WOMEN'S EMPOWERMENT AND ITS LINK TO INTIMATE PARTNER VIOLENCE AND CONTRACEPTIVE USE IN SELECTED SOUTHEAST ASIAN COUNTRIES

ANG CHIEW WAY

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ABSTRACT

Achieving gender equality is essential for the sustainable development of developing countries. Since 1994, the United Nations Population Fund has declared that reproductive rights are fundamental human rights, and uplifting women's status is a crucial component in improving their well–being. Many efforts to empower women have been made by global leaders following the adoption of the Millennium Development Goals and the Sustainable Development Goals. However, to date, gender inequality remains one of the most prevalent global challenges. In addition, gender inequality exposes women to intimate partner violence (IPV). It further limits women's access to modern contraception. Many past studies have found that women's empowerment is one of the main determinants influencing sexual and reproductive health and rights. Hence, this study aims to 1) identify the measures of women's empowerment at the household level; 2) examine the level of women's empowerment and its determinants, and 3) examine the association between women's empowerment and sexual and reproductive health and rights, specifically IPV and modern contraceptive use in selected Southeast Asian countries. This study focuses on Cambodia, Indonesia, Myanmar, and the Philippines because these countries represent the three major religions, Buddhism, Christianity, and Islam, practiced in Southeast Asia. In addition, the concept of male dominance in Asian society often places women in an inferior position whereby their authority in leadership and decision–making is suppressed. As such, women are often neglected, thus being less empowered in society. This study utilizes the latest data obtained from the Demographic and Health Survey conducted in Cambodia, Indonesia, Myanmar, and the Philippines. The sample for this study includes all women of the reproductive age (15 to 49 years) who are currently married or in a union. Exploratory factor analysis is applied to determine the measures of women's empowerment. Logistic regression is used to identify the factors influencing women's empowerment and its association with IPV and modern

contraceptive use. The measures of women's empowerment include women's household decision–making power, women's asset ownership, and women's attitude towards wife–beating. The results show that demographic and socioeconomic factors strongly influence women's empowerment. Education, work status, and exposure to mass media are significantly associated with women's empowerment across the countries. In turn, women's empowerment influences IPV and modern contraceptive use but its effect varies across the countries. Women's empowerment affects IPV and modern contraceptive use in Cambodia and the Philippines. In Indonesia, women's empowerment is significantly associated with modern contraceptive use. For Myanmar, the associations of women's empowerment with IPV and modern contraceptive use are insignificant in the multivariate context. In addition, women with greater exposure to mass media have a lower prevalence of experiencing sexual IPV in the Philippines, while those who have received secondary school education and are working in Cambodia have lower odds of experiencing IPV. The findings of this study provide inputs for policymakers in designing specific policies to improve the status of women.

Keywords: *Women's empowerment, household decision–making, attitude towards wife–beating, asset ownership, Southeast Asia, intimate partner violence (IPV), modern contraceptive use, education, work, mass media exposure.*

ABSTRAK

Mencapai kesaksamaan jantina adalah penting untuk pembangunan mampan di negara-negara membangun. Tabung Kependudukan Pertubuhan Bangsa-bangsa Bersatu telah mengisytiharkan bahawa hak reproduktif adalah hak asasi manusia, dan meningkatkan status wanita adalah komponen penting dalam meningkatkan kesejahteraan mereka sejak 1994. Banyak usaha untuk memperkasakan wanita telah dilakukan oleh pemimpin global berikutan penggunaan Matlamat Pembangunan Milenium dan Matlamat Pembangunan Mampan. Namun, sehingga kini, ketidaksamaan jantina kekal sebagai salah satu cabaran global yang paling lazim. Selain itu, ketidaksamaan jantina mendedahkan wanita kepada keganasan pasangan intim (IPV). Ketidaksamaan jantina mengehadkan lagi akses wanita kepada kontraseptif moden. Banyak kajian lepas mendapati bahawa pemerkasaan wanita adalah salah satu penentu utama yang mempengaruhi kesihatan dan hak seksual dan reproduktif. Justeru, kajian ini bertujuan untuk 1) mengenal pasti ukuran pemerkasaan wanita di peringkat isi rumah; 2) mengkaji tahap pemerkasaan wanita dan penentunya, dan 3) mengkaji hubungan antara pemerkasaan wanita dan kesihatan serta hak seksual dan reproduktif, khususnya IPV dan penggunaan kontraseptif moden di negara Asia Tenggara terpilih. Kajian ini fokus kepada Kemboja, Indonesia, Myanmar, dan Filipina kerana negara-negara tersebut mewakili tiga agama utama, Islam, Buddha, dan Kristian, yang diamalkan di Asia Tenggara. Di samping itu, konsep penguasaan lelaki dalam masyarakat Asia sering meletakkan wanita dalam kedudukan yang lebih rendah di mana kuasa kepimpinan dan membuat keputusan mereka telah ditindas. Oleh sedemikian, wanita sering diabaikan, lantas, kurang diberi kuasa dalam masyarakat. Kajian ini menggunakan data yang diperoleh daripada Demographic Health and Survey yang dijalankan di Kemboja, Indonesia, Myanmar, dan Filipina. Sampel bagi kajian ini merangkumi semua wanita dalam umur reproduktif (15-49 tahun) yang masih berkahwin atau bersatu. Analisis faktor penerokaan digunakan untuk

menentukan ukuran pemerkasaan wanita. Regresi logistik digunakan untuk mengenal pasti faktor yang mempengaruhi pemerkasaan wanita dan kaitannya dengan IPV dan penggunaan kontraseptif moden. Ukuran pemerkasaan wanita untuk kajian ini termasuk kuasa wanita membuat keputusan rumah tangga, pemilikan aset wanita, dan persepsi wanita terhadap pukul isteri. Keputusan menunjukkan bahawa faktor demografi dan sosioekonomi banyak mempengaruhi pemerkasaan wanita. Pendidikan, status pekerjaan dan pendedahan kepada media massa dikaitkan dengan ketara dengan pemerkasaan wanita di seluruh negara. Sebaliknya, pemerkasaan wanita mempengaruhi IPV dan penggunaan kontraseptif moden dengan ketara, tetapi kesannya berbeza di seluruh negara. Pemerkasaan wanita memberi kesan terhadap IPV dan penggunaan kontraseptif moden di Kemboja dan Filipina. Di Indonesia, pemerkasaan wanita dikaitkan dengan penggunaan kontraseptif moden. Bagi kes Myanmar, hubungan antara pemerkasaan wanita dan IPV dan penggunaan kontraseptif moden adalah tidak ketara dalam konteks multivariate. Di samping itu, wanita yang lebih terdedah kepada media massa mempunyai peratusan yang lebih rendah untuk mengalami IPV seksual di Filipina, manakala wanita yang berpendidikan menengah dan bekerja di Kemboja mempunyai kemungkinan yang lebih rendah untuk mengalami IPV. Dapatan kajian ini memberikan beberapa input kepada penggubal dasar dalam merangka dasar khusus untuk menaikkan taraf wanita.

Kata kunci: *Pemerkasaan wanita,* keputusan rumah tangga, persepsi terhadap pukul isteri, pemilikan aset, *Asia Tenggara, keganasan pasangan intim (IPV), penggunaan kontraseptif moden, pendidikan, pekerjaan, pendedahan media massa.*

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AIDS	:	Acquired Immunodeficiency Syndrome
ASEAN	:	Association of Southeast Asia Nations
ASEAN RPA on EVAW	:	ASEAN Region Plan of Action on the Elimination of Violence against Women
BAPPENAS	:	Ministry of National Development Planning
CDHS 2014	:	Cambodia Demographic and Health Survey 2014
CIDA	:	Canadian International Development Agency
COVID–19	:	Coronavirus disease
CPS	:	Contraceptive Prevalence Survey
DFAT	:	Department of Foreign Affairs and Trade
DHS	:	Demographic and Health Surveys
EAs	:	Enumeration Areas
EFA	:	Exploratory Factor Analysis
FGM	:	Female Genital Mutilation
GAD	:	Gender and Development
GBV	:	Gender-based violence
GDI	:	Gender Development Index
GDP	:	Gross Domestic Product
GEM	:	Gender Empowerment Measure
GEWE	:	Gender Equality and Women's Empowerment
GII	:	Gender Inequality Index
HDI	:	Human Development Index
HIV	:	Human Immunodeficiency Virus
ICPD	:	International Conference on Population and Development

IDHS 2017	:	Indonesia Demographic and Health Survey 2017
ILO	:	International Labour Organization
IPV	:	Intimate Partner Violence
IRB	:	ICF Institutional Review Board
KMO	:	Kaiser-Meyer-Olkin measure sampling adequacy (KMO)
LAM	:	Lactation amenorrhea
LMICs	:	Low and Middle–income Countries
MCW	:	Magna Carta of Women
mCPR	:	Modern Contraceptive Prevalence Rate
MDGs	:	Millennium Development Goals
MDHS 2015–16	:	Myanmar Demographic and Health Survey 2015-16
MoH	:	Ministry of Health
MoWA	:	Ministry of Women's Affairs
NAPAW	:	National Action Plan for Prevention Violence Against Women
NDHS 2017	:	Philippines National Demographic and Health Survey 2017
NGOs		Non–governmental organizations
OECD	:	Organization for Economic Co–operation and Development
PCA	:	Principal Component Analysis
PoA	:	Program of Action
RAN	:	National Action Plan
RPJPN	:	Long-Term National Development Plan
SDGs	:	Sustainable Development Goals

SPSS	:	Statistical Package for the Social Sciences
STI	:	Science, Technology, Innovation
TFR	:	Total Fertility Rate
TGP	:	Theory of Gender and Power
UN	:	United Nations
UN DESA	:	United Nations Department of Economic and Social Affairs
UNCTAD	:	United Nations Conference on Trade and Development
UNDP	:	United Nations Development Program
UNFPA	:	United Nations Population Fund
USAID	:	United States Agency for International Development
WAD	:	Women and Development
WEF	:	World Economic Forum
WFS	:	World Fertility Survey
WHO	:	World Health Organization
WID	:	Women in Development

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CHAPTER 1: INTRODUCTION

1.1 Introduction

In the new millennium, globalization, improvement of technology, and efforts by the government and non–governmental organizations (NGOs) have gradually elevated women's status. However, the outcome has been unsatisfactory (Shoaib et al., 2012). Women are still under–represented in politics, deprived of welfare in the workforce, among others, especially in developing countries (International Monetary Fund, 2019; Klugman et al., 2014).

The 1994 International Conference on Population and Development (ICPD) in Cairo marked a turning point in elevating women's status. The Program of Action (PoA) of the ICPD focuses on individual women's and men's needs, aspirations, and rights. In addition, it was agreed by the participating governments, the United Nations (UN) agencies, the intergovernmental organizations and NGOs that reproductive rights are a fundamental human right in development and population concerns. These authorities also recognized that elevating the status of women and young girls is the right path to improving a nation's well–being and sustainable development (United Nations Population Fund [UNFPA], 2014).

The PoA underscores the integral and mutually reinforcing linkages between population and development (UNFPA, 1996). The adoption of the PoA marked a new era of the willingness of governments, the international community, and civil society to integrate population factors in development planning (UNFPA, 1996). The PoA served as a foundation for governments in developing countries to implement the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs), particularly in alleviating poverty, improving education, and ameliorating gender equality over the past 20 years (UNFPA, 2014).

Gender equality is a fundamental human right and is a crucial element in building the foundation for sustainable development as women and young girls contribute significantly towards economic growth and development (United Nations [UN], 2021). Hence, various SDGs targets were set to empower women, such as combating violence against women and young girls, ameliorating gender–based discrimination, tackling harmful practices such as child marriage, female genital mutilation (FGM), addressing limited access to sexual and reproductive health, and reproductive rights. These targets were established in efforts to achieve the SDGs' Goal 5 in the year 2030.

It is essential to advance women's equality as it could increase an estimated 12% (USD 4.5 trillion) of the collective annual Gross Domestic Product (GDP) in Asian Pacific countries by 2025 (Woetzel et al., 2018). This indicates that achieving gender parity would be beneficial for the development of society and a country. To achieve the goal of MDGs and SDGs, the government of each country implemented several policies to empower women and to promote gender equality in various sectors such as health, education, and economics.

However, despite the continuous commitments and efforts to empower women, enormous inequalities remain (UN, 2021). There are gaps between policy aspirations and actual practice in society. Gender–based violence (GBV) remained one of the most widespread human rights violations globally (UNFPA, 2017). It was reported that 1 in 5 women aged 15 – 49 experienced physical or sexual violence in the past 12 months worldwide (UN, 2021). GBV undermines the victims' health, security, and autonomy, but little has been done to improve the situation. Victims of GBV suffer from various sexual and reproductive health consequences such as unwanted pregnancies, unsafe abortions, sexually transmitted infections, or diseases, and in the worst scenarios, death. In addition, child marriages and FGM are some global issues still being practiced today (UN, 2021). These practices are blatant violations of human rights and a clear denial of

the rights of women and young girls. The underlying factors resulting in these practices are poverty and gender inequality that arises from the patriarchal mindset and religious norms embedded in the household (UNFPA, 2018a, 2018b). Such phenomena need to be addressed instantaneously as it will perpetuate the chain of deprivation and inequalities across generations.

Furthermore, the gender inequalities of women from different aspects or areas such as labor, services and enablers, legal rights/protection and political voices and representation, and physical security remain high in Asian Pacific countries (Woetzel et al., 2018). For instance, the gender parity score for legal rights/protection and political voices and representation[1] was low, ranging from 0.18 to 0.51, across Southeast Asian countries (Woetzel et al., 2018). This indicates that women are still facing discrimination in society. Hence, it is necessary to investigate women's current status in developing countries, especially in Southeast Asia.

1.2 Women's status in Asia

This section discusses the current status of women in Asia, focussing particularly on East Asia, Southeast Asia, and South Asia sub-regions. The prevalence of lifetime physical and/or sexual IPV was high in South Asia, at 35% between 2000 and 2018 (World Health Organization [WHO], 2021). Meanwhile, the prevalence of lifetime physical and/or sexual IPV in East Asia and Southeast Asia was lower than in South Asia, at 21% and 20%, respectively, during the same period (WHO, 2021). On the other hand, the prevalence of modern contraceptive use was low across Asia sub-regions except for East Asia. The proportion of women aged 15 – 49 years using a modern contraceptive

[1] Comprising political representation and a legal protection index (including, for example, legislation protecting against domestic violence, providing equal inheritance rights and paternity or parental leave as well as mandating non-discrimination in hiring).

method was 67%, 39%, and 36% in East Asia, Southeast Asia, and South Asia sub-regions in 2019 (Sully et al., 2020).

It was found that the gross secondary enrolment rate of women in South Asia remains low at about 72% compared to 91% and 85% in East Asia and Southeast Asia, respectively, in 2020 (UNESCO Institute for Statistics, 2022). Meanwhile, female labour force participation in the three Asia sub-regions remained low at 60.7%, 54.8%, and 21.6%, respectively, in East Asia, Southeast Asia, and South Asia in 2021 (International Labour Organization [ILO], 2021). Although women in East Asia and Southeast Asia had relatively higher status than in South Asia, the statistics reported above indicated that women's status in the two sub-regions remains low. These facts and statistics indicate that gender inequality is an ongoing issue that should be overcome as soon as possible.

1.3 Country settings

This section discusses the background of the selected four Southeast Asian countries, particularly, Cambodia, Indonesia, Myanmar, and the Philippines. The population size and leading economic sector of each country are presented. Besides that, gender disparities in education, employment, and political representation are discussed. Figure 1.1 shows the map of Southeast Asia.

Figure 1.1. Maps of Southeast Asia.

Source: United Nations, 2012 (https://www.un.org/geospatial/content/southeast-asia)

1.3.1 Cambodia

Cambodia had an estimated population of 16.8 million, with 8.6 million women (51.1%) in 2020 (United Nations Department of Economic and Social Affairs [UN DESA], 2019). Cambodia's leading economic sector was the service sector as it contributed 43.1% of the total GDP in 2018 (Association of Southeast Asian Nations [ASEAN], 2019). Cambodia ranked 103 out of 156 countries based on the Global Gender Gap index[2] in 2021, where it was reported to have closed 68.4% of its gender gap (World Economic Forum [WEF], 2021).

[2] The Global Gender Gap Index measured the gender-based gaps from four different aspects: economic participation and opportunities, educational attainment, health and survival, and political empowerment.

The population living below the national poverty line had reduced significantly from 33% in 2005 to 13.5% in 2017 (ASEAN, 2019). Cambodia ranked 144 out of 189 countries in the Human Development Index (HDI[3]), which had increased from 0.368 in 1990 to 0.594 in 2019 (United Nations Development Programme [UNDP], 2020).

However, the gender disparities in education remain substantial as the adult literacy rate among Cambodian women was only 75%, which was lower than men at 86.5% in 2020 (WEF, 2021). The primary education enrolment rate was about 90% for both genders in 2020 (WEF, 2021). However, the enrolment rates of secondary and tertiary education for women were only 44.9% and 12.9% r7espectively which was lower than that for men at 55.1% (secondary) and 14.4% (tertiary) in 2020 (WEF, 2021).

The labor force participation rate among Cambodian women was recorded at 77.4%, which was lower than men at 89.3% in 2018 (ASEAN, 2019). However, the female representation in politics was very low with only 21.6% of parliamentary seats being held by women in 2020 (WEF, 2021). Such a figure indicates that gender inequalities still exist in Cambodia.

1.3.2 Indonesia

Indonesia is the world's largest archipelagic state, comprising about 17,500 islands (Department of Foreign Affairs and Trade [DFAT], 2017). Indonesia is the fourth most populous country in the world (World Bank, 2020). Indonesia had an estimated population of 273.5 million, with 135.8 million females (49.5%) in 2020 (UN DESA, 2019). Indonesia's leading economic sector was the service sector as it contributed 43.6% of the country's total GDP in 2018 (ASEAN, 2019). Indonesia ranked 101 out of 156

[3] The dimensions of HDI measured are long and healthy lives (life expectancy at birth), knowledge (expected years of schooling and mean years of schooling) and a decent standard of living (GNI per capita (PPP $)).

countries based on the *Global Gender Gap Index*, where it was reported to have closed about 69% of its gender gap (WEF, 2021).

The population living below the national poverty line had reduced gradually from 16% in 2005 to 10.6% in 2017 (ASEAN, 2019). Indonesia's well–being had improved over time, where the HDI value increased from 0.523 in 1990 to 0.718 in 2019 (UNDP, 2020). The adult literacy rate among Indonesian women was 94%, which was slightly lower than men's at 97.3% in 2020 (WEF, 2021). Meanwhile, the enrolment rate in primary school among females was lower than males with 91% of females being enrolled in primary school against 96% of males in 2020 (WEF,2021). Surprisingly, the enrolment rates of secondary and tertiary education among Indonesian women were higher than men – 79.9% and 39% of women were enrolled in secondary and tertiary education respectively versus 77.6% and 33.8% for men in 2020 (WEF,2021).

The gender disparities in the labor force participation rate remain high with only 55.4% of Indonesian females participating in the labor force compared to 83% of Indonesian males in 2018 (ASEAN, 2019). Only 21% of the parliamentary seats was held by women in 2020 (WEF, 2021).

1.3.3 Myanmar

Myanmar is a country that is rich in natural resources such as minerals, natural gas, and marine resources (Florento & Corpuz, 2014). Myanmar is the largest mainland country in Southeast Asia (Florento & Corpuz, 2014). Myanmar had an estimated population of 54.4 million, with 28.2 million females (51.8%) in 2020 (UN DESA, 2019). The leading economic sector in Myanmar was the service sector, which contributed 43.2% of the total GDP of the country in 2018 (ASEAN, 2019). Myanmar ranked 109 out of 156 countries based on the *Global Gender Gap Index in 2021*, where the country was reported to have closed 68.1% of its gender gap (WEF, 2021).

The population living below the national poverty line reduced significantly from 48.2% in 2005 to 24.8% in 2017 (ASEAN, 2019). Myanmar ranked 147 out of 189 countries based on the HDI in 2019, where the index had increased from 0.342 in 1990 to 0.583 in 2019 (UNDP, 2020). This indicated that the well–being of the Burmese had gradually improved over time.

