal et al., 2011). To underscore this, Collins and his colleagues (1993) have pointed out that various types of functional support need to be measured independently as they may be required in different situations. Despite women from each ethnic group showing different preferences in adapting coping strategies and distinct perspectives toward PPD, the understanding of the effect of emotional support in ameliorating PPD among Malaysian mothers across different ethnic groups is limited (Jaafor et al., 2014; Mohd Arifin, 2016). The wide range of prevalence across diverse ethnic groups highlights the need to understand PPD by taking ethnic differences and its relationship with cultural values into account, which has not been succinctly elaborated. Considering that problem-focused support is more beneficial for people from a collectivist culture (Chen et al., 2012), it raises the question of whether Malaysians from different ethnic backgrounds benefit variably from emotional support in dealing with PPD.

Meanwhile, PPD often goes undiagnosed and is left mistreated in Malaysia (Groh, 2012; Mohd Arifin, 2016). The complex nature of PPD and the ambiguous diagnostic standard of the DSM-5-TR complicate the diagnosis of PPD. In addition, PPD is highly stigmatized both publicly and personally, making mothers reluctant to disclose their PPD symptoms and associated feelings (Callister et al., 2011; Dennis & Chung-Lee, 2006; Foulkes, 2011; Jones et al., 2019). Apart from this, the majority of Malaysian nurses are lacking in skills to screen PPD patients despite having an

intermediate level of PPD knowledge (San et al., 2019). Skill at screening PPD is crucial for healthcare professionals because only mothers who have been assessed and diagnosed are introduced to appropriate care. Furthermore, specific approaches or interventions are also relatively limited for mothers to access when diagnosed with PPD. Practices in Malaysian clinics have paid more attention to the physical aspects of postnatal care, often neglecting psychological health (Ng, 2014).

In addition, although women reported that normalization or ignorance from family members act as their help-seeking barriers, which consequently aggravates their depressive symptoms, these findings are primarily from the qualitative studies on mothers' postpartum experiences (Chan & Levy, 2004; Chew-Graham et al., 2009; Dennis & Chung-Lee, 2006; Potvin et al., 2016; Sacks et al., 2022). To date, no quantitative research has examined the potential impact of social constraints on PPD. Qualitative research designs are prone to the limitation of self-selection bias, as researchers unconsciously select a sample that favors an anticipated outcome, which restricts the generalizability of findings to a broader population (Jason & Glenwick, 2015). Therefore, a quantitative study investigating the moderating effect of emotional support on the association between social constraints and PPD across different ethnic groups is essential to quantify PPD among Malaysian women.

1.5 Research Questions

1. Do social constraints significantly affect PPD among Malaysian mothers?
2. Does emotional support moderate the association between social constraints and PPD?
3. Does the moderating effect of emotional support on the relationship between social constraints and PPD vary across Malays, Chinese, and Indian mothers?

1.6 Research Objectives

1. To investigate the relationship between social constraints and PPD.
2. To examine the moderating effect of emotional support on the relationship between social constraints and PPD.
3. To investigate the moderating effect of ethnicity (e.g., Malays, Chinese, and Indians) on the moderating effect of emotional support on the relationship between social constraints and PPD.

1.7 Significance of the Study

1.7.1 Postpartum Women

Considering that around 5.1 % to 48.6% of Malaysian mothers are suffering from PPD (Hairol et al., 2021; Janting et al., 2023; Najid et al., 2023; NHMS, 2022; Thiagarajah et al., 2023), this study aims to provide beneficial reference and insights into the significance of emotional support in alleviating maternal PPD. The initial postpartum period is a crucial period to identify emotional problems in new mothers; Moreover, it also hope to provide an overview of the social constraints experienced by mothers, reduces stigma associated with PPD and helps encourage mothers to seek help without the feeling of shame or guilt.

1.7.2 Health Care Services

Apart from the physical care provided by the Malaysian postnatal care system, psychological or emotional care in the screening and management of PPD is equally important. Thus, this study hopes to shed light on the importance of designing a series of cost-effective interventions that can be widely implemented in healthcare systems. To reduce the risks and burdens of untreated PPD as well as to accelerate initial treatment contact, a suitable and standardized intervention arranged by primary care should also be broadly available. Besides that, it also provides insight for policymakers

in designing the guidelines of health care services delivery that provide an appropriately seamless and culturally sensitive approach for postpartum mothers from different ethnicities.