Burmese women's adult literacy rate was relatively low, as only 72% were literate, compared to 80% for men (WEF, 2021). The gender gaps in educational attainment have gradually narrowed in recent years. The enrolment rate in primary school for women was about 88%, slightly lower than men's which was 89.4% in 2020 (WEF, 2021). Women's secondary and tertiary enrolment rates were 66.6% and 22% in 2020, compared to men at 61.5% and 15.6%, respectively (WEF, 2021).

Gender disparities remain a concern in Myanmar as only 49.6% of Burmese women were participating in the labor force, which was lower than men at 76.8% in 2018 (ASEAN, 2019). In addition, Burmese women only held 15% of the parliamentary seats in 2020 (WEF, 2021).

1.3.4 Philippines

The Philippines had an estimated population of 109.6 million, with 54.6 million being females (49.8%) in 2020 (UN DESA, 2019). The Philippines' leading economic sector was the service sector which contributed about 58% of the country's total GDP in 2018 (ASEAN, 2019). The Philippines ranked 17 out of 156 countries based on the *Global Gender Gap Index in 2021* and was reported to have closed 78.4% of its gender gap (WEF, 2021). The Philippines had the smallest gender gap by far among the Asian countries (WEF, 2021).

However, poverty reduction in the Philippines was slow as the population living below the national poverty line only slightly declined from 26% in 2005 to 21.6% in 2016 (ASEAN, 2019). The Philippines ranked 107 out of 189 countries based on the HDI in 2019, which increased from 0.593 in 1990 to 0.718 in 2019 (UNDP, 2020). From the aspect of education, the Philippines' adult literacy rate is universal as more than 98% of Filipinos were literate for both genders (WEF, 2021). The enrolment rate in primary school was about 94% for both genders in 2020 (WEF, 2021). In addition, the enrolment rate in secondary and tertiary education for Filipino women in 2020 was 71.3% and 40.4%, respectively, which was much higher than Filipino men at 60.2% and 30.8%, respectively (WEF, 2021).

Gender disparities exist in the labor force, as only 46.2% of Filipino women participated in the labor force in 2018, which was much lower than Filipino men at 73.9% (ASEAN, 2019). In addition, the share of parliamentary seats held by Filipino women reduced from 35.3% in 2018 to 28.0% in 2019 but remained the same at 28.0% in 2020 (WEF, 2020, 2021).

1.4 Problem statements

Achieving gender equality is important for the sustainable development of a country. However, women have been denied the resources needed to fulfil their responsibilities in meeting the household's basic needs (Nelasco, 2012). The gender stereotyping that household work is "women's work" is deeply rooted in Asia, where women's contribution to the economy is not recognized (Rustagi, 2016). It was reported that the time women dedicated to unpaid chores and domestic work compared to men had increased from 2.9 times to 3.8 times in the Asia Pacific region during the period of 2014 to 2018 (Organisation for Economic Co–operation and Development [OECD], 2021). Such

phenomena resulted in adverse consequences for women as they forgo their paid employment to devote more time to household chores.

Morgan et al. (2022) examined the fertility differential among Muslim and non-Muslim women across Asian countries and explained that the possible reason Muslim women had a higher desire to have additional children and were less likely to use contraception was the influence of religion in politics. Derichs et al. (2010) explained that religion, particularly Islam, Buddhism and Christianity, have impacted Southeast Asian women's political participation. In general, women's political disempowerment was due to religious fundamentalism that did not give attention to universal human rights principles, which are often anti-women and promote a patriarchal structure (Derichs et al., 2010). Besides that, women have often symbolized purity in religious and societal contexts (Derichs et al., 2010). The symbolization made women sacrifice themselves and ignore their rights to fulfil this honoured role. Hence, women are easily controlled by men to protect this symbolic purity, thus placing themselves in an inferior status.

The subordinate position of women in society and the household has resulted in the neglect of women's rights in the economic, social, and cultural aspects. Moreover, women's low status has led to countless social issues such as gender inequality, distorted sex ratio, violence against women, and limited to access to education, among others. While the adoption of the MDGs and SDGs have improved gender gaps, complete gender equality has yet to be achieved (UN, 2021). It was reported that it would take approximately 135.6 years to close the gender gap globally (WEF, 2021).

The occurrence of the Coronavirus disease (COVID–19) since 2020 has adversely affected the progression of gender equality. The UN reported that the cases of violence against women increased by 30% in some countries during the lockdown imposed to control the spread of COVID–19 (UN, 2021). Consequently, women also had to bear

additional household burdens during the pandemic (UN, 2021). In 2020, women represented nearly 45% of global employment losses (UN, 2022b).

Women in Southeast Asia are still facing discrimination and inequalities in many aspects, especially in the form of legal protection and having a political voice. The UN reported that there is a lack of quotas for women to hold national parliamentary seats and insufficient laws legislating rape in various countries that have created a barrier to achieving gender equality (UN, 2021). In 2022, the global share of women in lower and single houses of national parliaments had just improved from 22.4% in 2015 to 26.2%, which indicate that the progress of women accessing leadership position remains sluggish (UN, 2022b). Moreover, the proportion of women representatives in parliament remained below 30% in Cambodia, Indonesia, Myanmar and the Philippines in 2020 (WEF, 2021).

Women are often the victims of abuse. The percentage of women who experienced IPV remained high across Southeast Asian countries, ranging from 6% in Singapore to 44% in Thailand. In the selected four countries in this present study, the prevalence rate of IPV was 17% in both the Philippines and Myanmar; 18.3% in Indonesia and 21% in Cambodia (Sothorn et al., 2019). Besides that, on average, 25% of Southeast Asian[4] women reported ever experienced physical and/or sexual violence by an intimate partner once in their lifetime (OECD, 2021). In addition, an average of 30% of women in Southeast Asian[5] countries reported condoning wife-beating (OECD, 2021).

[4] The countries included Cambodia, Indonesia, Lao PDR, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam.

[5] The countries included Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam.

The proportion of married women using modern contraceptive methods across Southeast Asian countries ranged between 24% (Timor–Leste) and 71% (Thailand) between 2014 and 2019 (World Bank, 2022). An estimated 1.4 million additional unintended pregnancies occurred across low and middle–income countries (LMICs) during the first year of COVID–19 pandemic (UN, 2022b). The wide ranged prevalence rate of using modern contraceptives and the sudden increase in the number of unintended pregnancies show that there is room for improvement in increasing the use of modern contraceptive methods in Southeast Asia.

The female labor force participation rate in Southeast Asia was at 54.8% in 2021 and much lower than that of males at 77.4%. However, it should be noted that such circumstance also occurred in other Asia sub–regions. In 2021, the female labor force participation rate was 60.7% in Eastern Asia, 47.1% in Central Asia and 21.6% in South Asia, as compared to 74.0%, 68.5% and 71.6% respectively for males (ILO, 2021).

Women and young girls in Asian countries spent more of their days doing unpaid care and domestic work compared to men and boys. For instance, Cambodian women spent ten times more of their time than men on unpaid care and domestic work (Asian Development Bank & United Nations Entity for Gender Equality and the Empowerment of Women, 2018). The UN reported that women across 89 countries are forced to spend about 2.5 times more hours in unpaid domestic and care work compared to men (UN, 2021). These facts and figures indicate that gender discrimination is evident. Empowering women is crucial for the achievement of sustainable development. Hence, efforts to improve the status of women should be adopted incessantly and urgently.

1.5 Policies and programs related to women's empowerment and reproductive health

The government in Southeast Asian countries have implemented some policies and strategies to uplift women's status in society, which are in line with the SDGs' targets and goals. For instance, the ASEAN developed some strategic plans to tackle violence against women and to promote gender equality. The ASEAN Region Plan of Action on the Elimination of Violence against Women (ASEAN RPA on EVAW) was developed based on the PoA and the SDGs. This strategic plan has been used as the blueprint by the ASEAN members in developing initiatives to overcome the issue of violence against women (ASEAN, 2016). The ASEAN RPA on EVAW has several key strategies, which includes devising effective and coordinated strategies to prevent violence, protecting victims or survivors of violence, developing and strengthening legal frameworks (ASEAN, 2016). The initiatives taken by the ASEAN members in addressing violence against women include the development of the Legal Protection Guideline for Women's and Children's Rights in Cambodia; the National Action Plan (RAN) P3APK (*Perlindungan dan Pemberdayaan Perempuan dan Anak dalam Penanganan Konflik*) in Indonesia; the National Strategic Plan for Advancement of Women (2013–2022) in Myanmar and the passage of the Magna Carta of Women (MCW) or RA 9710 of 2009 in the Philippines (ASEAN, 2016).

Besides the ASEAN RPA on EVAW, ASEAN also developed the ASEAN Gender Mainstreaming Strategic Framework 2021 – 2025, which aims to promote gender equality. This strategic framework is structured according to the "internal" aspect of ASEAN's own policies, practices, and organizational culture whereby it outlines a direction that presents a set of mutually reinforcing objectives and activities that builds ASEAN's commitment, capacity, and culture in relation to gender (ASEAN, 2021). In addition, the framework is also designed to support ASEAN's unique mandate and

strength in implementing effective efforts to promote gender equality at the regional and national levels of each country (ASEAN, 2021).

In accordance with the SDGs and the strategic plans designed by ASEAN, the government of each country has developed several national plans in promoting gender equality. In Cambodia, the Neary Rattanak V (2019 – 2023) has a series of strategic plans to strengthen gender equality in every sector and level in Cambodia. The key strategic areas of this policy include education, economy, and health (Ministry of Women's Affairs [MoWA], 2020b). Thus, the Cambodian government has provided economic opportunities and training for women as well as strive to promote and educate society on the concept of gender equality through educational institutions. With the continuous efforts implemented, the primary enrollment rates in Cambodia for both genders are universal. However, universal primary education is insufficient in promoting women's empowerment. Hence, to increase the enrollment rate of secondary and tertiary education among women, the government has provided scholarships to poverty–stricken students, especially female students, to reduce the gender gaps in education (MoWA, 2020b). Furthermore, the Cambodian government has also encouraged and provided women with better access to healthcare services, especially those from marginalized groups. Besides the Neary Rattanak V (2019 – 2023), the Cambodian government has developed the National Action Plan for Prevention Violence Against Women (NAPVAW) 2019 – 2023 in an effort to fight IPV. This policy prioritizes the prevention of the occurrence of IPV by increasing the awareness of women on violence through social media as well as through healthcare service providers (MoWA, 2020a). The Cambodian government has also developed the third National Strategy for Reproductive and Sexual Health 2017 – 2020 to ensure better health and well–being for women. This policy aims to increase equitable access and quality of reproductive and sexual health services through governance and service delivery, finance and human capital, and reproductive and sexual

health information system (Ministry of Health [MoH], 2017). Following the launch of the family planning program in 1994, the total fertility rate (TFR) in Cambodia has declined from 5.6 in 1990 to 2.5 in 2020 (World Bank, 2022). Moreover, the modern contraceptive prevalence rate (mCPR) is now nearly at par with that in countries such as Malaysia and the Philippines that launched their own family planning programs in the mid–1960s and early 1970s (Lai & Tey, 2020).

In Indonesia, the Long–Term National Development Plan (RPJPN) 2005 – 2025 aims to improve the quality of life of women. The Indonesian government declared that improving women's quality of life can increase their empowerment, and the relevant authorities have made efforts to increase the role of women in society by combating gender discrimination, violence, and exploitation (Ministry of National Development Planning [BAPPENAS], 2005). Some of the efforts include raising the quality and access to education and health services for women as well as improving the welfare and protection of women and children (BAPPENAS, 2005). The Indonesian government also developed a right–based strategy that aims to achieve universal access to high quality family planning services in accordance with the needs of the people and that supports their reproductive intentions through the collaboration with various stakeholders or agencies and NGOs. The strategy focuses on creating an enabling environment and supports interdependent supply and demand of family planning services which enable people to meet their reproductive intentions (UNFPA et al., 2017). Indonesia launched the family planning program in 1968. The program resulted in a dramatic rise in the prevalence rate of modern contraception from 7% to 54% in the first two decades (UN DESA, 2022). However, following the implementation of a decentralization policy in 2000, the mCPR levelled off at around 60% and the TFR remained above the replacement level (UNFPA et al.,2017). Consequently, efforts were made to revitalize the family

planning program through the training of health workers in the provision of free services to the public.

The National Strategic Plan for the Advancement of Women (2013 – 2022) in Myanmar has targeted several key areas in promoting and protecting women's rights including empowering their status, tackling IPV and improving the access to healthcare services (UNFPA, 2013). The key areas include health, education, livelihoods, violence against women, and the economy. Under this strategic plan, the government offers one–stop services at various levels by providing counselling and legal services to the victims of abuse (UNFPA, 2013). The government also provides free contraception to marginalized women and implemented health programs focusing on women's overall health and sexual and reproductive health and rights to raise public awareness (UNFPA, 2013). Besides the strategic plan, the Myanmar government also developed the National Standards for Midwives on Core Competencies and Education in collaboration with UNFPA in 2015 to identify the requirements, skills, knowledge, and competency of midwives and the standard of midwifery training programs to improve maternal health in Myanmar (Ministry of Health and Sports & United Nations Population Fund, 2015). Although Myanmar only launched the family planning program in 1991, its mCPR is on par with Indonesia and surpassed Malaysia and the Philippines who launched family planning programs at least two decades earlier.

Under the Gender Equality and Women's Empowerment (GEWE) Plan 2019 – 2025 in the Philippines, the government has expanded economic opportunities for women in entrepreneurship, Science, Technology and Innovation (STI), and Information and Communications Technology (ICT) fields (Philippine Commission on Women, 2019). The GEWE Plan 2019 – 2025 identified that women's empowerment is a key indicator in reducing violence and protecting women's own fundamental rights. Therefore, access to education and sexual and reproductive healthcare services among women, better access

to justice including transitional justice for marginalized women, promoting gender equality norms through mass media and education are some initiatives that have been developed in the GEWE Plan 2019 – 2025 (Philippine Commission on Women, 2019). The government also developed the Strategic Plan on Violence against Women and Their Children 2017 – 2022. This strategic plan focuses on spreading information and raising public awareness on violence against women through consistent advocacy efforts such as mass media, campaigns and even integrating the core message on violence against women in curricula and learning materials (Inter–Agency Council on Violence Against Women and their Children, 2018). In addition, the government has also focused on improving the response system by ensuring and enhancing the availability and accessibility to healthcare services for abuse victims. The Filipino government continues to promote modern contraceptive use through the National Family Planning Program. The strategies under this program include establishing family planning services in hospitals and other health facilities, providing delivery of family planning service for the poor communities and geographically isolated and disadvantaged couples, consistent advocacy, and social mobilization for family planning (Department of Health, 2022). Despite the implementation of the family planning program since the 1970s, the rise in mCPR in the Philippines has been more gradual than its neighboring countries. While the TFR of the Philippines declined from 6.3 in 1970 to 2.5 in 2020 (World Bank, 2022), it is among the few countries in the region with a fertility rate above the replacement level.

1.6 Scope of study

This study focuses on four Southeast Asian countries – Cambodia, Indonesia, Myanmar, and the Philippines. There are several reasons for this study. First, the four countries covers about 68% of the total population of Southeast Asia (UN DESA, 2019). Secondly, these countries represent the three major religions – Islam, Buddhism, and

Christianity (Leinbach, 2021), and the multicultural characteristics of Southeast Asia. Thirdly, past studies found that Southeast Asian women are more autonomous than those from other regions of Asia. Fourthly, there is limited research on women's status in Southeast Asia (Booth, 2016; Hirschman, 2016). Another reason for the selection of these countries is based on the data availability from the Demographic and Health Surveys (DHS). The respondents for this study include women currently married or in a union who are 15 to 49 years old. The sample size of the respondents was 11,668 in Cambodia, 34,467 in Indonesia, 7,870 in Myanmar, and 15,446 in the Philippines. The dataset obtained was between 2014 and 2017.

Women's empowerment is a broad topic that has been widely discussed by researchers and policymakers. There are different measures of women's empowerment across studies due to different sociocultural settings and study designs. This study focuses on women's empowerment at the household level and the measures were selected based on the Theory of Gender and Power (TGP) and the availability of data from the DHS. The measures of women's empowerment include women's household decision–making power, women's attitude towards wife–beating and women's asset ownership.

Sexual and reproductive health and rights are related to multiple human rights, including the right to life, the right to be free from torture, the right to health, the right to privacy, the right to education, and the prohibition of discrimination (UN, 2022a). In addition, the violation of human practices is another aspect of sexual and reproductive health and rights. This study focuses on modern contraceptive use and IPV. To date, the low usage of modern contraception and the occurrence of IPV remain a concern across Southeast Asia. These issues have become an obstacle to achieving universal access to sexual and reproductive healthcare services.

1.7 Research questions

Below are the research questions for this study:

a) What are the internal consistencies of selected measures of women's empowerment in Southeast Asian countries?

b) What is the level of women's empowerment and its determinants in Southeast Asian countries?

c) What is the association of women's empowerment with sexual and reproductive health and rights, specifically IPV and modern contraceptive use in Southeast Asian countries?

1.8 Research objectives

The research objectives for this study are:

a) To examine the internal consistencies of the selected measures of women's empowerment in Southeast Asian countries.

b) To examine the level of women's empowerment and its determinants in Southeast Asian countries.

c) To examine the association between women's empowerment and sexual and reproductive health and rights (IPV and modern contraceptive use) in Southeast Asian countries.

1.9 Research hypotheses

The research hypotheses are as follows:

a) Demographic and socioeconomic characteristics are associated with women's empowerment.

b) Women's empowerment is associated with IPV.

c) Women's empowerment is associated with modern contraceptive use.

1.10 Significance of research

Promoting and empowering women and young girls in achieving gender equality has become one of the global goals set to be achieved after the 1994 ICPD conference (UNFPA, 2014). However, there are many obstacles and barriers in achieving absolute gender equality. To date, women are still facing various discriminations or abuse at the societal and numerous institutional levels. Many past studies have investigated and studied the underlying factors influencing women's empowerment (Rammohan & Johar, 2009; Samarakoon & Parinduri, 2015; Thandar et al., 2019). In addition, the relationship between women's empowerment and sexual and reproductive health issues has also captured the attention of academic researchers.

Cambodia, Indonesia, Myanmar, and the Philippines represent a case study of Southeast Asian countries for this present study. Cambodia and Myanmar, which were listed as the least developed countries by the United Nations Conference on Trade and Development (UNCTAD) (2021), should gain more attention from researchers in efforts to uplift and promote women's status in their countries.

The term "empowerment" and "autonomy" have been used interchangeably in past studies (Basu & Koolwal, 2005; Malhotra et al., 2002; Mason & Smith, 2000). This present study hopes to make a clear distinction of the different key terms and concepts between "empowerment" and “autonomy”. Moreover, it is important to identify the underlying factors influencing women's empowerment in Southeast Asian countries. It is anticipated that this study will provide some input for policymakers in designing specific policies to elevate the status of women. In addition, this study could raise public awareness on the importance of raising women's status, especially for those with low repute. Empowering women is essential in combating sexual and reproductive health issues such as IPV and low modern contraceptive use. Women's empowerment enables women to be more independent as they gain more power in making their own decisions.

Women also play a significant role in the sustainable development of society. Thus, women's rights should not be neglected.

1.11 Organization of report

This research is organized into five chapters. Chapter 1 provides the introduction and overview of the thesis. Chapter 2 presents the literature review on the origin and theories of women's empowerment, the measures of women's empowerment, the factors affecting women's empowerment, and past studies on IPV and modern contraceptive use. Chapter 3 illustrates the conceptual framework adopted and the overview of data. Chapter 4 presents the analyses of the measures of women's empowerment, the factors affecting women's empowerment, and the relationship of women's empowerment with IPV and modern contraceptive use. Lastly, Chapter 5 discusses the overall findings of this study and identifies its limitations.

CHAPTER 2: LITERATURE REVIEW

This chapter aims to provide a review of the existing research on women's empowerment. The comparison of the definitions of 'empowerment' and 'autonomy' is discussed. In addition, the origin and the fundamental theories of women's empowerment are reviewed. Moreover, the measures of women's empowerment and the factors affecting women's empowerment based on past studies are considered. This chapter also presents past studies on IPV and modern contraceptive use, and the associations with women's empowerment across Asian countries for the past two decades.

2.1 Definitions of women's empowerment

In recent years, the word 'empowerment' has become a buzzword without society appreciating the concept behind this term (Batliwala, 2007). In general, empowerment refers to the process of individuals gaining power, gaining control over their lives, and making their own decisions (Kabeer, 1999; Keller & Mbewe, 1991; Malhotra et al., 2002). The concept of women's empowerment is multifaceted. Many terms had been used interchangeably in explaining women's empowerment such as women's status, women's autonomy, and gender equality (Malhotra et al., 2002; Phan, 2016). Mason and Smith (2000) used the term 'empowerment', 'autonomy' and 'gender stratification' interchangeably. Additionally, Basu and Koolwal (2005) stated that 'autonomy' and 'empowerment' are often used synonymously in journals. Several key terms that is most often included in explaining 'empowerment' are 'power', 'control', 'choices' and 'options' (Malhotra et al., 2002; Mishra & Tripathi, 2011).

The term ‘autonomy’ should be clarified prior to defining ‘empowerment.’ Autonomy is related to an individual’s ability or freedom to perform a certain action, which is slightly different from the term empowerment. Dyson and Moore (1983) defined autonomy as ‘the capacity to obtain information and make decisions about one’s private concerns and those of one’s intimates.’ The authors had investigated Indian women’s autonomy by taking into account the influence of cultural norms in personal decisions. In investigating the influence of religion on women’s autonomy in India and Pakistan, Jejeebhoy and Sathar (2001) defined autonomy as ‘the control women have over their own lives – the extent to which they have an equal voice with their husbands in matters affecting themselves and their families, control over the material and other resources, access to knowledge and information, the authority to make independent decisions, freedom from constraints on physical mobility, and the ability to forge equitable power relationships within families.’ Moreover, Bloom et al. (2001) used the term ‘autonomy’ and ‘interpersonal control’ interchangeably in their study. Upadhyay and Hindin (2005) distinguished women’s autonomy from women’s status by referring to their influence over interpersonal issues which usually encompasses the ability to formulate strategic choices, control resources, and participate in decision–making. Autonomy is an indicator of empowerment (Acharya et al., 2010). However, Mishra and Tripathi (2011) argued that autonomy is a step ahead of empowerment.

As there are four different operational definitions of power, it is no doubt that the definition of empowerment varies among sociologists and academic researchers. For instance, Keller and Mbewe (1991) described empowerment as a process whereby women can organize themselves to increase their self–reliance, assert their independent right to make choices, and control resources that will assist in challenging and eliminating their subordination. Kabeer (1999) defined empowerment as ‘the expansion in people’s ability to make strategic life choices in a context where this ability was previously denied to

them.' Moreover, Bennett (2002) mentioned that empowerment is the enhancement of assets and capabilities of diverse individuals and groups to engage, influence, and hold accountable the institutions which affect them.

There are some key elements that distinguish 'empowerment' from 'autonomy' and other different terms that are often used to discuss women's empowerment. Malhotra et al. (2002) mentioned that one of the key elements is that 'empowerment' is a process. Additionally, it was found that 'agency', which is one of the components of 'empowerment', is another key element that distinguishes 'empowerment' from the other terms (Malhotra et al., 2002; Mishra & Tripathi, 2011). The concept of empowerment comes from the need to enable women to overcome systematic sources of subordination and its implication on intervention strategies to enhance those powers of women and its sources to affect change (Muraleedharan, 2009). Unlike autonomy, empowerment emphasized the collective aspect of power and the individual aspect (Acharya et al., 2010). The term 'empowerment' is often used to advocate policies and intervention strategies (Mishra & Tripathi, 2011).

In short, empowerment is the process of an individual making their own choices and their power to control the choices they have. In contrast, autonomy is the ability and capacity to make choices and the control over the choices made. Hence, these terms should not be used interchangeably as the key concept of each term is different. In this study, the term 'empowerment' will be used throughout the whole paper. The definition proposed by Kabeer (1999) fits the context of this study as the focus of the present study is on the capability of married women to access their agency and power in making choices in their daily lives.

2.2 Women's empowerment: Origin and theories

The term 'empowerment' emerged in the late 1970s and is frequently used by social service providers and researchers. This term is used to describe the well–being and power gaining for the marginalized group (e.g., women, African America, gays, and lesbians) until the term 'empowerment' was formally used in the field of development in the 1980s (Calvès, 2009). Three notable phases linked to women's empowerment are Women in Development [WID], Women and Development [WAD], and Gender and Development [GAD].

2.2.1 Women in Development [WID]

WID was coined in the early 1970s after Ester Boserup's *Women's Roles in Economic Development* (Rathgeber, 1990; Razavi & Miller, 1995). The central concept of WID was closely linked to the modernization ideology of developing and improving human capital (e.g., the expansion of education system, giving training and more varied role models by freeing the labor market) to eliminate women's disadvantage (Rathgeber, 1990; Razavi & Miller, 1995). In other words, women no longer are marginalized and neglected if they are "visible" and included in the development process. There was a policy change from welfare provision to equality (Rowlands, 1997).

However, the WID approach received criticism. WID is closely linked to the modernization ideology that began from accepting the existing social structure (Rathgeber, 1990), which implies that the nature of women's subordination was not questioned or emphasized under WID. WID only focused on how women could be integrated into the current ongoing development initiatives without examining why women had been neglected in the past (Rathgeber, 1990).

Moreover, WID only paid attention to the women's productive labor and ignored the social welfare and reproductive concerns of women (Rathgeber, 1990; Razavi & Miller, 1995). Hence, WID projects typically focused on income–generating activities such as teaching women a skill or handcraft to be economically involved in development without paying serious attention to other issues because women were overburdened with tasks and responsibilities (Rathgeber, 1990; Razavi & Miller, 1995). It was found that WID had little focus on power relations between men and women (Rathgeber, 1990; Razavi & Miller, 1995). In addition, WID received critique that it only "instrumentalizes" women for meeting development goals such as population control and sustainable development (Rowlands, 1997). Thus, these critiques led to the emergence of WAD.

2.2.2 Women and Development [WAD]

WAD emerged in the late 1970s (Rathgeber, 1990). WAD grew out of the limitation of modernization ideology founded in WID (Muyoyeta, 2007; Rathgeber, 1990). In short, WAD argued that women had always been a part of social development and economic development rather than purely emphasizing strategies to integrate women into development (Muyoyeta, 2007; Rathgeber, 1990). In WAD, it was argued that the work women do both inside and outside the household is central to maintaining the societies (Muyoyeta, 2007; Rathgeber, 1990). WAD assumed that women's position would improve if and when the international structure becomes more equitable (Muyoyeta, 2007; Rathgeber, 1990).

However, it failed to undertake a full–scale analysis of the relationship between the patriarchal structure, differing modes of production and women's oppression (Rathgeber, 1990) as WAD undermined women's development. Underrepresentation of women in the economic, political, and social structure is identified as the primary problem of advancement among women (Muyoyeta, 2007). It appeared that women's position was primarily within the structure of international and class inequalities and thus, lessened the

role of patriarchy in underestimating women's development (Muyoyeta, 2007). Theoretically, WAD recognized the impact of class, but it was the same as WID in practice. WAD tended to group women without considering other considerations such as class, ethnicity, or other factors related to women's social status (Muyoyeta, 2007; Rathgeber, 1990).

2.2.3 Gender and Development [GAD]

In the 1980s, GAD emerged to bridge the gap and limitations of the WID and WAD approaches (Muyoyeta, 2007; Rathgeber, 1990). GAD is concerned about the dynamics of social gender relations (e.g., the sexual division of labor) between men and women in society (Muyoyeta, 2007; Rowlands, 1997). Unlike WID and WAD, GAD paid special attention to women's oppression in the family (Muyoyeta, 2007; Rathgeber, 1990). GAD is concerned with the diversity of people's circumstances, women's contribution within and outside the household, women's physical situation (e.g., health and education), and other related gender inequalities within society (Muyoyeta, 2007; Rathgeber, 1990; Rowlands, 1997). In general, GAD illustrates the power relation between men and women and the situation of subordination that most women encountered in society (Rowlands, 1997).

GAD had challenged and questioned the underlying norm of current social, economic, and political structures (Rathgeber, 1990; Rowlands, 1997). However, this will affect and provoke some women and men to re–examine social structures and institutions as well as the loss of power (Rathgeber, 1990). Hence, this leads to difficulties in practice with a fully articulated project adopting a GAD approach (Rathgeber, 1990). As with WID and WAD, gender can be used in an instrumentalist way to facilitate other objectives within the prevailing ideologies (Rowlands, 1997). Therefore, the fundamental question on gender relation (e.g., the increment of women–headed household, overburdening of

women's task) is concealed (Rowlands, 1997). An entire GAD project is hard to find as this theory greatly challenges society's current structure.

2.3 Dimensions of women's empowerment

Many development approaches were produced from WID, WAD and GAD theories, including the empowerment approach (Muyoyeta, 2007; Rowlands, 1997). The empowerment approach is closely associated with Third World feminist and grassroots organizations (Muyoyeta, 2007). This approach focuses on increasing women's self–reliance and strengthening the distinction between women's practical and strategic gender interests (Muyoyeta, 2007; Rowlands, 1997). The empowerment approach is meant to raise awareness and situate women in active participation to ensure changes occur (Muyoyeta, 2007). Eliminating male bias, building women's skills and self–esteem, and moving women out of the subordination position were important aspects of the approach (Muyoyeta, 2007; Rowlands, 1997). However, women's non-participation issues are complex. Hence, this required cultural, economic, and political changes in society. Thus, the power dynamics between men and women need to be addressed.

Power is the root of 'empowerment' (Oxaal & Baden, 1997; Rowlands, 1997). However, debates of power arise as different definitions and focus of power have been put forth by various sociologists. Some sociologists defined power as an individual or group's ability to get another individual or group to do something against their own will (Rowlands, 1997). Such power is also described as "zero–sum", where the more power one person has, the less power the other has (Oxaal & Baden, 1997; Rowlands, 1997).

However, the frameworks of understanding power were neutral, where these frameworks neither questioned nor challenged the nature of society on how power is distributed. For example, if power is defined as 'power over', gender analysis showed that men predominantly wielded power over women (Rowlands, 1997). This has led to

conflicting interests. Hence, the framework of power was challenged by feminist theorists (Oxaal & Baden, 1997; Rowlands, 1997). Redistributing power is essential to resolve conflict. Thus, the idea of women's empowerment was raised by feminist theorists to reduce men's power in order to live in a more equitable society (Oxaal & Baden, 1997).

Rowlands (1997) conceptualized power into different operational levels (from household to institutions), which focuses on the following process:

- power over – "controlling power which maybe responded to with compliance, resistance or manipulation."
- power to – "generative power which creates new possibilities and action without domination."
- power with – "a sense of the whole being greater than the sum of the individuals, especially when a group tackles problem together."
- power within – "spiritual strength and uniqueness that resides in each one of us and make us truly human."

With the four operational meanings and understanding of power, empowerment could be conceptualized distinctively under these four different types of power. For instance, besides participation in decision–making, empowerment also includes the processes that leads people to perceive themselves as able and entitled to make decisions under the interpretation of 'power over' from a feminist perspective (Rowlands, 1997). Hence, empowerment is a broad concept covering many dimensions and aspects.

Rowlands (1997) mentioned that the operating of empowerment could be categorized into three dimensions: personal, collective, and relational, as shown in Figure 2.1. Personal dimension referred to "the sense of self and self–confidence and capacity, undoing the effects of internalized oppression" (Rowlands, 1997). Relational dimension is defined as "the development of the ability to negotiate and influence the nature of relationship and decision made" (Rowlands, 1997). Moreover, the collective dimension

is where individuals work together to achieve a more extensive impact than each could have alone (Rowlands, 1997).

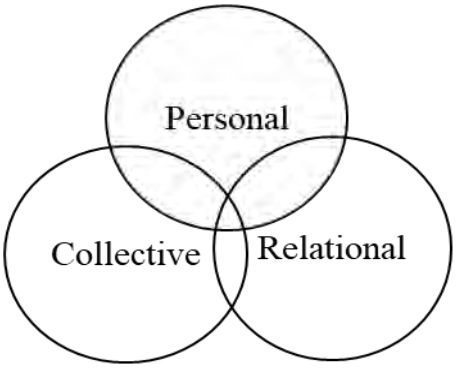

Figure 2.1. The three dimensions of empowerment proposed by Rowlands (1997).

In addition, Kabeer (1999, 2005, 2010) made an interesting statement where a person who exercises a great deal of choice in their life is considered as empowered after that person had been disempowered in the first place. Hence, the person is considered as powerful instead of being empowered. Kabeer (1999, 2005) mentioned that empowerment entails a process of change. Therefore, Kabeer had categorized empowerment into three different dimensions, which are resources (precondition), agency (process), and achievement (outcomes), as shown in Figure 2.2.

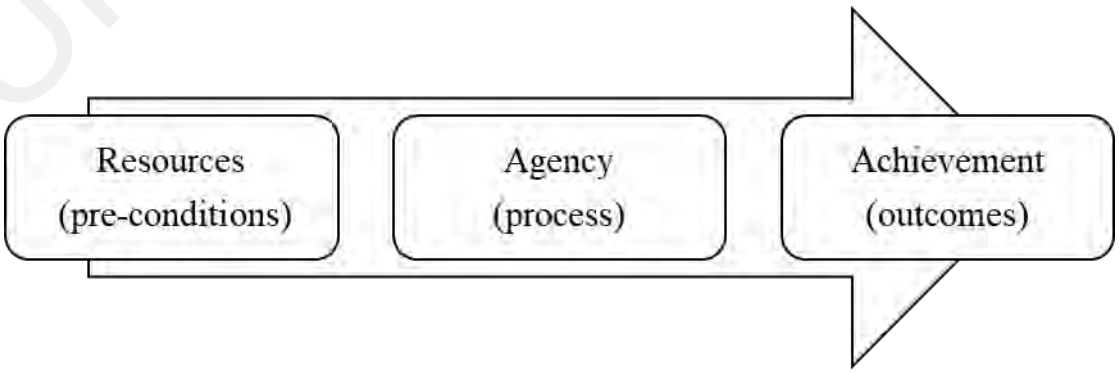

Figure 2.2. Dimensions of empowerment proposed by Kabeer (1999).

Besides material resources, human and social resources are included in the context of resources. They are distributed in various institutions within the society, which may take the form of actual allocation (Kabeer, 1999). Access to these resources will reflect the rules and norms that govern society's distribution (Kabeer, 1999). Heads of household, chief of tribes, or elites within the community have the decision–making authority in particular institutions by virtue of their position (Kabeer, 1999, 2005). In addition, resources are the medium through which agency is exercised (Kabeer, 2005).

Agency as the second dimension of power, is referred to as the ability to define one's goals and act upon them (Kabeer, 1999). In the social science context, the agency is often referred to as 'decision–making' (Kabeer, 1999). There are two types of agency, particularly instrumental agency, and intrinsic agency (Jones et al., 2020). The instrumental agency was the observed action that is usually measured by the decision or action done by women, while the intrinsic agency was the sense of empowerment, such as their opinion or perception of gender norms and beliefs (Jones et al., 2020; Kabeer, 2005).

Kabeer (2005) mentioned that agency had both positive and negative perceptions about power. 'Power to' (positive sense) refers to people's ability to make and act on their own life choices, even in a situation of oppression (Kabeer, 2005). In comparison, its negative sense, 'power over' is defined as the capacity of some person to override others' agency, such as the exercise of authority, use of violence, and other forms of coercion (Kabeer, 2005). However, power also can be operated in the absence of an explicit form of agency. Hence, institutional bias, cultural or ideological norms may constrain people's ability to make strategic life choices (Kabeer, 2005). Agency in relation to empowerment, therefore, implies not only actively exercising choice but also doing this in ways that challenge power relations.

Achievement is referred to as the outcome of the agency of people's effort (Kabeer, 2005). Achievement is considered a failure if someone's goal reflects some deep–seated constraints on the ability to choose, which can be treated as a manifestation of disempowerment (Kabeer, 1999). Under the context of empowerment, achievement is considered both the agency exercised and its consequences (Kabeer, 2005). However, it is hard to define achievement as achievement is far more likely to be empowering if it contributes to women's sense of independence rather than simply meeting survival needs (Kabeer, 2005).

The achievement aspect is seldom used in measuring empowerment as it requires a clear clarification to distinguish between the differential in making choices and the inequalities in the ability to make choices (Kabeer, 1999). All society members are not given equal rights in making decision and taking actions, which leads to gender differences in achievement (Kabeer, 1999). The gender inequalities aspect is considered in applying achievement to measure empowerment, which often leads to complex analysis and investigation. Therefore, resources and agency are the two most commonly discussed aspects of women's empowerment (Kabeer, 1999; Malhotra et al., 2002).

However, resources are generally treated as the catalyst or enabling factors that potentially foster the empowerment process (Malhotra et al., 2002). Using resources as proxies of empowerment is complex as it is affected by other aspects such as the culture and norms of society, socioeconomic status and others (Govindasamy & Malhotra, 1996; Malhotra & Mather, 1996). In turn, this might lead to conceptually vague and misleading results and conclusions (Samari & Pebley, 2015).

Richardson (2017) mentioned that it is advisable to use a direct indicator of empowerment. Agency is referred to as the essence of women's empowerment or the direct indicator of women's empowerment (Malhotra et al., 2002; Richardson, 2017). The usage of indirect indicators, especially for cross–sectional studies, could be problematic

as the factors' directionality is unclear (either the factors are resources for empowerment or achievement of the process of empowerment or both) (Richardson, 2017). Hence, these statements indicated that the agency would be a better measurement in measuring women's empowerment.

2.4 Theory of Gender and Power (TGP)

Power had been intricately linked to empowerment, which led to the development of the TGP. In 1987, Robert Connell had widely discussed and argued the existing theories on gender relations in the past and developed a new theory called the Theory of Gender and Power. TGP highlighted the gender–based inequalities and the constraints an individual faces due to their gender (Connell, 1987). In addition, TGP also explained the gender division of 'male' and 'female' roles in society and had assumed the subordinate position of women favoring men (Connell, 1987). Connell (1987) had identified the three main components structure of TGP, which were 1) sexual division of labor, 2) the structure of power, and 3) the structure of cathexis as shown in Figure 2.3.

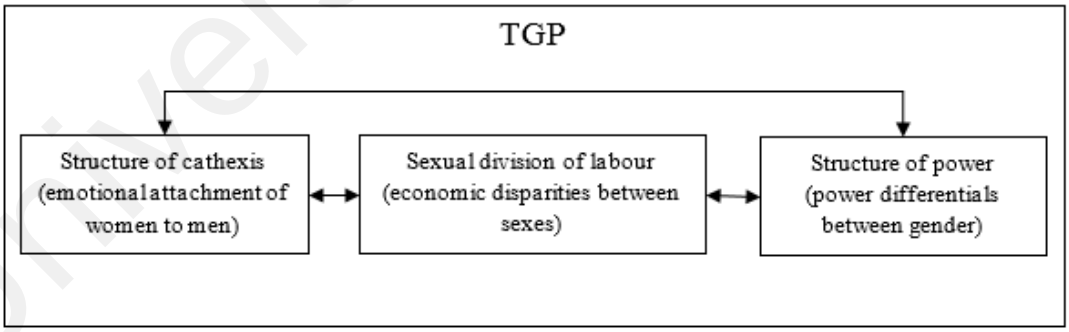

Figure 2.3. Structure of TGP.