1.7.3 Healthcare Professionals

Due to the cultural and ethnic variation in risk factors, symptoms presentation, and perspectives on PPD, it is essential for health practitioners to be culturally sensitive when providing care to specific ethnic groups. As a result, within the specific scope of a controlled study, the nature of quantitative research may identify and describe the experiences of social constraints and their impacts on PPD severity among a subset of postpartum women with certain ethnic backgrounds with support of statistical evidence. The data gathered will be relevance and useful, primarily for healthcare professionals and the public within this defined context. In addition, by understanding ethnic differences in their interactions between PPD, social constraints and emotional support, this study hopes to inform the training programs for healthcare professionals, emphasizing the importance of cultural sensitivity and awareness in addressing PPD, that subsequently improve the communication, transfer, and delivery of care between healthcare professionals and mothers with the acknowledgment of cultural differences and diversities.

1.7.4 Community Support

Other than this, people are always eager to try treatments that benefit them, regardless of whether they are biomedical or traditional therapies accepted by their culture. On top of this, this study seeks to shed new light on the significance of developing a culturally sensitive community-based intervention that satisfies the unique needs of each ethnic group and policies that improve the availability of community support for mothers. Furthermore, this study hopes to raise awareness

among healthcare professionals and the public about the potential adverse consequences of social constraints and their role in mitigating PPD, thereby, highlighting the need to create a receptive, accepting environment for postpartum mothers.

1.8 Scope of the Study

Despite the widely documented studies on emotional support, its moderating effect on the association between social constraints and PPD has not been explored yet. Therefore, this study focused on the moderating effect of emotional support on the association between social constraints and PPD among Malaysian mothers from various ethnicities (i.e., Malays, Chinese, and Indians). Purposive and snowball samplings were utilized in recruiting 306 postpartum women who gave birth within the past twelve months from when data collection started. The inclusion of participants is restricted to several criteria, including (1) gave birth to a healthy newborn the past twelve months, (2) Malaysian citizen, (3) able to understand either Malay, English or Chinese, (4) married, (5) 18 to 40 years old (6) mothers from either Malays, Chinese or Indians ethnicity. The data collection took place through online questionnaire distribution and paper-and-pen questionnaire recruitment at the hospitals. Each participant was asked to complete a survey. The Social-Cognitive Processing Model by Lepore et al. (2001) was applied in this study to understand the impact of social constraints on PPD. Also, the SCP model was employed to comprehend the moderating effect of emotional support on the association between social constraints and PPD. The SCP model was adopted given it is the only existing model that incorporates social contexts with cognitive processing to understand how social contexts such as social support or social constraints affect the processing of stressors and emotional adjustment, which is the primary focus of the present study. In contrast,

other social-cognitive theories have incorporated social contexts with cognitive processing to understand their mechanisms on behaviour changes (Bandura, 1986), decision making (Crick & Dodge, 1994; Lemerise & Arsenio, 2000) and online interpersonal relationship development (Walther, 1992), which are slightly deviate from the focus of the study, and therefore were not adopted.

1.9 Definition of Terms

1.9.1 Social Constraints

Social constraints are defined as “both objective social conditions and individuals’ construal to those conditions that lead individuals to refrain from or modify their disclosure of stress- and trauma-related thoughts, feelings, or concerns” (Lepore & Revenson, 2007, pg. 315). Social constraints can be assessed using the Social Constraints Scale constructed by Lepore and Ituarte (1999). The scale gauges how often, over the course of the previous month, participants felt socially constrained when interacting with members of their social network (Lepore & Ituarte, 1999). A higher mean score denotes a higher frequency of social constraints experiences (Lepore & Ituarte, 1999).

1.9.2 Emotional Support

Emotional support is referred to as the “manifestation of care, concern, love, and interest, particularly throughout times of stress or upset” (Cutrona & Russell, 1990). The Postpartum Support Questionnaire (PSQ) developed by Logsdon and McBride (1989) measures four kinds of social support namely, comparison support, informational support, emotional support and material support that are provided to women after the birth of their babies. The subscale of emotional support obtained from PSQ is used to measure the importance of emotional support and the emotional support

received and expected by the mother. Higher scores indicate higher importance or more support expected or received.