Previous research outlined both the sexual division of labor and the structure of power. Consequently, the structure of cathexis was derived by Connell (1987) to address the emotional aspect that links to the structure of labor and power. According to this theory, these structures explain the cultural aspects of gender roles assigned by men and women. Connell (1987) emphasized that the three structures were overlapping and always

interacting while embedded in societal and institutional levels. The social mechanism such as unequal pay wages, sexual stereotypes, and violence that consistently constructed and assigned various kinds of masculinity and femininity characters and roles had played an active role in maintaining these social structures within both societal and institutional levels (Panchanadeswaran et al., 2007; Wingood & DiClemente, 2000). This caused the occurrence of gender–based inequalities in women's live sphere, which included sociocultural, economic, and domestic dimensions.

Since then, TGP has been widely used in sexual and reproductive health studies such as contraceptive use (DePadilla et al., 2011; Okigbo et al., 2018), violence against women (Davies et al., 2009; Panchanadeswaran et al., 2007) and women's empowerment (Carmack et al., 2020; Woolfork et al., 2020). The most famous application of TGP was the public health model constructed by Wingood and DiClemente (2000) that highlighted the exposure and risk factors that affect women's risk of contracting human immunodeficiency virus (HIV) or Acquired immunodeficiency syndrome (AIDS). This study will modify and adapt the concept of TGP and the model constructed by Wingood and DiClemente (2000) in constructing the conceptual framework.

2.4.1 Sexual division of labour

The sexual division of labor is defined as "the allocation of particular types of work to particular categories of people" (Connell, 1987). Society had categorized the occupation into "men's occupation" and "women's occupation." Often, men get privileged in the workplace, are paid better and get more training and skills opportunities than women. In addition, the support of the cultural belief that promotes patriarchy or male dominance has enforced the sexual division of labor (Connell, 1987).

The concept that men must be financial and economically independent has also exploited women's position in the household as men have to work to get paid for the household while the wife should take care of internal household matters (Connell, 1987). Such kinds of stereotypes and discriminations in society created the glass ceiling among women.

Women is expected to get lesser pay and opportunities in the workplace, which may cause them to be economically dependent on their spouses. This gradually resulted in economic disparities among men and women, which led to the inferior status of women in the household and society. Besides that, other social mechanisms favor male educational attainment and the segregation of 'income–generating work' caused the limited access to economic, educational, and other resources among women (Wingood & DiClemente, 2000). Thus, women had been positioned in subordinate status within society and in various institutions.

2.4.2 Structure of power

According to Connell (1987), power differentials between the sexes occur in both society and various institutions. Power had been conceptualized and defined distinctively based on a different discipline. Some sociologists defined power as an individual or group's ability to get another individual or group to do something against their own will (Rowlands, 1997). This study used the operational definition of power defined by Rowlands (1997), which were "power over", "power to", "power with", and "power within".

The social mechanisms such as the abuse of authority, control and violence actively maintained the structure of power (Conroy et al., 2019; Wingood & DiClemente, 2000). Men were empowered in gender relations. In addition, the hierarchies of the states and businesses that virtually exclude women and the patriarchal system also contributed to the maintenance of the structure of power (Connell, 1987; Maharaj, 1995). With such

social mechanisms, women were placed in subordinate position in their relationships. Women had to be dependent on men financially or socially due to the discrimination or stereotypes in society and other institutions. Thus, this led to women being vulnerable to violence or becoming less empowered in deciding various household or healthcare matters.

2.4.3 Structure of cathexis

Cathexis was the emotional dimension of various relationships in society (Connell, 1987). According to Connell (1987), sexuality is enacted or constructed but is not "expressed". In general, the structure of cathexis emphasized the social normalization regarding the sexuality of women by their emotional attachment to men (Panchanadeswaran et al., 2007; Wingood & DiClemente, 2000). Thus, cathexis consisted of society's expectations of women regarding their sexuality. With such social norms, biases on men and women about how they should express their sexuality began to emerge.

These biases produced the cultural norms in society, the ideology of gender roles such as housework as ‘women's work’, and men should not be financially dependent on women (Connell, 1987; Wingood & DiClemente, 2000). In addition, the belief in gender stereotypes due to the biases created taboos imposed on women such as women being sexualized as an object, women with premarital sex are labelled as 'bad girls', women should not have multiple partners but yet all are accepted norms for men (Connell, 1987; Wingood & DiClemente, 2000).

These traditional norms and gender roles had oppressed women in various institutions such as families, workplaces, and society. If a woman accepted and practiced these norms and roles, her power would be further eroded in a relationship (Panchanadeswaran et al., 2007). If she is in an abusive relationship, she will suppress herself which will then affect her justifications and capacities to resist abuse and violence (Panchanadeswaran et al.,

2007). Hence, the social norms about female sexuality (social mechanism within the structure of cathexis) caused women to be less empowered than men.

2.5 Measurement of women's empowerment

The broad concept of women's empowerment indicated that the measures capturing women's empowerment varied across studies due to different points of view. Besides Kabeer's (1999) study, Malhotra et al. (2002) had listed the most commonly used measures of women's empowerment according to six dimensions, which were economic, sociocultural, familial or interpersonal, legal, political, and psychological, at three different levels (household, community, and broader arenas). In addition, Upadhyay et al. (2014) performed a systematic review investigating the relationship between women's empowerment and fertility. The authors summarized 19 main domains of women's empowerment, which include sociodemographic characteristics (e.g., age, residence), socioeconomic characteristics (e.g., education level, wealth, employment), women's power in decision–making for household, sexual and reproductive matters, financial matters, freedom of mobility, cultural belief, and community–level measures among others.

Many past studies have utilized different measures of women's empowerment across countries. Measures such as Gender Empowerment Measure [GEM], Gender Development Index [GDI], and Gender Inequality Index [GII] are global measures used to represent women's empowerment (Nelasco, 2012; Oxaal & Baden, 1997). GEM was introduced in the Human Development Report 1995 by the United Nations Development Program (UNDP) to measure gender equality by looking at women's political representation, the percentage of women in economic decision–making positions in the professional and managerial field, and women's participation in labor as well as their share of income (Klasen, 2006; Oxaal & Baden, 1997; UNDP, 1995; 2019). In 2010,

GEM was replaced with GII as GEM creates elite bias and had low coverage due to unavailability of data across countries. GDI was introduced along with GEM to measure the difference in countries' achievement in basic human dimensions: health, education, and the command over economic resources between male and female (Oxaal & Baden, 1997; UNDP, 1995; 2019). The *Human Development Report 2010* introduced GII, an inequality index that measured gender inequalities in three aspects of human development: reproductive health, empowerment, and economic status of women (UNDP, 2010, 2019).

At the community level, indicators such as female labor force participation rate, son preference, female secondary educational enrolments, and the ideal sex ratio for children are some measures used in representing women's empowerment (Chaudhuri, 2010; Sanderson & Dubrow, 2000; Upadhyay et al., 2014). Additionally, indicators of women's empowerment could be developed through a development project or program done in the society or community. For instance, Canadian International Development Agency (CIDA) listed some possible measures of women's empowerment at the project level of different dimensions, such as the effect of the enforcement of legislation in terms of treatment of offenders against women, the prevalence of seats held by women in local councils or decision–making bodies, and salary or wage differentials between women and men (CIDA, 1997; Oxaal & Baden, 1997). In addition, some past studies used multilevel analysis to capture women's empowerment at both individual or household states and the province or community level. Hence, aggregate data of individual or household variables such as the education level of women, decision–making on finance, fertility and household matters were used to capture women's empowerment at both levels (Lamidi, 2016; Mason & Smith, 2000; Pallitto & O'Campo, 2005).

Based on the past studies, women's household decision–making power is one of the most used indicators in measuring women's empowerment at the household level (Kishor & Subaiya, 2005; Lamidi, 2016; Ndaimani, 2018; Thandar et al., 2019). In addition, some past studies applying TGP had selected women's household decision–making power to represent women's empowerment (Okigbo et al., 2018; Woolf & Maisto, 2008). Variables such as attitudes towards wife–beating that acted as the sense of empowerment had also been used to represent women's empowerment (Abreha et al., 2020; Blackstone, 2016; Nakamura et al., 2018; Oyediran, 2016). Furthermore, many past studies used the perception of self–efficacy of women on sexual and reproductive health matters such as violence against women, family planning, and partner risk behaviors as the measures of women's empowerment under the concept of TGP (Carmack et al., 2020; Okigbo et al., 2018; Rinehart et al., 2018; Woolfork et al., 2020). Carmack et al. (2020) and Okigbo et al. (2018) had included the emotional aspect influenced by the countries' social norms regarding sexual and reproductive health matters in representing women's empowerment under TGP (Carmack et al., 2020; Okigbo et al., 2018).

Women's access and control over the existing resources is often used to proxy women's empowerment (Kabeer, 1999; Malhotra et al., 2002). Women's educational attainment and employment status are the two most popular resources used as proxies of women's empowerment (Chaudhuri, 2010; Hossain, 2015; Phan, 2016). However, it is not advisable to use indirect measures or proxies in measuring women's empowerment as it might cause misleading results and conclusions (Samari & Pebley, 2015). Thus, direct measures (agency dimension) are a better option in measuring women's empowerment (Richardson, 2017).

According to Wingood and DiClemente (2000), sexual division of labor emphasized the gendering of occupation, thus intensifying discrimination faced by women in the workplace that has led to women becoming economic dependent on their partners. Thus, women's asset ownership was used to represent the sexual division of labor for this study. Moreover, the structure of power looked at the power differentials between men and women in society that caused women to be placed in an inferior position or had no power or rights in the household (Wingood & DiClemente, 2000). Hence, women's household decision–making power was more appropriate in representing the structure of power. Also, the structure of cathexis was the emotional aspect to a different kind of relationship or the emotional attachment of women to men that was influenced by cultural norms or ideologies of gender roles (Connell, 1987). Therefore, women's attitude towards wife–beating was used to represent the structure of cathexis in this study. In conclusion, the measures of women's empowerment selected for this study are women's household decision–making power, women's asset ownership and women's attitude towards wife–beating.

2.6 Factors associated with women's empowerment

Many past studies have proven that women's demographic variables such as the age of women, place of residence, and socioeconomic status (education level of women and occupation of women) have contributed to women's empowerment. In addition, access to mass media has also been significant in affecting women's empowerment.

2.6.1 Women's age

The age of women has a positive association with women's empowerment. Older women tend to be more empowered in decision–making than younger women (Acharya et al., 2010; Brajesh & Shekhar, 2015; Musonera & Heshmati, 2017; Samari & Pebley, 2015). This is because older women had moved away from family responsibilities such

as childbearing and childrearing (Acharya et al., 2010; Pambè et al., 2014). Besides that, older women had more prestige and domestic power as they took on the roles of a wife or mother and mother in law (Ali Sheikh et al., 2016).

A past study done in Indonesia concluded that women aged 30 to 50 years old had more power (Rammohan & Johar, 2009) than their younger counterparts while another study discovered that South Asian women aged below 20 had lower empowerment levels, but the level of empowerment increases over time (Brajesh & Shekhar, 2015). Also, a past study done in Bangladesh discovered that women aged 30 to 40 years old were more empowered (Tabassum et al., 2019). Interestingly, previous studies by Zaman et al. (2008) and Nikkhah et al. (2010) discovered that the age of women was not a significant determinant of women's empowerment.

2.6.2 Female education

Female education has a positive association with women's empowerment (Cinar & Kose, 2018; Jejeebhoy, 1995; Ng & Tey, 2018; Pervin et al., 2014; Saranjam et al., 2020; Shoaib et al., 2012; Tabassum et al., 2019). Educated women are more exposed to new ideas and modern gender norms and behavior and are more aware of their rights.

Hameed et al. (2014) asserted that the likelihood of women making final decisions increases with their education level. Lamidi (2016) agreed that the higher the education qualification of a woman, the greater power gained by a woman in decision–making.

In addition, Sell and Minot (2018) concluded that education had an indirect effect on women's empowerment where reducing the education gap between husband and wife could increase women's empowerment. Moreover, Ng and Tey (2018) found that women's education had a significant direct and indirect effect on women's empowerment. Education is one of the examples of resources of women's empowerment (Malhotra et al., 2002). Hence, some past studies used women's education as a proxy of women's empowerment instead of treating it as a contributing factor (Hossain, 2015; Phan, 2016).

2.6.3 Women's work status

In addition to education, women's work status was another commonly used proxy of women's empowerment (Hossain, 2015; Phan, 2016). Working women with paid wages were deemed more empowered in making decisions (Acharya et al., 2010; Assaad et al., 2014; Cinar & Kose, 2018; Lamidi, 2016; Tabassum et al., 2019). By earning an income, working women could raise their "voice" in the family which enabled them to have more power in making decisions and choices and thus, eliminating their subordinate position in society and becoming more empowered (Pambè et al., 2014; Zaman et al., 2008).

It is noteworthy that women who worked for cash were more empowered as they were economically strong in making decisions. In addition, working women had higher economic status, and they shared their earnings in the household, which led them to be admired and be placed in a position of power in the family, thereby becoming more empowered (Ali Sheikh et al., 2016).

However, Nikkhah et al. (2010) stated that there was no significant association between women's employment status and women's empowerment in Iran as the majority of the respondents were housewives. In addition, Cinar and Kose (2018) concluded that women's work status had a negative impact on women's empowerment due to the household duties and their exploitative job conditions.

2.6.4 Exposure to mass media

Women that often access mass media are more empowered (Akram, 2017; Brajesh & Shekhar, 2015; Musonera & Heshmati, 2017; Tabassum et al., 2019). Mass media is a provenance of learning and source of the latest technology (Ali Sheikh et al., 2016). Therefore, mass media or social media could give awareness to women by acting as a bridge with the external world and revealing prospects of empowerment (Ali Sheikh et al., 2016). Hence, women that had access to mass media were exposed to new perceptions

and ideas on modern women's roles and hence, became more empowered (Musonera & Heshmati, 2017).

2.6.5 Place of residence

Urbanization is positively associated with women's empowerment. Women residing in rural areas were less empowered in decision–making (Acharya et al., 2010; Musonera & Heshmati, 2017; Ng & Tey, 2018; Samari & Pebley, 2015). The geographical isolation of rural areas limited women's access to basic social services and economic opportunities, leading to lower socioeconomic status among rural women (Acharya et al., 2010). In addition, poverty–stricken rural women encountered economic and financial constraints that restricted women from becoming more empowered (Zakar et al., 2015).

As urban women were more educated, they had more access to economic opportunities, workforce participation, and higher income, making them financially independent (Brajesh & Shekhar, 2015). Therefore, urban women would have better socioeconomic status than rural women, and subsequently, urban women were more empowered (Ali Sheikh et al., 2016). Unlike urban areas, rural areas had a lack of education and health facilities and infrastructures that placed rural women in the vulnerable group of poverty that constrained them from being empowered (Akram, 2017).

2.6.6 Household wealth

Past studies found that women from wealthier families were more empowered in decision–making (Akram, 2017; Lamidi, 2016; Musonera & Heshmati, 2017; Pambè et al., 2014). The income and wealth of the household will significantly affect women's education level and job opportunities (resources of women's empowerment), and subsequently affect women's empowerment (Akram, 2017).

However, a study in Nepal found that women from wealthier families were less likely to take part in decision–making due to the patriarchal system (Acharya et al., 2010). Henry (2011) found that Egyptian women who had access to resources such as education and employment tended to encounter a growing conflict between their new roles and their traditional familial responsibilities. Interestingly, women from wealthier families in Burkina Faso and Egypt were less empowered from the aspects of mobility (Pambè et al., 2014; Samari & Pebley, 2015). Studies in Bangladesh (Mahmud et al., 2012) and Namibia (Kazembe, 2020) found that women from wealthier families had a lesser role in decision–making because the men in such households were more dominant if women were not a financial contributor to the family.

2.6.7 Age of marriage

The age of marriage was positively associated with women's empowerment (Musonera & Heshmati, 2017; Pervin et al., 2014; Solanke, 2015). Early marriage had denied young girls access to education and employment opportunities, and married women also had less time for self–development without the interference of family responsibilities (Musonera & Heshmati, 2017; Solanke, 2015). A study in Egypt found that delaying women's first marriage until adulthood has a positive effect on their long term post marital economic empowerment (Yount et al., 2018). A past study in Ethiopia also found that child brides were powerless in decision–making and more vulnerable to be victims of abuse than those married at the age of 18 and above (Abera et al., 2020). In contrast, studies in Bangladesh (Zaman et al., 2008) and Pakistan (Batool & Jadoon, 2018) discovered no significant association between women's age of marriage and women's empowerment.

2.6.8 Number of living children

The number of children was positively associated with women's empowerment (Acharya et al., 2010; Brajesh & Shekhar, 2015; Musonera & Heshmati, 2017). Women with a higher number of children were more empowered as they tend to be more involved in making decisions with their spouses, for instance, the decision to provide education for their children (Brajesh & Shekhar, 2015). In addition, women were highly valued by their marriage and for childbearing, which allowed them to gain respect and freedom (Musonera & Heshmati, 2017). Thus, women with more children were more empowered and had higher status.

In contrast, Phan (2013) argued that women participating in decision–making in both household and fertility–related matters (high level of empowerment) would give birth to fewer children. In addition, a past study done in Pakistan found that women who had more children were less empowered because they had less time to practice their authority and rights (Ali Sheikh et al., 2016). Another study in Iran also found that women with a single child had higher levels of empowerment compared to multi–child families, but the cause of low preference of children were also influenced by their education levels and employment status (Saberi et al., 2018).

2.6.9 Summary

Most past studies found that each of the women's sociodemographic and economic variables and exposure to mass media has a positive association with women's empowerment. Although some past studies presented a negative relationship, it is undeniable that these variables, especially women's education, work status, and exposure to mass media, are some determinants that greatly impact women's empowerment. Therefore, improving women's livelihood is crucial to promoting women's empowerment at the household level in achieving gender equality.

2.7 Women's empowerment and intimate partner violence (IPV)

This section presents the past studies related to women's empowerment and IPV. IPV is one of the most prevalent human rights violations (WHO, 2012). Past studies on IPV in the Asian region focused mainly on South Asian countries such as India, Pakistan, and Bangladesh due to the high prevalence of IPV in these countries.

Women with limited access to education and employment tend to have lower self–worth and self–esteem as well as a reduced social and economic ability that leads them to be dependent on their family member or spouses (Jewkes et al., 2002). This resulted in the loss of power or disempowerment among women in the household that placed them in a subordinate position and increased the vulnerability of these women in becoming victims of violence.

Past studies have identified women's empowerment as the protective factor of IPV. For instance, a past study in India explored the relationship between women's empowerment, their exposures to IPV, and their help–seeking behavior (Dalal, 2011). It was found that there were other factors in addition to women's empowerment such as higher education that may protect women from IPV (Dalal, 2011). Another study found that women's empowerment interacted with other factors that could collectively lessen IPV in Bangladesh (Schuler & Nazneen, 2018).

A past study in India discovered that women who had limited power in decision–making and condoned wife–beating were vulnerable to abuse (Donta et al., 2016). Meanwhile, another study among ever married women in India discovered that those with higher decision–making powers had a lower risk of experiencing physical and sexual IPV (Murugan et al., 2020). Additionally, the authors also discovered that women that owned property had a lower risk of experiencing physical IPV (Murugan et al., 2020).

Shahar et al. (2020) reviewed past studies related to IPV in Malaysia and concluded that women who possessed violence–condoning attitudes were more vulnerable to IPV. Another past study in Malaysia among pregnant women found that women embedded with the culture and norm that promote male dominance were reported of having a higher risk of experiencing emotional IPV (Haron et al., 2021). In addition, a study that examined IPV among 46 LMICs also found that less empowered women (who agreed with the justification of wife–beating) were more likely to report experiencing IPV (Coll et al., 2020).

However, some past studies found that women's empowerment could not protect women from IPV. Theoretically, women's empowerment was a protective factor of IPV, but it may not be the case in some LMICs such as India and Turkey (Vyas & Watts, 2009). In contrast, women's empowerment may be the contributing factor of IPV as husbands feel that their status was being challenged. For instance, Rahman et al. (2011) found that working women and those who can make more decisions in the household were more likely to experience IPV in Bangladesh because their husbands perceived this as a threat to their power. Another study in Bangladesh by Sanawar et al. (2019) mentioned that some sub–groups of empowered women were still vulnerable to IPV, although women's empowerment had gradually improved. More empowered older women were vulnerable to physical violence due to their involvement in the family and subsequent conflict over decision–making, such as spending their income and issues related to children's healthcare (Sanawar et al., 2019). Burmese married women with decision–making power were more likely to report experiencing violence by their husband or partner in their lifetime (Kabir et al., 2019). Women's household decision–making and adherence to patriarchal norms (women's attitude towards wife–beating) had increased the likelihood of IPV in Pakistan due to patriarchal norms of the society (Murshid & Critelli, 2020).

Economic insecurity or pressure (including food or property) also affected men's perpetration of IPV towards their spouses (Fulu, Jewkes, et al., 2013; Koenig et al., 2006; Krishnan et al., 2010). Economic insecurity in the household is an indication that men fail to meet the expectation of being breadwinners, which could lead to social disapproval. Thus, such disapproval had increased men's sense of inadequacy and caused depression, resulting in higher incidences of IPV perpetration by men (Hatcher et al., 2022; Hatcher et al., 2019; Krishnan et al., 2010).

Exposure to intergenerational parental violence or maternal abuse is one of the factors that increase the vulnerability of women in becoming victims of IPV. Several past studies found that women who witnessed inter–parental violence tended to be more tolerant to violence against women (Islam et al., 2014; Koenig et al., 2006; Miedema & Kyaw, 2022). This is because women may perceive violence as normal behavior in the household (Islam et al., 2014). Parents are the primary agents in children's development. Thus, children that witnessed parental violence would have learnt and adapted from such situation and reflected it in their adulthood (Islam et al., 2014; Solanke, 2018).

In conclusion, the relationship between women's empowerment and IPV is complex as it involves the current social structure and cultural norms that greatly impact women's thoughts in society. However, most of the past studies mentioned above used South Asian countries as the case study. In addition, many past studies used either women's household decision–making power or women's attitude towards wife–beating as the measures of women's empowerment. Hence, it is hoped that this study could explain the influence of women's empowerment on IPV by including three different measures of women's empowerment – household decision–making power, attitude towards wife beating and asset ownership.

2.8 Women's empowerment and modern contraceptive use

This section discusses past studies related to modern contraceptive use and women's empowerment in Asian countries. In general, there is a positive relationship between women's empowerment and contraceptive use. Ahmed et al. (2010) discovered that women with high empowerment were more likely to use modern contraceptives. Besides that, Patrikar et al. (2014) found that women's empowerment was significantly associated with contraceptive use among Indian married women. A study examining women's empowerment with contraceptive norms in Bangladesh found a positive association between women's empowerment and the use of contraception (Deb et al., 2011). Another study in Pakistan also found that women's decision–making power (proxy of women's empowerment) was positively associated with modern contraceptive use, and women had a lower tendency to use modern contraception if their spouse was the primary decision–maker (MacQuarrie & Aziz, 2022).

Prata et al. (2017) concluded that women's empowerment was consistently and positively associated with contraceptive use in developing countries. A study conducted using data from DHS in 32 sub-Saharan African countries found that working women with a higher educational level (one of the components of women's empowerment in the study) had greater decision-making power and were more likely to use contraception (Yaya et al., 2018). Additionally, a study conducted in Indonesia found that women empowered in making household decisions have better access to primary health services, including access to family planning services (Sholihah A et al., 2019). Two past studies discovered that educated women and those working in the modern sector (proxy of women's empowerment) had significant roles in decision–making, which contributed to the rise in contraceptive use (Biswas & Kabir, 2002; Lai & Tey, 2020). This indicated that women's empowerment complemented by other socioeconomic characteristics would increase the use of contraception.

However, some past studies found no direct cause–effect relationship between women's empowerment and the use of contraception. For instance, a past study in rural Bangladesh discovered that women's asset ownership had little impact on the current contraceptive use (Biswas & Kabir, 2002). Moreover, a past study done in Pakistan found that women's decision–making had a small effect on the uptake of contraception after controlling the demographic characteristics (Hakim et al., 2003). Weak association between decision–making for family planning and modern contraceptive use was found in rural Nepal after adjusting other demographic and socioeconomic factors in the study (Mahato et al., 2020).

Concisely, the relationship between women's empowerment and contraceptive use depends on the level and the measures of women's empowerment used in the analysis. Most of the past studies reviewed explained the unidimensional aspect of the effect of women's empowerment in terms of household decision–making power on contraceptive use whilst using South Asian countries as the case study. Hence, it is hoped that this study could explain the influence of various women's empowerment measures on modern contraceptive use in Southeast Asian countries instead.

2.9 Research gaps

Past studies that constructed women's empowerment measures mainly focused on African countries (Abreha et al., 2020; Miedema et al., 2018; Muluneh et al., 2021) and South Asian countries (Batool & Batool, 2018; Williams, 2005). Research that focused on measuring women's empowerment in Southeast Asian countries are scarce (Phan, 2016). In addition, only a few studies presented the internal consistency of the latent variables in the indicators of women's empowerment (Abreha et al., 2020; Batool & Batool, 2018). It is important to present the internal consistency analysis to identify the reliability of the latent variables selected and the model constructed. Consequently, there

are limited research explaining the selection of measures in the concept of women's empowerment.

Many past studies used different measures of women's empowerment, including education attainment and the work status of women, which are proxies or enabling factors of women's empowerment. It is advisable to use direct measures of women's empowerment to avoid misleading results and conclusions. Therefore, this study presents TGP in explaining the measures of women's empowerment and applies Exploratory Factor Analysis (EFA) to present the internal consistencies of women's empowerment measures based on the DHS data.

In addition, there is limited research that has made comparative analyses on women's empowerment in Southeast Asian countries. There is a growing literature on women's empowerment as a protective factor of IPV (Dalal, 2011; Rahman et al., 2011) and the determinant of modern contraceptive use (Lai & Tey, 2020; Yaya et al., 2018). Nevertheless, the majority of these studies focused on South Asian countries (Biswas & Kabir, 2002; Dalal, 2011; Mahato et al., 2020; Murshid & Critelli, 2020; Murugan et al., 2020; Rahman et al., 2011) and African countries (Antai & Antai, 2008; Do & Kurimoto, 2012; Doku & Asante, 2015; Kibira et al., 2014; Yaya et al., 2018). This study aims to fill in the existing gaps by examining the level of women's empowerment and its relationship with sexual and reproductive health and rights in Southeast Asian countries which has been less investigated by researchers and academicians.

CHAPTER 3: METHODOLOGY

This chapter discusses the source of data and the present study's conceptual framework. In addition, the details of the variables of the study are elaborated in this chapter. Lastly, the data analyses methods used are also explained.

3.1 Source of data

The data used for the present study was obtained from the DHS. The DHS was established by the United States Agency for International Development (USAID) in 1984 as the follow up to the World Fertility Survey (WFS) and the Contraceptive Prevalence Survey (CPS). The DHS program has provided technical assistance for the implementation of surveys in Southeast Asian countries. The countries selected for this study were Cambodia DHS 2014 (CDHS 2014), Indonesia DHS 2017 (IDHS 2017), Myanmar DHS 2015–16 (MDHS 2015–16) and the Philippines National DHS 2017 (NDHS 2017). DHS collected the data every five years. Hence, there are several waves of data available for each country. For instance, there are four waves of CDHS and eight waves of IDHS. Meanwhile, there are six waves of NDHS in the Philippines, while MDHS 2015–16 is the first wave of data collected in Myanmar.

The DHS is a nationally representative population–based survey that provide in–depth overview of the life courses of women and men, including their control over income and household decisions, women's experiences of different forms of violence and others. Besides that, information such as education, domestic violence, family planning, women's empowerment were parts of the topics covered in the DHS.

The DHS collected primary data through face–to–face interviews, using different questionnaires such as household questionnaires, women's questionnaires, men's questionnaires, and biomarker questionnaires. The procedures and questionnaires for the DHS have been reviewed and approved by the ICF Institutional Review Board (IRB).

Besides the IRB, the MDHS 2015–16 survey was reviewed and approved by the Myanmar Ministry of Health Ethics Review Committee. Meanwhile, the Ministry of Health of Indonesia determined that the IDHS 2017 did not require approval from the IRB as the IRB for the IDHS 2017 was housed within the Ministry of Health.

Before each interview, informed consent that emphasizes voluntary participation must be obtained from each respondent. In addition, there is a need to assure confidentiality of the information collected. Hence, the privacy of respondents in the DHS was protected. The sample of DHS obtained was based on a two–stage stratified sampling design derived from the list of enumeration areas [EAs] drawn from the census of each country (Ministry of Health and Sports & ICF International, 2017; National Institute of Statistics et al., 2015; National Population and Family Planning Board et al., 2018; Philippine Statistics Authority & ICF International, 2018). Systematic sampling with proportional to size was used in the first stage to select the number of EAs for each country (Cambodia: 611 EAs; Indonesia: 1,970 EAs; Myanmar: 442 EAs; the Philippines: 1,250 EAs).

In the second stage, a fixed number of households were identified from the selected EAs using systematic sampling from the updated household listing. For instance, 52 households were selected for CDHS 2014, while 25 households were selected for IDHS 2017 (National Institute of Statistics et al., 2015; National Population and Family Planning Board et al., 2018). Meanwhile, the number of households selected from EAs for MDHS 2015–16 was 30 (Ministry of Health and Sports & ICF International, 2017). For the NDHS 2017, an equal number of 20 or 26 sample housing units were selected from each sampled EAs (Philippine Statistics Authority & ICF International, 2018).

This study covered currently married women or women in a union within the reproductive age (15 to 49 years old). The sample size of the respondents that were interviewed in each country were 11,668 in Cambodia, 34,467 in Indonesia, 7,870 in Myanmar and 15,445 in the Philippines. Sample weight was applied to ensure the samples resembled the true population distribution in the respective countries.

3.2 Theoretical framework

The theoretical framework of this study was developed by adapting the concept of TGP and the operational definition of power by Rowlands (1997), which led to the proposed dimensions of empowerment by Kabeer (1999). Based on the framework in Figure 3.1, gender inequalities are driven by three components of social structure embedded at distinct levels, from the societal level to the individual level. TGP and the proposed dimensions of empowerment, particularly agency, influenced the selection of women's empowerment indicators. Based on past studies (Ahmed et al., 2010; Dalal, 2011; Murugan et al., 2020; Prata et al., 2017), there were significant relationships between women's empowerment and sexual and reproductive health, particularly IPV and modern contraceptive use. The theoretical framework also adapted the ecological model proposed by Heise (1998) in determining the risk factors of IPV.

Heise (1998) explained that the occurrence of IPV was an interplay among personal, situational, and sociocultural factors that could explain the incidences of men's violent behaviors and women becoming an easy target of abuse. Hence, the risk factors of IPV were categorized into four diverse levels, particularly ontogenic (individual), microsystem, exosystem, and macrosystem (see Appendix 1).

Ontogenic factors referred to the personality history and development of an individual, Microsystem factors were defined as the interaction of a person engaging with others directly or indirectly, which caused the increased risk of sexual coercion, childhood sexual abuse, and/or physical violence against adult women (Heise, 1998). Meanwhile, exosystem factors referred to the social structure of society and macrosystem factors were defined as the cultural values and beliefs that permeate and inform the other three layers of social ecology (Heise, 1998).

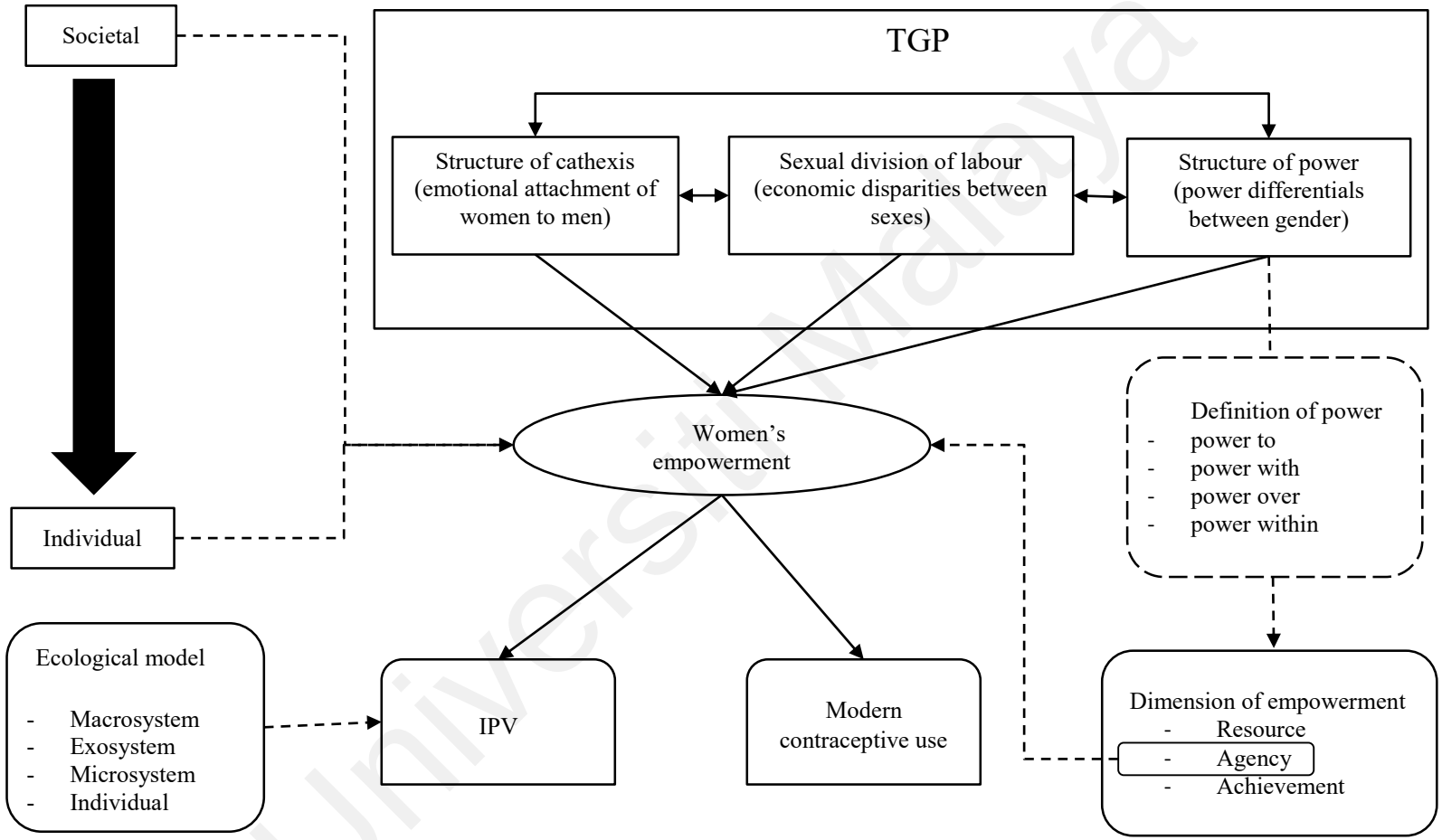

Figure 3.1. Theoretical framework.

Source: Adapted from Connell (1987); Heise (1998); Kabeer (1999); Rowlands (1997).

3.3 Conceptual framework

The conceptual framework of this study is shown in Figure 3.2. Following the objectives of this study and the existing literature, women's demographic and socioeconomic status were selected as the factors associated with women's empowerment and sexual and reproductive health and rights, particularly IPV and modern contraceptive use.

In addition, the ontogenic factor (witnessing father–to–mother IPV), microsystem factor (husband's alcohol use) and exosystem factor (socioeconomic status of husband) were included in examining the relationship between women's empowerment and IPV. Meanwhile, an additional variable of "heard of family planning via mass media" was also included in examining the relationship between women's empowerment and modern contraceptive use. This variable was widely utilized in past studies (Bajoga et al., 2015; Lasong et al., 2020; Palamuleni & Adebowale, 2014).

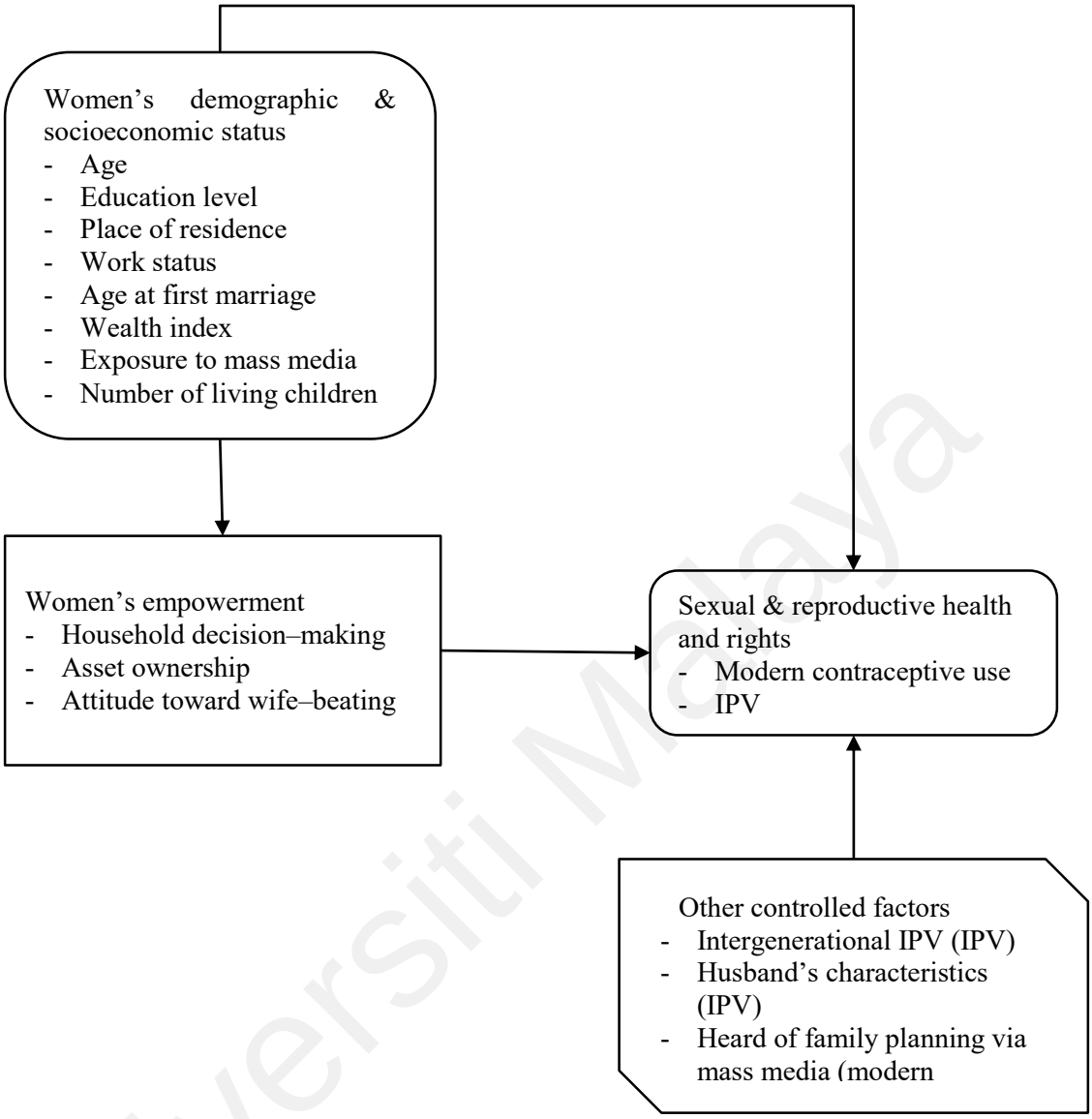

Figure 3.2. Conceptual framework.

3.4 Study variables

This section discusses the indicators of women's empowerment. The variables representing different forms of IPV, particularly emotional, physical, and sexual IPV are also discussed in this section. Moreover, modern contraceptive use, demographic and socioeconomic variables are also explained in this section.