1.9.3 Postpartum Depression

According to the text-revision version of the Fifth Edition Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR), PPD is categorized as Major Depressive Disorder (MDD) with “peripartum onset specifier” to indicate as MDD that occurs during pregnancy or after childbirth (American Psychiatric Association, 2022). Specifically, PPD refers to “a mood disorder that onsets within four weeks after childbirth, usually presents with symptoms of restlessness, upset mood, anxiety, forgetfulness, irritability, sleep disturbances, change in appetite and poor functioning” (American Psychiatric Association, 2022). PPD can be measured by utilizing the Edinburgh Postnatal Depression Scale (EPDS) developed by Cox et al. (1987). The scale assessed the severity of depressive symptoms during the past seven days. Given that a score of 11.5 is used as the ideal cut-off point, thus woman who scores 11 or 12 is suggested to be at risk for developing PPD (Kadir et al., 2004; Wan Mahmud et al., 2003).

1.9.4 Living Arrangement

Living arrangement is defined as a person’s place of residence, alone or with others, or in an institution (Sayem et al., 2022). Living arrangements are categorized into two types, namely nuclear family and joint/extended family (Sayem et al., 2022; Wallerstein and Smith, 1992). The nuclear family is defined as a family that constitutes two generations residing together, consisting of the father, mother, and any dependent children (Williams, 2011). Meanwhile, a joint or extended family is defined as multiple generations living together, including extended relatives, typically parents’ in-laws (Akhtar et al., 2020; Wallerstein and Smith, 1992).

1.9.5 Parity

Parity is defined as the number of times a woman delivered a live neonate at 24 gestational weeks or more, regardless of whether the newborn was viable or stillbirth (Gaillard et al., 2014). Parity is categorized into two categories, namely primiparity and multiparity (Genovesi et al., 2017). Primiparity refers to a woman's status as a "primipara", which means the mother has experienced a single pregnancy and childbirth (Genovesi et al., 2017). Multiparity, on the other hand, describes a woman who has experienced multiple pregnancies and childbirths (Genovesi et al., 2017). A multipara is a woman who has given birth to two or more children (Genovesi et al., 2017).

1.9.6 Mode of Delivery

Mode of delivery is the method that a woman undergoes to have the fetus and the placenta leave her body (Warren & Arulkumaran, 2009). Mode of delivery is traditionally classified into two types, namely vaginal delivery and caesarean section (Warren & Arulkumaran, 2009). In particular, vaginal delivery is categorized into two subtypes, namely natural unassisted vaginal delivery and assisted vaginal delivery (Warren & Arulkumaran, 2009), whilst caesarean section is also categorized into two subtypes namely planned caesarean section and emergency caesarean section (Story & Brown, 2009). Natural unassisted vaginal delivery refers to the delivery of a newborn via the vagina without the use of forceps or vacuum (Warren & Arulkumaran, 2009). Assisted vaginal delivery refers to the delivery of a newborn via the vagina with the use of obstetric forceps or vacuum extractor to facilitate the downward movement of the fetal head along the pelvic (Doumouchtsis & Arulkumaran, 2009). Furthermore, a planned caesarean section is when a newborn is delivered through a planned surgical procedure that incises the mother's abdomen (Story & Brown, 2009). An emergency

caesarean section refers to the delivery of a newborn through an unplanned surgical procedure that incises the mother's abdomen under urgent circumstances (Story & Brown, 2009).

CHAPTER 2

LITERATURE REVIEW

This chapter critically reviews the existing scholarly works related to current research questions. In addition, the concept with theoretical support, which served as a guide for the conceptual aspect of the current research is also demonstrated in this chapter. Lastly, this chapter has included the hypotheses proposed based on the review of existing literature.