3.4.1 Indicators of women's empowerment

Based on the conceptual framework, the indicators representing women's empowerment include women's household decision–making power (structure of power), women's attitude towards wife–beating (structure of cathexis) and women's asset ownership (sexual division of labor). The household decision items include women's healthcare, large household purchases and visits to family or relatives. Each household decision–making item consisted six options: "respondent alone", "respondent and husband/partner", "respondent and other person", "husband/partner alone", "someone else" and "other". In this study, each item was reclassified as "participated in decision–making" if women were involved in decision-making either solely or jointly and "did not participate in decision–making" if otherwise. Women that participated in all three decisions, regardless of whether the decision was made by the women themselves or jointly with others, were categorized as "high empowerment" and "low empowerment" otherwise (Gayatri & Utomo, 2019; Haque et al., 2021).

Meanwhile, women's attitude towards wife–beating items included the opinions of women that a husband is justified in hitting or beating his wife when the wife goes out without telling the husband, neglecting the children, arguing with the husband, refuses to have sex with the husband and burning the food. Each item consisted three options: "yes", 'no' and 'don't know'. In this study, each item was recoded as "agree" if the respondents answered "yes" or "don't know" and "disagree" if they answered "no" to show the perception of women against wife–beating. Women were classified as "high

empowerment" if and only if they answered "disagree" for all the five items and "low empowerment" otherwise (Haque et al., 2021; Oyediran, 2016).

Women's asset ownership items included owning a house alone or jointly and owning land alone or jointly. The variable was categorized as "not at all" if they answered "does not own" for both land and house. Meanwhile, if the women answered "own alone only" on either the ownership of land or house, they were classified as "sole ownership". If the women answered "own jointly only" or "own alone and jointly" on either the ownership of house or land, they were classified as "joint ownership."

3.4.2 Intimate partner violence (IPV)

In identifying the relationship between IPV and women's empowerment, the dependent variables used were any forms of violence experienced in the past 12 months e.g., emotional (has ever been humiliated, threatened with harm or insulted by husband or partner), physical (has ever been punched, pushed, slapped, strangled, licked, threatened with a weapon or had her arm–twisted or hair pulled by husband or partner), and sexual violence (has ever been physically forced to perform sexual response, unwanted sexual acts or have unwanted sex with husband or partner). Respondents that answered "often," "sometimes" and "yes but frequency in last 12 months missing" to either one of the items for each form of violence indicated experienced IPV in the past 12 months, and "no" if otherwise. For NDHS 2017, seven questions on emotional IPV were asked to the respondents, but this study only selected the three questions mentioned above as they were consistent with the three questions available for the other two countries.

3.4.3 Modern contraceptive use

To examine the association between women's empowerment and modern contraceptive use, the dependent variable was the current contraceptive method used (no method, folkloric method, traditional method, and modern method). The respondents that answered "modern method" were recoded as "using a modern method" and "not using a modern method" if otherwise.

3.4.4 Demographic and socioeconomic variables

Several demographic and socioeconomic variables were used in the analysis. These included the women's age (<25, 25–29, 30–34, 35–39, 40–44, 45–49), women's education level (no schooling or primary, secondary, and tertiary), women's work status (not working or working), place of residence (urban or rural), wealth index (poorest, poorer, middle, richer, richest), age at first marriage (<18, 18–20, 21–23, at least 24), and the number of living children (no children, 1, 2, 3, 4, 5 and above). In addition, women's exposure to mass media (reading newspaper or magazine, listening to the radio, and watching television) was recoded as "not at all" if they had no exposure to all mass media, "access one of the media less than once a week" if they had access to any one of the media less than once a week and "access one of the media at least once a week" if they had access to any one of the media at least once a week. Husband's characteristics were added in examining the relationship between IPV and women's empowerment. The husband's characteristics included the husband's education level (no schooling or primary, secondary, tertiary), the husband's frequency of getting drunk (never, often, sometimes), and control behavior.

The husband's control behavior was categorized as "not at all" if they answered "no" to all control items and "yes" if otherwise. The control items included jealous if the respondent talks with other men, accuses the respondent of unfaithfulness, does not permit the respondent to meet female friends, tries to limit the respondent's contact with

family, insists on knowing the respondent's whereabouts, deprive the respondent of money for household expenses, and does not trust the respondent with money. In addition, the variable of whether the women had witnessed father–to–mother IPV (no or yes) was also included.

In examining the association between women's empowerment and modern contraceptive use, the variable of "heard family planning on media in the past few months" was included. The responses were recoded as "no" if the women never heard of family planning from any media (radio, television, and newspaper or magazine) for the past few months and "yes" if otherwise.

3.5 Data analysis techniques

The data were analyzed using Statistical Package for the Social Sciences (SPSS) version 20. Exploratory factor analysis was applied in identifying the measures of women's empowerment. Descriptive analyses were presented to display the profiles of the DHS respondents in each country. Meanwhile, cross–tabulations and the Chi–square test (or Fisher's exact test for 2*2 contingency table) were used to examine the bivariate association of women's empowerment with IPV and modern contraceptive use according to the selected independent variables. Binary and multinomial logistic regressions were used to investigate the association of women's empowerment, IPV and modern contraceptive use with selected independent variables at the multivariate level. The cut–off point of p–value for all analyses in this study was 0.05.

3.5.1 Exploratory factor analysis (EFA)

The measures of women's empowerment varied across surveys and studies. Hence, exploratory factor analysis (EFA) was used to determine the women's empowerment indicators in this study. EFA is an unrestricted measurement model analysis as no or little relevant theory, or past literature is required to support the model constructed (Kline,

2013). The ten items selected to indicate women's empowerment were listed in Section 3.3.1. It was hypothesized that three factors would be constructed from the ten items, namely, women's household decision-making power, women's attitude towards wife-beating and women's asset ownership.

There were five main implementation steps in EFA, including evaluation of data suitability, factor extraction method, factor retention method, selection of rotational method, and interpretation of data (Taherdoost et al., 2014). Factorability of the correlation matrix was one of the methods used to inspect the suitability of the data. In SPSS, Kaiser-Meyer-Olkin measure sampling adequacy (KMO) and Bartlett's Test of Sphericity were used to indicate the suitability data for factor analysis (IBM, 2019). KMO was a statistic that indicates the proportion of variance in variables that might be caused by the underlying factors, while Bartlett's Test of Sphericity tested the hypothesis that the correlation matrix is an identity matrix, which would indicate that the variables are unrelated and therefore not suitable for structure detection (IBM, 2019). If the Kaiser-Meyer-Olkin measure sampling adequacy value is higher than 0.50 and the p-value of Bartlett's Test of Sphericity is less than 0.05, it indicates that the data is adequate to perform EFA (IBM, 2019).

Factor extraction was a procedure where the variables were grouped into several categories. The most commonly used factor extraction method in statistical software (i.e. SPSS) was Principal Component Analysis (PCA) (Taherdoost et al., 2014). PCA was useful in establishing preliminary result in EFA (Taherdoost et al., 2014), thus, PCA was used in this study. Next, factor retention was performed after the extraction of the factor. The most commonly used factor retention method was based on the eigenvalue – a value larger than 1 (Williams et al., 2010). Factor rotation was the next crucial step in EFA to ensure all variables have high loadings only on one factor (Yong & Pearce, 2013). The most commonly suggested method for factor rotation is Varimax, introduced by Henry

Felix Kaiser in 1958, which was used in this study. Besides, Cronbach's Alpha (or Kuder and Richardson Formula 20 test for binary items) was used to examine the internal consistency of the model. Past studies mentioned that Cronbach's Alpha value, which exceeded 0.50, was sufficient for analysis purposes (Altman, 1991; Streiner & Norman, 2008).

3.5.2 Logistic regressions

There were two types of logistic regressions used in this study: binary logistic regression and multinomial logistic regression. Binary logistic regression was used when the dependent variable, Y was dichotomous, with two possible outcomes ($Y = 0,1$). The predictor variables $X = (X_1, X_2, \dots, X_p)$ was a set of selected independent variables where x_i was the observed value of the explanatory variables for observation i. These sets of variables contained categorical variables. After the dependent and independent variables were defined, then binary logistic regression function could be used, as given by:

$$\pi(x) = P(Y = 1 | X = x) = \frac{\exp(\beta_0+\beta_1 x_1+\cdots+\beta_p x_p)}{1+\exp(\beta_0+\beta_1 x_1+\cdots+\beta_p x_p)} \ , \ 0 \leq \pi(x) \leq 1 \qquad (3.1)$$

where

$\pi(x)$ - the probability of the dependent variable equalling to one of the predictor variables that have been selected

β_p - the coefficient of predictor variable x_p, $\quad where\ p = 1,2, \dots, p$

Equivalently, the log odds, called the logit, has the linear relationship.

$$g(x) = logit(\pi(x)) = \ln\left[\frac{\pi(x)}{1-\pi(x)}\right] = \beta_0 + \beta_1 x_1 + \cdots + \beta_p x_p \ , -\infty \leq g(x) \leq \infty \qquad (3.2)$$

Meanwhile, multinomial logistic regression was used when the dependent variable, Y was categorical, with more than two possible outcomes ($Y = 0,1,2, \dots, j$). $Y = k$ was used as the referent baseline outcome and $Y = j$ was the outcome falling in the j^{th} category. Assuming there were p independent variables denoted by the vector, x and a constant

term, the vector x had a length of $p + 1$, where $x_0 = 1$. Thus, the general model for log odds is as follows:

$$g_j(x) = logit\ \left(\pi_j(x)\right) = \ln\left[\frac{\pi_j(x)}{\pi_k(x)}\right] = \beta_{j0} + \beta_{j1}x_1 + \beta_{j2}x_2 + \cdots + \beta_{jp}x_p = x'\beta_j \qquad (3.3)$$

Table 3.1 presents the coding of the dependent variables used for the logistic regression analysis.

Table 3.1. Coding of the dependent variables.

Method used	Variable	Coding
Binary Logistic Regression	Women's household decision–making power	0 – Low empowerment 1 – High empowerment
	Women's attitude towards wife–beating	
	Experienced emotional IPV	0 – No
	Experienced physical IPV	1 – Yes
	Experienced sexual IPV	
	Current type of contraceptive method used	0 – Non modern users 1 – Modern users
Multinomial Logistic Regression	Women's asset ownership	0 – Does not own 1 – Sole ownership 2 – Joint ownership

The logistic regression model used maximum likelihood estimation to estimate the coefficient of the variables. The adjusted odds ratio was used to measure the association between an exposure and an outcome, representing the odds that an outcome will occur given a particular exposure compared to the odds of the outcome occurring in the absence of that exposure after adjusting the effects of other variables in the model (Szumilas, 2010). The Wald test was used to examine the significance of individual coefficients in the model and the cut off of p–value for the Wald test was 0.05. In this study, the binary logistic regression was used to identify the factors influencing women's household decision–making power and women's attitude towards wife–beating. The binary logistic regression was also used to examine the relationship of women's empowerment with IPV and modern contraceptive use. Multinomial logistic regression was applied to identify the factors influencing women's asset ownership.

CHAPTER 4: RESULTS

This chapter presents the findings of this study. Firstly, the profile of the respondents are described. Next, the measures of women's empowerment are presented, followed by the factors influencing women's empowerment in the four countries. Lastly, the relationship between women's empowerment and sexual and reproductive health and rights, particularly IPV and modern contraceptive use in the selected four countries are propounded.

4.1 Profile of respondents

Table 4.1 presents the women's demographic and socioeconomic profile in the four countries selected for this study. About 35% and 39% of married women in Cambodia and Indonesia were aged 30 to 39. For Myanmar, about four in ten married women were aged 30 to 39 while about 36% of married Filipino women were aged 30 to 39. About 37% and 34% of married women in Cambodia and Indonesia were aged 40 to 49. Meanwhile, about 32% of married women were aged 40 to 49 in both Myanmar and the Philippines.

The majority of Cambodian married women (82.6%) received up to primary or secondary education, while about 15% had never attended school. About 2% of Indonesian women had never attended school, while more than half received secondary education. Consequently, about four in ten Indonesian women studied up to the primary level. Similar to Cambodia, about 15% of Burmese women had never attended school. Meanwhile, Filipino women were more educated, as 81% had at least secondary education.

Slightly over 70% of Cambodian women were employed, while close to 56% of Indonesian women were working. About 64% and 50% of women in Myanmar and the Philippines were working. The majority (84.7%) of Cambodian women resided in rural areas. About 52% of Indonesian women were from rural areas, while 74% of Burmese women resided in rural areas. Meanwhile, about 55% of Filipino women were from rural areas.

More than 80% of Cambodian and Burmese women had exposure to mass media, while more 95% of Indonesian and Filipino women had exposure to mass media. The wealth quintile was quite evenly distributed for all countries. About 30% of Cambodian women reported that they married before age 18, while 34.3% married when they were 18 to 20. Meanwhile, about 28% of Indonesian women married before age 18 and about 29% married at the age of 18 to 20. About 57% of Burmese women married before age 21, while about two in ten women married at the age of 21 to 23. In the Philippines, 29% of the women married at the age of 18 to 20, while about 23% married at the age of 21 to 23.

Only 9.5% of Cambodian women were childless, while about half had one to two children. Besides that, about 8% of Indonesian women were childless, while about 81% had one to three children. More than half of the Burmese women had one to two children, while about 12% were childless. In the Philippines, about 48% of the women had one to two children, while about 14% had at least five children.

Table 4.1. Demographic and socioeconomic profile of respondents across the selected Southeast Asian countries.

	Weighted %			
	Cambodia	**Indonesia**	**Myanmar**	**Philippines**
Total	n = 11,668	n=34,467	n=7,870	n=15,446
Age				
<25	2,209 (19.2)	3,840 (11.3)	1,094 (13.4)	2,200 (14.2)
25–29	2,241 (18.9)	5,426 (15.5)	1,299 (16.2)	2,706 (17.5)
30–34	2,567 (22.1)	6,539 (18.5)	1,486 (19.4)	2,744 (17.7)
35–39	1,519 (13.2)	6,956 (20.3)	1,474 (19.1)	2,850 (18.5)
40–44	1,647 (14.1)	6,273 (18.0)	1,326 (16.5)	2,519 (16.3)
45–49	1,485 (12.6)	5,433 (16.4)	1,191 (15.1)	2,426 (15.8)
Education level				
No schooling/ primary	7,690 (68.7)	11,445 (35.7)	4,823 (62.5)	3,408 (18.6)
Secondary	3,588 (28.8)	17,956 (52.0)	2,432 (29.5)	7,272 (48.6)
Tertiary	390 (2.5)	5,066 (12.3)	613 (8.0)	4,765 (32.8)
Work status				
Not working	3,195 (28.7)	14,813 (44.2)	3,063 (36.4)	7,619 (50.0)
Working	8,470 (71.3)	19,630 (55.7)	4,805 (63.6)	7,826 (50.0)
Exposure to mass media				
Not at all	2,015 (17.0)	1,240 (2.8)	1,205 (15.1)	937 (3.6)
Access one of the media less than once a week	2,118 (17.1)	3,763 (10.0)	1,752 (20.7)	2,253 (12.0)
Access one of the media at least once a week	7,535 (65.9)	29,464 (87.2)	4,913 (64.2)	12,255 (84.4)
Place of residence				
Urban	3,330 (15.3)	17,320 (48.4)	2,057 (26.1)	5,092 (45.1)
Rural	8,338 (84.7)	17,147 (51.6)	5,813 (73.9)	10,353 (54.9)
Wealth index				
Poorest	2,190 (19.3)	7,980 (17.6)	1,685 (20.9)	4,265 (20.2)
Poorer	2,180 (20.2)	6,721 (19.9)	1,620 (20.4)	3,569 (20.2)
Middle	1,942 (19.9)	6,649 (20.7)	1,608 (20.0)	2,938 (20.2)
Richer	2,267 (20.1)	6,629 (21.2)	1,554 (19.5)	2,576 (20.6)
Richest	3,089 (20.5)	6,488 (20.5)	1,403 (19.2)	2,097 (18.8)

Table 4.1. continued.

Age at first marriage				
<18	3,409 (29.5)	9,041 (27.9)	2,029 (25.9)	3,488 (21.2)
18–20	3,971 (34.3)	9,934 (29.2)	2,444 (30.9)	4,590 (29.0)
21–23	2,404 (20.7)	7,470 (21.2)	1,568 (19.8)	3,354 (22.9)
At least 24	1,884 (15.5)	8,022 (21.7)	1,829 (23.4)	4,013 (26.9)
Number of living children				
No children	1,129 (9.5)	2,660 (7.6)	879 (11.8)	1,201 (8.0)
1	2,593 (22.1)	8,340 (26.5)	1,907 (26.0)	3,137 (21.3)
2	3,211 (27.8)	11,554 (36.1)	1,968 (26.3)	3,886 (26.6)
3	2,218 (18.6)	6,811 (18.6)	1,404 (17.7)	2,991 (19.5)
4	1,218 (11.4)	3,005 (7.0)	811 (9.3)	1,781 (10.9)
At least 5	1,199 (10.6)	2,097 (4.3)	901 (8.8)	2,449 (13.7)

Note:

(i) Missing values are excluded from the calculations.

4.2 Exploratory factor analysis

Exploratory factor analysis was conducted to answer research objective 1. Firstly, the KMO measure sampling adequacy and Bartlett's Test Sphericity for the model adequacy of EFA results were presented. Next, the factor extraction was performed using the PCA method, and it was hypothesized that three factors would be constructed from the ten selected items. Then, the factor loadings of the model for each country were calculated using the Varimax rotation method with the assumption that there is no correlation between the three factors. Besides that, the reliability test was also presented to determine the internal consistency of the measures of women's empowerment constructed in this study.

4.2.1 Model adequacy

Table 4.2 presents the model adequacy of the data. The KMO measure sampling adequacy values are 0.717 [Cambodia], 0.689 [Indonesia], 0.647 [Myanmar], and 0.676 [Philippines] respectively, and the Bartlett's Test of Sphericity is significant for each DHS data used in this study. These indicate that the model determined via EFA is adequate for each country.

Table 4.2. Model adequacy for the four selected DHS data.

Country	KMO measure sampling adequacy	Bartlett's Test of Sphericity		
		Approx. Chi-Square	df	p-value
CDHS 2014	0.717	26098.657	45	p<0.001
IDHS 2017	0.689	55828.838	45	p<0.001
MDHS 2015–16	0.647	17189.339	45	p<0.001
NDHS 2017	0.676	19482.761	45	p<0.001

4.2.2 Factor loadings

Table 4.3 to Table 4.6 show the factor loadings of the constructed model for measures of women's empowerment in the four countries. In general, three factors were extracted. The factors after extraction explained more than 53% of women's empowerment for each of the four countries (see Appendix 2 – Appendix 5 for the details of total variance explained for each country). In Cambodia, Indonesia, and the Philippines, the items clustered on the same factor suggest that factor 1 represents women's attitude towards wife–beating, factor 2 represents women's household decision–making power, and factor 3 represents women's asset ownership. In Myanmar, the items clustered on the same factor suggest that factor 1 represents women's attitude towards wife–beating, factor 2 represents women's asset ownership, and factor 3 represents women's household decision–making power.

Table 4.3. Factor loadings of measures of women's empowerment, CDHS 2014.

Items	Factors[a]		
	1	2	3
Participation in deciding own healthcare	-0.022	**0.690**	0.045
Participation in deciding large household purchases	0.022	**0.754**	0.033
Participation in deciding visits to family or relatives	0.029	**0.774**	-0.025
Attitude towards wife beating if go out without telling husband	**0.773**	-0.028	-0.016
Attitude towards wife beating if neglects children	**0.787**	-0.025	0.012
Attitude towards wife beating if argue with husband	**0.791**	-0.003	-0.009
Attitude towards wife beating if refuse to have sexual intercourse with husband	**0.685**	0.027	-0.061
Attitude towards wife beating if burn the food	**0.674**	0.057	-0.027
Owns a house alone or jointly	-0.039	0.036	**0.876**
Owns land alone or jointly	-0.028	0.019	**0.877**
Eigenvalue	2.783	1.695	1.488
% of Variance	27.830	16.946	14.878

Notes:
(i) Extraction Method: Principal Component Analysis.
(ii) Rotation Method: Varimax with Kaiser Normalization
(iii) [a]Rotation converged in 4 iterations.

Table 4.4. Factor loadings of measures of women's empowerment, IDHS 2017.

Items	Factors[a]		
	1	2	3
Participation in deciding own healthcare	0.041	**0.703**	-0.013
Participation in deciding large household purchases	0.037	**0.777**	-0.005
Participation in deciding visits to family or relatives	0.038	**0.759**	0.022
Attitude towards wife beating if go out without telling husband	**0.761**	0.045	-0.012
Attitude towards wife beating if neglects children	**0.725**	0.041	0.003
Attitude towards wife beating if argue with husband	**0.681**	0.011	-0.025
Attitude towards wife beating if refuse to have sexual intercourse with husband	**0.711**	0.037	-0.003
Attitude towards wife beating if burn the food	**0.582**	0.028	-0.023
Owns a house alone or jointly	0.003	0.016	**0.828**
Owns land alone or jointly	-0.044	-0.012	**0.825**
Eigenvalue	2.418	1.681	1.369
% of Variance	24.183	16.812	13.684

Notes:
(i) Extraction Method: Principal Component Analysis.
(ii) Rotation Method: Varimax with Kaiser Normalization
(iii) [a]Rotation converged in 4 iterations.

Table 4.5. Factor loadings of measures of women's empowerment, MDHS 2015 – 16.

Items	Factors[a]		
	1	2	3
Participation in deciding own healthcare	0.060	-0.011	**0.722**
Participation in deciding large household purchases	0.036	0.040	**0.776**
Participation in deciding visits to family or relatives	0.026	0.029	**0.770**
Attitude towards wife beating if go out without telling husband	**0.690**	-0.077	0.041
Attitude towards wife beating if neglects children	**0.683**	-0.018	0.071
Attitude towards wife beating if argue with husband	**0.685**	-0.016	-0.007
Attitude towards wife beating if refuse to have sexual intercourse with husband	**0.678**	0.023	0.016
Attitude towards wife beating if burn the food	**0.667**	-0.013	0.047
Owns a house alone or jointly	-0.050	**0.944**	0.017
Owns land alone or jointly	-0.023	**0.944**	0.040
Eigenvalue	2.326	1.792	1.728
% of Variance	23.261	17.924	17.283

Notes:
(i) Extraction Method: Principal Component Analysis.
(ii) Rotation Method: Varimax with Kaiser Normalization
(iii) [a]Rotation converged in 4 iterations.

Table 4.6. Factor loadings of measures of women's empowerment, NDHS 2017.

Items	Factors[a]		
	1	2	3
Participation in deciding own healthcare	0.018	**0.775**	-0.038
Participation in deciding large household purchases	0.031	**0.765**	0.015
Participation in deciding visits to family or relatives	0.015	**0.791**	0.000
Attitude towards wife beating if go out without telling husband	**0.674**	0.022	-0.049
Attitude towards wife beating if neglects children	**0.650**	0.014	-0.004
Attitude towards wife beating if argue with husband	**0.655**	-0.010	-0.007
Attitude towards wife beating if refuse to have sexual intercourse with husband	**0.661**	0.035	0.009
Attitude towards wife beating if burn the food	**0.649**	0.020	0.031
Owns a house alone or jointly	-0.007	-0.007	**0.831**
Owns land alone or jointly	-0.005	-0.013	**0.830**
Eigenvalue	2.195	1.787	1.381
% of Variance	21.952	17.866	13.814

Note:
(i) Extraction Method: Principal Component Analysis.
(ii) Rotation Method: Varimax with Kaiser Normalization
(iii) [a]Rotation converged in 4 iterations.

4.2.3 Model fit and reliability analysis

Table 4.7 summarizes the reliability analysis of each women's empowerment subscale in the selected four countries. In every country, each subscale shows an adequate level of reliability. However, the women's household decision–making power factor in Cambodia and women's asset ownership factor in Indonesia and the Philippines had lower reliability (<0.60) compared to other factors.

Table 4.7. Reliability test.

Country	Cronbach's Alpha/ KR-20		
	Women's household decision–making	Women's attitude towards wife–beating	Women's asset ownership
Cambodia	0.567	0.796	0.749
Indonesia	0.602	0.705	0.595
Myanmar	0.623	0.708	0.931
Philippines	0.654	0.625	0.540

4.3 Women's empowerment and its associated factors

This section presents the analyses conducted as an answer to research objective 2. Cross–tabulations and the Chi–square test or Fisher's exact test were used to identify the association between the independent variables and women's empowerment at the bivariate level. Logistic regression was applied to examine the factors influencing women's household decision–making power, women's attitude towards wife–beating and women's asset ownership in the multivariate context.

4.3.1 Percentage of women with high empowerment

Figure 4.1 shows the proportion of women with high empowerment in chosen Southeast Asian countries. In general, Cambodian women (86.4%) and Filipino women (85.0%) had a high level of empowerment in household decision–making compared to Indonesian women (68.4%) and Burmese women (65.3%). Roughly four in ten Cambodian women and Burmese women did not condone wife–beating, compared to about 68% of Indonesian women and 88% of Filipino women. In addition, approximately

three–quarters of Cambodian women had joint ownership of an asset, while about four in ten women in the remaining countries had joint ownership. The proportion of women who had sole ownership of an asset in Cambodia (6.8%) and the Philippines (7.9%) were much lower compared to Indonesia (24.6%) and Myanmar (23.7%).

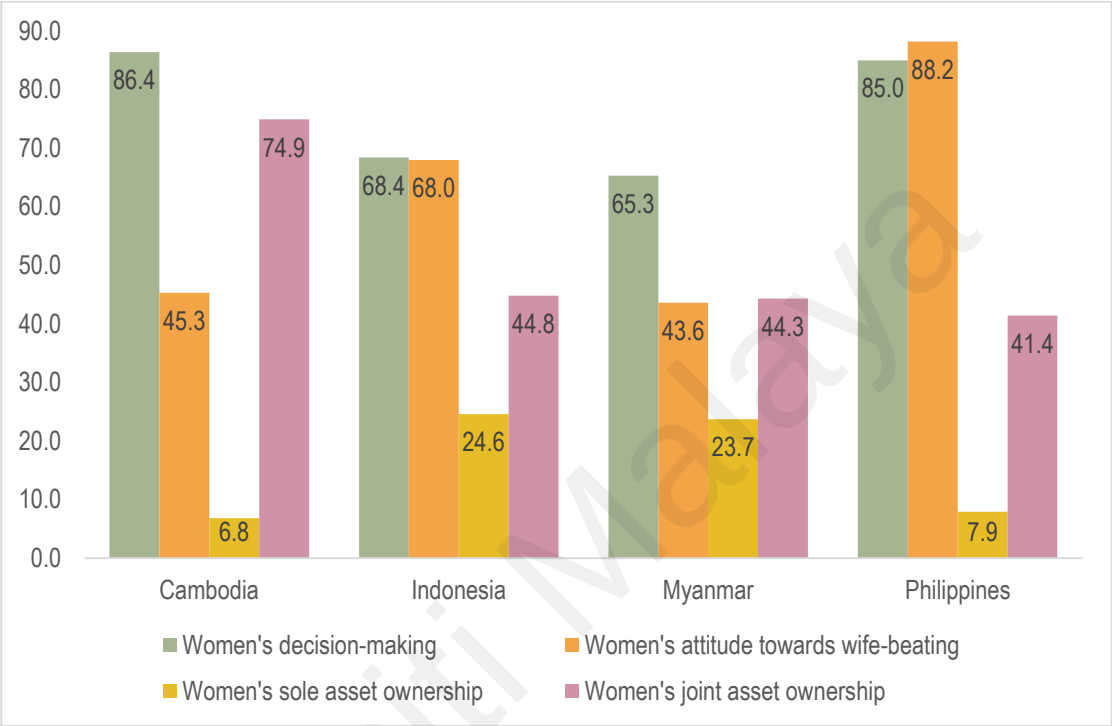

Figure 4.1. Percentage of women with high empowerment.

4.3.2 Women's household decision–making power

Table 4.8 presents the percentage distribution of the number of household decisions that married women involved across Southeast Asian countries. In general, a higher proportion of women were involved in all three household decisions across the countries. At least 85% of women in Cambodia and the Philippines were involved in all the household decision–making. Meanwhile, women in Indonesia and Myanmar who were involved in all household decision-making were only about 68% and 65%, respectively. A higher percentage of women not involved in any household decision was found in Indonesia (4.0%) and Myanmar (5.2%) than in Cambodia (1.4%) and the Philippines (2.2%).

Table 4.8. Percentage distribution of the number of household decisions that married women involved in selected Southeast Asian countries.

Country	n	Number of decisions involved			
		0	1	2	3
Cambodia	11,668	1.4	2.1	10.1	86.4
Indonesia	34,414	4.0	8.5	19.1	68.4
Myanmar	7,870	5.2	9.4	20.1	65.3
Philippines	15,445	2.2	2.6	10.2	85.0

Table 4.9 presents the bivariate analysis of women's household decision–making power in the selected countries. The age of women was strongly associated with women's household decision–making power across the countries with the difference being slightly larger in Myanmar. Women's work status was positively associated with women's household decision–making power. Moreover, the wealth index and the number of living children were strongly associated with household decision–making power across the four countries. Apart from Myanmar, women's education was associated with women's household decision–making power with Indonesia having a larger difference. There was a positive association between women's household decision–making power and education in Indonesia and the Philippines, but a negative association was observed in Cambodia. Exposure to mass media was associated with women's decision–making power across the countries, but the difference was larger in Indonesia. Place of residence was strongly associated with women's household decision–making power except for the Philippines. A positive association between urbanization and women's household decision–making power was observed in Indonesia and Myanmar. In contrast, a negative association was found in Cambodia. Women's age at first marriage was significant in influencing women's household decision–making power in Indonesia and the Philippines, with Indonesia observing a larger difference.

Table 4.9. Percentage of women with high empowerment in household decision–making by selected variables.

Variables	Cambodia	Indonesia	Myanmar	Philippines
	%	%	%	%
Total	86.4	68.4	65.3	85.0
Age	***	***	***	***
<25	81.9	62.5	52.1	80.4
25–29	87.8	68.0	63.8	84.9
30–34	86.1	68.1	67.4	86.1
35–39	87.5	68.7	68.1	85.3
40–44	87.4	70.1	69.6	87.1
45–49	89.2	70.6	67.8	85.8
Education	*	***		***
No schooling/Primary	87.0	65.4	65.1	82.0
Secondary	85.1	68.7	64.4	84.6
Tertiary	83.7	75.5	69.4	87.3
Work status	***	***	***	***
Not working	82.6	65.3	61.9	83.8
Working	87.9	70.8	67.2	86.3
Exposure to mass media	***	***	*	**
Not at all	83.4	61.4	62.4	83.2
Access one of the media less than once a week	84.7	66.7	64.6	82.8
Access one of the media at least once a week	87.6	68.8	66.2	85.4
Place of residence	***	***	***	
Urban	79.4	69.6	68.6	85.0
Rural	87.6	67.2	64.1	85.0
Wealth index	***	***	***	***
Poorest	87.0	66.0	60.3	80.3
Poorer	87.3	67.8	67.7	84.6
Middle	88.7	69.2	64.7	83.1
Richer	87.7	68.7	66.9	88.6
Richest	81.3	69.6	67.0	88.6
Age at first marriage		***		**
< 18	86.9	65.7	65.5	83.0
18–20	85.9	67.4	64.7	85.0
21–23	86.4	69.5	66.6	85.3
At least 24	86.2	72.0	64.6	86.4
Number of living children	***	***	***	**
No child	80.3	66.6	53.4	83.6
1	85.9	67.2	65.6	85.4
2	86.2	69.7	67.5	84.7
3	88.2	68.7	68.3	86.5
4	88.1	68.9	66.3	86.2
5 and above	88.1	65.2	66.2	83.1

Notes:

(i) Chi-square/Fisher exact test significance: ***p<0.001, **p<0.01, *p<0.05.

4.3.3 Women's attitude towards wife–beating

Table 4.10 presents the percentage distribution of the number of wife–beating justifications not condoned by married women across Southeast Asian countries. In general, Filipino women had a higher percentage (88.2%) of disagreeing with all the justifications of wife–beating. Less than half of women in Cambodia and Myanmar disagreed with all the justifications of wife–beating. Meanwhile, about seven out of ten women in Indonesia were not condoned with wife–beating. Besides that, the proportions of Cambodian and Burmese women agreeing on the justification of wife–beating were relatively higher compared to Indonesian and Filipino women. About 6% and 4% of Cambodian and Burmese married women were condoned with any justifications of wife–beating.

Table 4.10. Percentage distribution of the number of wife–beating justifications not condoned by married women in Southeast Asian countries.

Country	n	Number of wife–beating justifications not condoned			
		0	1–2	3–4	5
Cambodia	11,668	6.1	19.9	28.7	45.3
Indonesia	34,414	0.9	6.3	24.8	68.0
Myanmar	7,870	3.8	14.2	38.3	43.6
Philippines	15,445	0.3	1.1	10.5	88.2

Table 4.11 summarizes the bivariate analysis of women's attitudes toward wife–beating. It may hypothesize that women who do not condone wife–beating are more empowered. The age of women was strongly associated with women's attitude towards wife–beating across the countries. Urban women were less likely than those who married young to condone wife–beating. Additionally, the wealth index and the number of living children were strongly associated with women's attitude towards wife–beating. Except for Indonesia, women's education was positively associated with the attitude of not condoning wife–beating, with Cambodia experiencing a larger difference. Women's work status was significantly linked to the attitude towards wife–beating, especially in Cambodia and Myanmar, but not in the Philippines. Exposure to mass media raised the

level of intolerance towards wife–beating across the four countries and the difference was larger in Cambodia. Women who married late were less likely than those who married young to condone wife–beating in Indonesia and the Philippines.

Table 4.11. Percentage of women with high empowerment in attitude towards wife–beating by selected variables.

Variables	Cambodia	Indonesia	Myanmar	Philippines
	%	%	%	%
Total	45.3	68.0	43.6	88.2
Age	***	***	***	***
<25	46.6	61.0	40.8	86.3
25–29	50.6	65.8	43.8	87.1
30–34	46.5	67.0	43.3	88.6
35–39	43.2	69.5	44.5	89.4
40–44	40.7	70.6	40.6	88.0
45–49	40.3	71.3	48.8	89.2
Education	*		***	***
No schooling/Primary	40.9	65.6	40.1	82.3
Secondary	53.0	67.7	45.0	87.9
Tertiary	75.2	76.1	66.0	91.9
Work status	***	*	***	
Not working	43.7	68.3	46.0	87.7
Working	45.9	67.8	42.3	88.6
Exposure to mass media	***	***	*	**
Not at all	38.5	65.0	38.3	83.7
Access one of the media less than once a week	43.0	70.1	40.6	88.2
Access one of the media at least once a week	47.6	67.9	45.9	88.4
Place of residence	***	***	***	***
Urban	58.1	71.8	51.8	90.4
Rural	43.0	64.5	40.8	86.4
Wealth index	***	***	***	***
Poorest	40.1	63.4	41.0	80.7
Poorer	42.5	65.7	41.2	86.4
Middle	41.8	68.2	40.7	89.8
Richer	43.3	73.3	43.3	91.7
Richest	58.2	68.0	52.4	92.5
Age at first marriage		***		***
< 18	41.1	63.8	41.3	85.2
18–20	46.3	66.5	43.5	85.6
21–23	47.9	69.7	42.1	90.3
At least 24	47.3	73.9	47.7	91.6

Table 4.11. continued.

Number of living children	***	***	***	***
No child	48.7	66.1	40.9	90.6
1	50.5	66.9	46.7	89.8
2	47.1	69.8	42.6	89.8
3	43.3	68.3	43.4	86.9
4	38.8	66.1	45.7	86.2
5 and above	36.8	64.8	39.5	84.6

Notes:
(i) Chi-square/Fisher exact test significance: ***p<0.001, **p<0.01, *p<0.05.

4.3.4 Women's asset ownership

Table 4.12 presents the bivariate analysis of women's asset ownership by selected independent variables in Southeast Asian countries. Each independent variable was significantly associated with women's asset ownership except women's work status in the Philippines and the wealth index in Indonesia. A strong relationship between women's age and women's sole ownership of an asset was observed in Indonesia and Myanmar. The difference in women's sole ownership across education groups was larger in Myanmar. A higher proportion of working women were owning assets compared to non–working women, especially in Indonesia and Myanmar.

Women residing in rural areas tended to have a higher level of asset ownership. The wealth index effect on women's sole ownership seemed to be stronger in Myanmar. Women's sole ownership increased with women's age at first marriage in Cambodia and the Philippines. Also, it was observed that the positive effect of the number of living children on women's sole ownership of an asset was stronger in Myanmar.

Table 4.12. Percentage of women with assets by selected variables.

Variables	Cambodia		Indonesia		Myanmar		Philippines	
	%		%		%		%	
	Sole	Joint	Sole	Joint	Sole	Joint	Sole	Joint
Total	6.8	74.9	24.6	44.8	23.7	44.3	7.9	41.4
Age	***		***		***		***	
<25	6.8	48.0	11.3	23.3	9.8	29.0	4.4	19.8
25–29	7.2	67.4	18.0	34.4	17.5	36.6	5.6	32.7
30–34	6.6	80.3	24.1	43.2	23.0	45.5	7.1	40.8
35–39	8.1	85.5	26.3	49.8	27.0	47.7	8.2	46.7
40–44	6.4	88.9	29.8	53.8	31.6	50.2	10.1	51.1
45–49	5.4	91.1	32.6	55.1	31.0	53.9	11.8	55.2
Education	***		***		***		***	
No schooling/Primary	6.2	78.6	28.3	50.4	26.2	48.4	7.7	52.8
Secondary	8.2	67.2	21.8	41.2	21.2	37.2	7.3	38.2
Tertiary	6.4	61.4	25.7	44.0	13.4	38.2	8.8	39.8
Work status	***		***		***			
Not working	7.4	67.6	23.3	40.6	20.2	42.3	7.4	35.4
Working	6.5	77.9	25.7	48.1	25.7	45.4	8.4	47.5
Exposure to mass media	**		***		***		***	
Not at all	6.0	78.1	28.4	47.1	28.4	43.9	10.5	45.0
Access one of the media less than once a week	6.1	76.3	27.1	42.1	21.8	47.8	7.7	43.8
Access one of the media at least once a week	7.1	73.8	24.2	45.0	23.2	43.2	7.8	40.9
Place of residence	***		***		***		***	
Urban	6.5	62.7	24.2	39.6	19.3	33.8	7.8	30.0
Rural	6.8	77.1	24.9	49.7	25.3	48.0	8.0	50.9
Wealth index	***				***		***	
Poorest	6.4	79.7	21.1	44.2	25.0	51.9	7.8	56.1
Poorer	6.8	78.0	23.4	40.5	24.8	48.2	6.9	44.7
Middle	6.6	75.0	23.3	42.8	25.0	43.8	6.2	33.4
Richer	7.4	74.7	26.3	44.0	23.3	37.5	7.9	29.7
Richest	6.7	67.7	28.1	52.0	20.2	39.1	10.8	43.6
Age at first marriage	***		***		***		***	
< 18	5.7	79.7	27.3	50.2	27.5	44.1	7.8	41.4
18–20	6.1	74.8	24.2	44.5	21.3	48.1	8.1	41.9
21–23	6.8	73.4	22.0	43.0	24.5	42.9	7.3	41.8
At least 24	10.1	68.1	24.1	40.1	21.9	40.6	8.2	40.7

Table 4.12. continued.

Number of living children	***		***		***		***	
No children	8.8	43.7	16.4	26.8	11.9	29.9	6.6	26.6
1	8.1	58.6	20.3	34.4	20.2	36.1	5.1	28.0
2	7.3	78.4	26.3	49.0	25.3	48.2	8.6	40.7
3	5.5	87.1	29.0	52.2	26.8	49.3	9.3	48.1
4	4.6	89.1	27.1	55.6	30.7	53.3	8.6	51.3
At least 5	5.4	91.3	27.6	55.9	31.3	56.1	9.0	55.0

Note:

(i) Chi-square/Fisher exact test significance: ***p<0.001, **p<0.01, *p<0.05.