2.1 Postpartum Depression

Postpartum Depression (PPD) is a mood disorder that is more common among females compared to their male counterparts (Barry et al., 2023; Kamalifard et al., 2018). Stressful life events such as pregnancy and childbirth can increase stress and make women vulnerable to psychological problems. During the first months of postpartum, about 10.3% to 27% of mothers are suffering from PPD (Howell et al., 2009; Necho et al., 2020; Sylven et al., 2016). Similar phenomena are also observed in Malaysia, with approximately 5.1% to 48.6% of women suffering from PPD (Hairol et al., 2021; Janting et al., 2023; Najid et al., 2023; NHMS, 2022; Thiagarajah et al., 2023), implying a condition that needs more attention from various aspects. Nevertheless, PPD is often mistaken as postpartum blues. It is crucial to note that the severity of symptoms and time of onset plays a major role in distinguishing various postpartum mood disorders, given the symptoms of PPD are more intense and last longer than postpartum blues (Doucet et al., 2009; Rujiwetpongstorn, 2017). Both postpartum blues and PPD are conceptualized as postpartum mood disorders that exist along a spectrum based on their severity, with PPD falling in between postpartum blues and postpartum psychosis (Cutrona, 1982; McCabe-Beane & O'Hara, 2017; Nonacs & Cohen, 1998).

Shortly after the labour, women may first experience postpartum blues, sometimes referred to as baby blues or maternity blues. Typical characteristics of postpartum blues could include mood fluctuations, crying fits, anxiety, and trouble failing asleep (Balaram & Marwaha, 2021; Yalom et al., 1968). Generally, postpartum blues will start within the first two to three days following delivery and persist for up to 14 days (Balaram & Marwaha, 2021; Pitt, 1973). Remarkably, the symptoms of postpartum blues usually resolve within ten days of postpartum, with symptoms lasting beyond this period should be considered for more serious diagnosis of postpartum mood disorders (Moyo, 2020). On the other end of the spectrum, postpartum psychosis also referred as puerperal psychosis, is a condition that requires immediate hospitalization, as it leads mothers to possess life-threatening thoughts of harming their baby and themselves (Friedman et al., 2023). Postpartum psychosis is a rare and severe condition that begins rapidly, with symptoms manifesting as early as three to 10 days after delivery, and most of the episodes emerge within two weeks (Friedman et al., 2023). Women with postpartum psychosis may experience symptoms including mania, depression, confusion, hallucinations, delusions, and obsessive thoughts about the baby (Friedman et al., 2023).

Apart from postpartum blues and psychosis, PPD is categorized as Major Depressive Disorder (MDD) with “peripartum onset” specifier according to the DSM-5-TR diagnostic criteria. PPD is defined as a moderate-to-severe depressive episode that developed within the first four weeks following childbirth (American Psychiatric Association, 2022). Nevertheless, its onset criteria have been criticized for not extending to one year, given about 6.3% to 12.9% of women’s PPD symptoms begin within the first year following childbirth (Tebeka et al., 2021; Wesseloo et al., 2018). Numerous studies even found that the PPD symptoms persist throughout the first two

years of postpartum (Mayberry et al., 2007; Torres et al., 2019). Women with PPD may experience a depressed mood, lack of interest, low energy, difficulty thinking or focusing, feelings of worthlessness or inappropriate guilt, psychomotor agitation, irritability, recurrent suicidal ideations, sleep, and eating habits disturbances (American Psychiatric Association, 2022). The diagnosis of PPD requires at least five of the symptoms listed above to occur; with one of the included symptoms must be a depressed mood or lack of interest (American Psychiatric Association, 2022). Notably, a depressed mood induced by a substance, or a general medical condition is not considered when diagnosing PPD (American Psychiatric Association, 2022). In addition, these symptoms ought to be present most of the days, along with deterioration in either social or occupational functioning (American Psychiatric Association, 2022). Lastly, the symptoms must begin within the first four weeks of postpartum (American Psychiatric Association, 2022).

2.1.1 Negative Consequences

Emerging research suggests that PPD has detrimental impacts on the mother, the family, and the mother-child relationship (Kasamatsu et al., 2019; Maxwell et al., 2018; Myers & Johns, 2018). For instance, PPD has been associated with low marital relationship satisfaction (Elmagd & Albokhary, 2021), and difficulties in maintaining intimacy with their spouse (Johansson et al., 2020; Woolhouse et al., 2012). Women experience fear of developing attachment and intimacy with their babies and spouses, as they find their babies as the source of their childbirth trauma (Fenech & Thomson, 2014). Likewise, some women attribute sexual intimacy with their partner as a reminder of the trauma associated with childbirth (Fenech & Thomson, 2014). Apart from this, women also experienced a significant reduction in libido (Khalid et al., 2020) and intimacy with their spouse attributable to the tiredness of childcare and the

demanding need for adjustment to new roles (Johansson et al., 2020; Woolhouse et al., 2012). The overwhelming tasks of taking care of the newborn put additional strain on the couple's intimate relationship and worsened their relationship quality, which further led to separation or divorce (Johannsen et al., 2021). However, the causal association between the deterioration of relationships and depression remains controversial, as other studies have claimed that women's PPD symptoms exacerbate when they are dissatisfied with their intimate relationship quality (Faisal-Cury et al., 2021; Malus et al., 2016).

Besides that, a mother with PPD would also experience intense sadness, persistent anxiety, and poor maternal attachment with the infant due to the lack of interest in their babies (Maxwell et al., 2018; Eitenmüller et al., 2022). Consequently, poor maternal-infant bonding further leads to poor socio-emotional development and difficult temperament within toddlers (Faisal-Cury et al., 2021). For instance, a study has shown maternal PPD symptoms lead to infants' development delay in language, cognitive, and psychological aspects (KC et al., 2024; Sultan Ali et al., 2013). Male children are more likely than female children to experience delayed speech and gross motor development (KC et al., 2024; Sultan Ali et al., 2013). Additionally, PPD is also linked with a greater risk of sudden infant death syndrome (SIDS) and infanticide (Bramante & Di Florio, 2023; Sanderson et al., 2002). SIDS is the sudden and unexplained death of a seemingly healthy baby less than 12 months old, which usually occurs during sleep (McKenna, 2017), whilst infanticide refers to the killing of a child less than a year old (Dodson, 2019). Under the worst conditions, the persistence of PPD symptoms could also develop into suicidal ideations (Lee et al., 2022; Praetorius et al., 2020; Simpson et al., 2018).

2.1.2 Factors Associated With PPD

Although the etiology of PPD remains ambiguous, previous literature has recorded myriad factors that associated with PPD from the social, psychological, and biological aspects (Bay & Sayiner, 2021; Daoud et al., 2019; Di Florio et al., 2017; Islam et al., 2017; Iwata et al., 2016; Julian et al., 2021; Kim & Dee, 2018; Kornfeind & Sipsma, 2018; Landsman et al., 2017; Lewis et al., 2017; Meky et al., 2019; Mikšic et al., 2020; Modi et al., 2018; Mohammad et al., 2021; Qiu et al., 2020; Shitu et al., 2019; Sidhu et al., 2019; Trifu et al., 2019; Zhou, Li, et al., 2018). The next section gives a brief overview of numerous common factors associated with PPD.

Education. Mothers with low education levels are at higher risk for PPD (Kim & Dee, 2018; Matsumura et al., 2019). When investigating the relationship between sociodemographic and PPD symptoms expression, findings demonstrated that minimally educated women are prone to report symptoms of lack of enjoyment, whereas well-educated women reported symptoms of crying and ideations of self-harm (Di Florio et al., 2017). Conversely, numerous research claimed that no association was found between education level and mothers' PPD (Ahmed et al., 2021; Shitu et al., 2019). The underlying processes of the association between education level and PPD remains ambiguous, given relatively fewer studies have been conducted to understand the relationship. Nevertheless, scholars suggest that education level is often associated with employment and income, which mediate the relationship between education level and PPD (Kim & Dee, 2018).

Income. Low income serves as a risk factor of PPD (Sri Mulyani et al., 2023), given low income is often associated with financial stress (Ryu & Fan, 2023). Aside from the financial stress, mothers with low incomes are often left undetected and lack access to treatment (Azale et al., 2018; Dávila, 2024). However, contrary findings

indicated no association between low income and PPD (Mukherjee et al., 2018). Scholars have argued the discrepancies in findings of income and PPD owing to the unreliable of self-reported income, as people tend to overreport or underreport their income over the exact amount (Aochi et al., 2020).

Employment. Employment is often perceived as important to ensure stable financial income for the maintenance of a family. Employment is claimed to protect mothers against PPD (Lewis et al., 2017), thereby unemployed mothers are more vulnerable to PPD, given they are financially insecure, less privileged, and have fewer social support (Aochi et al., 2020). Nonetheless, income should not be the only explanation for the relationship between employment and PPD, given findings from Liu et al. (2017) found that employed mothers also displayed a greater risk for PPD during the postpartum period. Variables other than income level such as social support, work preference and beliefs about work, job security, workload, and working environment are also deemed to modify the association between employment and PPD (Aochi et al., 2020; Lewis et al., 2017; Liu et al., 2017).

Ethnicity Minority. Ethnic minority women who exposed to diverse forms of discrimination are a vulnerable population to PPD (Daoud et al., 2019). Besides that, women with ethnic minority backgrounds reported feeling stress owing to their need to be socially integrated (Shakeel et al., 2018). The language barrier and lack of culturally specific instruments also hinder ethnic minority women from seeking help and getting detected (Schouten et al., 2021). These barriers and challenges are similarly applicable to immigrant women, who feel stress to undergo their pregnancy and the postpartum period in a foreign country with limited family and friends' support (Alhasanat-Khalil et al., 2018; Johansson et al., 2023).

Maternal Age. Researchers argued that younger maternal age, instead of older maternal age, has emerged to be a significant predictor of PPD (Swift et al., 2020; Zhou, Li, et al., 2018). The limited social connections and resources that sustain younger pregnant women aged below 20 years old throughout their pregnancy and postpartum period leads them to psychological distress (Ayu et al., 2019; Mohammad et al., 2021; Swift et al., 2020). Besides that, younger pregnant women are claimed to be not biologically mature for reproduction, as the optimal reproductive age ranges from 20 to 35 years old (Ayu et al., 2019). Any pregnancy that occurs out of this age range implies an increased risk of pregnancy complications that contribute to PPD (Ayu et al., 2019). In agreement with this, women aged 25 to 34 years old represent the lowest risk of PPD when compared to women aged below 25 and above 35 (Silverman et al., 2017). Likewise, pregnant women who are aged beyond 35 years old also display more child-related concerns and worries, given older mothers exhibit a higher risk of pregnancy complications or other health problems in their offspring (Sakemi et al., 2023). Despite that, the impact of age on PPD development remained controversial, as older women are claimed to be more prepared and psychologically mature for being a mother, thereby displaying a relatively lower risk of PPD compared to younger women (Ayu et al., 2019).

Parity. Nevertheless, scholars dispute that, instead of maternal age, parity plays a vital role in PPD (Iwata et al., 2016). In particular, primiparous are more prone to PPD, notably in the first month of postpartum due to their lack of childcare experiences, sleep disturbances, and maternal concerns (Dol et al., 2021; Iwata et al., 2016). Nevertheless, the PPD symptoms in primiparous resolve progressively at the 10th and 14th week of postpartum as maternal confidence increases over time (Aydemir & Onan, 2020). The gradual forming of routine along with the accumulation of

required information and maternal care skills enhances mothers' confidence and consequently reduces their depressive symptoms (Aydemir & Onan, 2020). Conversely, a study also claimed that multiparous women are more vulnerable to PPD, owing to the childcare stress of balancing between existing offsprings and their newborns (Cho et al., 2021). Nevertheless, scholars postulated that the risk and prevalence of PPD are uniform throughout different periods from pregnancy to the first year postdelivery, suggesting the vulnerability of depression is influenced by biological factors instead of the acquisition of maternal skills and self-efficacy (Eberhard-Gran, 2004).

Marital Status. Other than age and parity, women who are widowed, divorced, or unmarried are also more likely to develop PPD symptoms, given they are more prone to social, psychological, and economic challenges (Shitu et al., 2019). Single mothers reported a lack of social support and income to support them throughout their transition to motherhood (Benuyenah & Bich Tran, 2021). Together, the psychosocial and economic challenges followed by the absence of a partner make mothers more vulnerable to PPD (Shitu et al., 2019). However, the protective effect of marital status is double-edged, given married mothers are also exposed to the risk of PPD due to their relationship with their husbands. Having a husband who is unhelpful, unreliable, and unsupportive could make postpartum women more vulnerable to PPD (Pinar et al., 2022).

Interpersonal Relationship Satisfaction. Women are more depressed when they experience husbands and in-laws related relationship conflicts (Pinar et al., 2022). After birth, mothers are in need of substantial support from their husbands and family, however, mothers could get dissatisfied with the support from their partner and the intensive involvement of parent in-laws in mothers' daily lives has exposed mothers