4.3.5 Binary logistic regression of women's household decision–making power

Table 4.13 displays the binary logistic regression analysis of women's household decision–making power by the selected variables. The likelihood of women having high empowerment in household decision–making increased with the women's age. The effect of age was stronger in Myanmar compared to the other three countries. In Indonesia, the odds of women having high empowerment in household decision–making increased in line with the women's education. Meanwhile, working women were more likely to have high empowerment in household decision–making than their non–working counterparts across the four countries with the effect being stronger in Cambodia.

Cambodian women that had access to one of the mass media at least once a week were more likely to have high empowerment in household decision–making. In addition, the likelihood of Indonesian women having high empowerment in household decision–making increased when the frequency of accessing mass media per week increases. Rural women were more likely to have high empowerment in decision–making in Cambodia and the Philippines than their urban counterparts, but the reverse was true in Myanmar.

Cambodian and Indonesian women from the richest families were less likely to have a high level of empowerment in decision–making. In comparison, Burmese women from poorer families were more likely to have high empowerment in decision–making than those from the poorest families. The likelihood of Filipino women having high empowerment in household decision–making increased with family wealth index.

Burmese women that married at the age of 24 and above were less likely to have high empowerment in household decision–making.

The odds of Cambodian women having a high level of empowerment in household decision–making was higher among those with one to four children compared to childless women. The odds of Indonesian women having a high level of empowerment in household decision–making was higher among those with two children. In contrast, Burmese women who had one to three children were more likely to have high empowerment in household decision–making than those without children.

Table 4.13. Binary logistic regression of women's household decision–making power (outcome group: high empowerment; reference group: low empowerment).

Variables	Cambodia AOR (95% CI)	Indonesia AOR (95% CI)	Myanmar AOR (95% CI)	Philippines AOR (95% CI)
Age	***	***	***	***
<25 (ref)	1	1	1	1
25–29	1.51*** (1.25, 1.82)	1.18*** (1.08, 1.29)	1.57*** (1.31, 1.88)	1.35*** (1.15, 1.59)
30–34	1.26* (1.03, 1.54)	1.17** (1.06, 1.29)	1.90*** (1.57, 2.29)	1.44*** (1.20, 1.72)
35–39	1.37** (1.08, 1.74)	1.24*** (1.12, 1.37)	1.98*** (1.61, 2.42)	1.32** (1.10, 1.59)
40–44	1.34* (1.05, 1.70)	1.35*** (1.22, 1.50)	2.16*** (1.74, 2.68)	1.57*** (1.28, 1.92)
45–49	1.61*** (1.24, 2.09)	1.42*** (1.27, 1.58)	2.03*** (1.62, 2.55)	1.37** (1.11, 1.68)
Education		***		
No schooling/Primary (ref)	1	1	1	1
Secondary	1.03 (0.91, 1.17)	1.22*** (1.15, 1.29)	1.03 (0.91, 1.16)	1.08 (0.95, 1.23)
Tertiary	1.22 (0.86, 1.71)	1.63*** (1.48, 1.79)	1.22 (0.99, 1.51)	1.10 (0.94, 1.30)
Work status	***	***	***	*
Not working (ref)	1	1	1	1
Working	1.53*** (1.37, 1.72)	1.22** (1.16, 1.28)	1.22*** (1.11, 1.35)	1.11* (1.01, 1.22)

Table 4.13. continued.

Exposure to mass media	***	***		
Not at all (ref)	1	1	1	1
Access one of the media less than once a week	1.17 (0.99, 1.40)	1.18* (1.02, 1.37)	1.04 (0.89, 1.22)	0.86 (0.66, 1.11)
Access one of the media at least once a week	1.85*** (1.59, 2.17)	1.29*** (1.13, 1.48)	1.09 (0.94, 1.26)	0.91 (0.72, 1.16)
Place of residence	***		**	**
Urban (ref)	1	1	1	1
Rural	1.65*** (1.38, 1.96)	1.00 (0.95, 1.05)	0.81** (0.71, 0.93)	1.17** (1.07, 1.29)
Wealth index	***	**	**	***
Poorest (ref)	1	1	1	1
Poorer	0.91 (0.76, 1.09)	1.01 (0.94, 1.09)	1.31*** (1.13, 1.52)	1.32*** (1.15, 1.52)
Middle	0.97 (0.80, 1.17)	1.04 (0.97, 1.13)	1.11 (0.96, 1.29)	1.21* (1.05, 1.40)
Richer	0.84 (0.69, 1.03)	0.96 (0.89, 1.04)	1.16 (0.99, 1.37)	1.90*** (1.60, 2.24)
Richest	0.59*** (0.47, 0.73)	0.89** (0.82, 0.97)	1.04 (0.86, 1.26)	1.86*** (1.54, 2.24)
Age at first marriage			**	
< 18 (ref)	1	1	1	1
18–20	0.92 (0.80, 1.05)	1.04 (0.98, 1.10)	0.92 (0.81, 1.05)	1.02 (0.90, 1.17)
21–23	0.98 (0.84, 1.15)	1.06 (0.99, 1.14)	0.91 (0.78, 1.06)	0.94 (0.82, 1.09)
At least 24	0.95 (0.78, 1.15)	1.09* (1.01, 1.18)	0.74*** (0.63, 0.87)	0.93 (0.80, 1.10)

Table 4.13. continued.

Number of living children	**	*	***	
No children (ref)	1	1	1	1
1	1.45*** (1.20, 1.75)	1.05 (0.96, 1.16)	1.46*** (1.24, 1.72)	1.16 (0.97, 1.40)
2	1.31** (1.07, 1.62)	1.13* (1.02, 1.24)	1.34** (1.12, 1.61)	1.02 (0.85, 1.23)
3	1.53** (1.20, 1.94)	1.07 (0.96, 1.19)	1.30* (1.06, 1.60)	1.16 (0.95, 1.42)
4	1.45** (1.10, 1.90)	1.09 (0.96, 1.24)	1.14 (0.90, 1.46)	1.18 (0.94, 1.48)
At least 5	1.34 (1.10, 1.80)	0.95 (0.82, 1.10)	1.14 (0.88, 1.48)	0.97 (0.77, 1.22)
Constant	1.46*	0.97	0.80	2.64***

Notes:
(i) Wald test significance: ***p<0.001, **p<0.01, *p<0.05
(ii) AOR: adjusted odds ratio.
(iii) 95% CI: 95% confidence interval.

4.3.6 Binary logistic regression of women's attitude towards wife–beating

The following discussion highlights the results that are statistically significant at α = 0.05. Table 4.14 shows the binary logistic regression analysis of women's attitudes towards wife–beating according to the selected variables. Cambodian women aged 25 to 34 were more likely to disagree with the justification of wife–beating. The likelihood of Indonesian women disagreeing with wife–beating increased with age while women aged 45 to 49 were more likely to disagree with the justification of wife–beating than those aged 24 and below in Myanmar.

Education had a significant positive influence on women's disagreement on the justification of wife–beating across the four countries with the education effect being stronger in Cambodia and Myanmar. Working women in Indonesia and Myanmar were less likely to disagree with the justification of wife–beating than those who were unemployed. Exposure to mass media significantly influenced women's attitude towards wife–beating across the countries. Cambodian and Burmese women who had access to mass media at least once a week were more likely to disagree with wife–beating, but the reverse was true in Indonesia.

In all the four countries, rural women were more likely than urban women to condone wife–beating, with a stronger association observed in Indonesia and Myanmar. In addition, women from the richest families were more likely not to condone wife–beating in Cambodia, Indonesia, and the Philippines. Cambodian women who married at the age of 18 to 20 years old were more likely to disagree with the justification of wife–beating. The likelihood of disagreeing with the justification of wife–beating increased in line with women's age at first marriage in Indonesia. In addition, Filipino women that get married at an older age (21 and above) were more likely to disagree with the justification of wife–beating.

Interestingly, Cambodian women who had at least four children were less likely to disagree with the justification of wife–beating. In comparison, Indonesian women who had one to two children were more likely not to condone wife–beating than those who had five or more children (result not shown in Table 4.14). In addition, Burmese women with one child and four children were more likely to disagree with wife–beating. However, Filipino women who had three to four children were less likely to disagree with the justification of wife–beating than those without children.

Table 4.14. Binary logistic regression of women's attitude towards wife–beating (outcome group: high empowerment; reference group: low empowerment).

Variables	Cambodia AOR (95% CI)	Indonesia AOR (95% CI)	Myanmar AOR (95% CI)	Philippines AOR (95% CI)
Age	**	***	**	
<25 (ref)	1	1	1	1
25–29	1.24** (1.09, 1.42)	1.11* (1.02, 1.22)	1.07 (0.89, 1.28)	1.05 (0.87, 1.26)
30–34	1.16* (1.00, 1.34)	1.18** (1.08, 1.30)	1.09 (0.90, 1.32)	1.17 (0.95, 1.43)
35–39	1.14 (0.96, 1.34)	1.37*** (1.24, 1.51)	1.16 (0.95, 1.41)	1.26* (1.02, 1.56)
40–44	1.01 (0.86, 1.20)	1.49*** (1.34, 1.65)	1.04 (0.84, 1.28)	1.15 (0.92, 1.43)
45–49	1.05 (0.88, 1.26)	1.56*** (1.40, 1.74)	1.47** (1.18, 1.83)	1.28* (1.01, 1.62)

Table. 4.14. continued.

Education	***	***	***	**
No schooling/Primary (ref)	1	1	1	1
Secondary	1.38*** (1.26, 1.51)	1.01 (0.96, 1.07)	1.19** (1.06, 1.34)	1.23** (1.07, 1.40)
Tertiary	2.84*** (2.14, 3.76)	1.28*** (1.16, 1.41)	2.67*** (2.17, 3.28)	1.37** (1.14, 1.64)
Work status		***	**	
Not working (ref)	1	1	1	1
Working	1.064 (0.98, 1.16)	0.88*** (0.84, 0.92)	0.87** (0.79, 0.96)	0.95 (0.85, 1.05)
Exposure to mass media	*	***	*	**
Not at all (ref)	1	1	1	1
Access one of the media less than once a week	1.13 (1.00, 1.29)	1.04 (0.90, 1.21)	1.07 (0.92, 1.25)	1.12 (0.85, 1.48)
Access one of the media at least once a week	1.18** (1.05, 1.32)	0.87* (0.76, 1.00)	1.18* (1.03, 1.36)	0.87 (0.68, 1.11)
Place of residence	**	***	***	*
Urban (ref)	1	1	1	1
Rural	0.81** (0.71, 0.93)	0.75*** (0.72, 0.79)	0.80*** (0.70, 0.91)	0.88* (0.79, 0.99)
Wealth index	***	***		***
Poorest (ref)	1	1	1	1
Poorer	1.02 (0.91, 1.15)	1.10** (1.03, 1.19)	0.96 (0.83, 1.11)	1.42*** (1.23, 1.64)
Middle	0.94 (0.83, 1.06)	1.22*** (1.14, 1.32)	0.88 (0.75, 1.02)	1.81*** (1.54, 2.13)
Richer	0.91 (0.80, 1.04)	1.20*** (1.11, 1.30)	0.85* (0.72, 0.99)	2.11*** (1.75, 2.53)
Richest	1.32*** (1.13, 1.54)	1.42*** (1.31, 1.54)	0.90 (0.74, 1.08)	2.12*** (1.72, 2.61)
Age at first marriage	*	***		***
< 18 (ref)	1	1	1	1
18–20	1.13* (1.03, 1.24)	1.08* (1.02, 1.15)	1.05 (0.93, 1.18)	0.88 (0.77, 1.01)
21–23	1.11 (1.00, 1.24)	1.15*** (1.07, 1.23)	0.89 (0.77, 1.03)	1.20* (1.02, 1.41)
At least 24	1.00 (0.88, 1.14)	1.25*** (1.16, 1.35)	1.00 (0.85, 1.16)	1.23* (1.03, 1.47)

Table. 4.14. continued.

Number of living children	**	***	**	*
No children (ref)	1	1	1	1
1	1.12 (0.97, 1.29)	1.08 (0.98, 1.18)	1.27** (1.08, 1.50)	0.96 (0.77, 1.21)
2	0.96 (0.82, 1.12)	1.10 (1.00, 1.22)	1.09 (0.91, 1.31)	0.96 (0.76, 1.21)
3	0.88 (0.74, 1.05)	1.00 (0.89, 1.11)	1.16 (0.95, 1.42)	0.76* (0.60, 0.97)
4	0.79* (0.65, 0.96)	0.92 (0.81, 1.05)	1.33* (1.05, 1.69)	0.75* (0.58, 0.98)
At least 5	0.80* (0.65, 0.99)	0.91 (0.78, 1.05)	1.01 (0.78, 1.30)	0.77 (0.59, 1.01)
Constant	0.65**	1.65***	0.6**	4.70***

Notes:
(i) Wald test significance: ***p<0.001, **p<0.01, *p<0.05
(ii) AOR: adjusted odds ratio.
(iii) 95% CI: 95% confidence interval.

4.3.7 Logistic regression of women's asset ownership

The following discussion highlights the results that are statistically significant at $\alpha = 0.05$. Table 4.15 to Table 4.17 display the adjusted odds ratios from the multinomial logistic regression of women's asset ownership by selected variables. The odds of women owning an asset solely or jointly compared to not owning any asset increased with age across all countries. It was observed that Cambodian women aged 30 to 34 and 45 to 49 were less likely to own assets solely than jointly. In Indonesia, women aged 30 and above were more likely to own assets solely than jointly. In addition, the likelihood of Burmese women owning assets solely compared to jointly increased with age.

Better educated Cambodian women were more likely to own an asset whether solely or jointly compared to not owning any asset. Filipino women who studied up to tertiary levels were more likely to own assets solely than not owning assets. However, better educated Indonesian and Burmese women were less likely to own assets solely than jointly or not owning any asset.

Intriguingly, secondary educated Indonesian women were less likely to own assets jointly compared to not owning assets at all, but the reverse was true among tertiary educated women. Working women were more likely to own assets solely or jointly compared to their not owning any asset counterparts across the countries. Moreover, the odds of working women owning the asset solely than jointly was lower in three out of four countries with the reverse being true in Myanmar.

Women who had access to mass media were less likely to own assets solely compared to not owning any asset in Indonesia and Myanmar. In addition, Indonesian women who had access to mass media less than once a week were also less likely to own assets jointly than not owning any asset. However, women who had access to media were more likely to own assets jointly compared to not having any asset in Myanmar and the Philippines. Women who had access to mass media were less likely to own assets solely than jointly in Indonesia, Myanmar, and the Philippines.

Rural women were more likely to own assets solely or jointly than not owning any asset across the countries with this association being stronger in Cambodia. However, rural women were less likely to own any asset solely compared to jointly in Indonesia and the Philippines. Oddly, women from better–off families were less likely to own assets solely or jointly than not owning any asset in Cambodia, Myanmar, and the Philippines, but the reverse was true in Indonesia. As a contrast, women from better–off families were more likely to own assets solely compared to owning assets together with their spouses in Indonesia, Myanmar, and the Philippines.

Women's age at first marriage had a negative effect on women's asset ownership, either solely or jointly, for all countries, with the strongest effect observed in Indonesia. Cambodian women who married at the age of at least 24 years old were more likely to have sole ownership of assets than joint ownership. As compared to women who married before 18 years old, those who married at a later age were less likely to have sole

ownership than joint ownership in Indonesia, Myanmar, and the Philippines. Women's asset ownership, either solely or jointly, was positively associated with the number of children. As compared to childless women, those with children were less likely to own assets solely than jointly in Cambodia, Indonesia, and the Philippines.

Table 4.15. Multinomial logistic regression of women's asset ownership (outcome group: sole ownership, reference group: does not own).

Variables	Sole ownership[a]			
	Cambodia	Indonesia	Myanmar	Philippines
	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)
Age				
<25 (ref)	1	1	1	1
25–29	2.12*** (1.61, 2.79)	2.37*** (2.08, 2.70)	2.41*** (1.83, 3.19)	1.69*** (1.28, 2.24)
30–34	3.98*** (2.90, 5.47)	4.61*** (4.03, 5.28)	4.78*** (3.59, 6.36)	2.53*** (1.90, 3.37)
35–39	10.43*** (7.08, 15.36)	6.63*** (5.48, 7.64)	7.19*** (5.32, 9.72)	3.39*** (2.53, 4.56)
40–44	10.93*** (7.19, 16.61)	10.98*** (9.44, 12.77)	11.32*** (8.22, 15.60)	4.95*** (3.66, 6.70)
45–49	12.96*** (8.04, 20.87)	15.33*** (13.10, 17.94)	14.00*** (9.98, 19.63)	7.16*** (5.26, 9.73)
Education				
No schooling/Primary (ref)	1	1	1	1
Secondary	1.48*** (1.22, 1.80)	0.74*** (0.68, 0.80)	0.96 (0.82, 1.13)	1.08 (0.89, 1.30)
Tertiary	1.41 (0.82, 2.42)	1.08 (0.95, 1.22)	0.59** (0.43, 0.80)	1.27* (1.01, 1.60)
Work status				
Not working (ref)	1	1	1	1
Working	1.22* (1.02, 1.46)	1.13*** (1.06, 1.21)	1.44*** (1.26, 1.65)	1.22** (1.07, 1.39)
Exposure to mass media				
Not at all (ref)	1	1	1	1
Access one of the media less than once a week	0.95 (0.70, 1.28)	0.72** (0.59, 0.89)	0.80* (0.64, 1.00)	0.82 (0.57, 1.17)
Access one of the media at least once a week	1.26 (0.97, 1.64)	0.66*** (0.55, 0.81)	1.09 (0.89, 1.32)	0.86 (0.63, 1.19)

Table 4.15. continued.

Place of residence				
Urban (ref)	1	1	1	1
Rural	2.44*** (1.83, 3.26)	1.48*** (1.39, 1.58)	2.17*** (1.81, 2.60)	1.67*** (1.46, 1.91)
Wealth index				
Poorest (ref)	1	1	1	1
Poorer	0.88 (0.67, 1.17)	1.11* (1.01, 1.23)	0.74** (0.60, 0.91)	0.59*** (0.48, 0.73)
Middle	0.66** (0.50, 0.88)	1.26*** (1.13, 1.39)	0.63*** (0.51, 0.79)	0.48*** (0.38, 0.60)
Richer	0.78 (0.58, 1.04)	1.62*** (1.46, 1.80)	0.57*** (0.45, 0.71)	0.54*** (0.43, 0.69)
Richest	0.61** (0.43, 0.86)	2.48*** (2.21, 2.77)	0.68** (0.52, 0.89)	0.93 (0.72, 1.19)
Age at first marriage				
< 18 (ref)	1	1	1	1
18–20	0.86 (0.69, 1.08)	0.72*** (0.66, 0.78)	0.70*** (0.58, 0.83)	0.93 (0.77, 1.11)
21–23	0.80 (0.62, 1.04)	0.48*** (0.44, 0.53)	0.80* (0.65, 0.98)	0.68*** (0.55, 0.83)
At least 24	0.69* (0.51, 0.92)	0.37*** (0.33, 0.41)	0.51*** (0.41, 0.64)	0.58*** (0.47, 0.73)
Number of living children				
No children (ref)	1	1	1	1
1	1.22 (0.93, 1.61)	1.38*** (1.22, 1.57)	1.70*** (1.32, 2.19)	0.78 (0.59, 1.04)
2	1.52** (1.12, 2.05)	1.61*** (1.41, 1.83)	2.01*** (1.53, 2.63)	1.29 (0.99, 1.69)
3	1.35 (0.93, 1.98)	1.60*** (1.38, 1.85)	1.72*** (1.28, 2.32)	1.31 (0.98, 1.74)
4	0.92 (0.58, 1.46)	1.34** (1.12, 1.61)	2.20*** (1.54, 3.14)	1.13 (0.82, 1.55)
At least 5	1.42 (0.84, 2.42)	1.13 (0.92, 1.40)	2.11*** (1.44, 3.10)	0.99 (0.71, 1.37)

Notes:

(i) [a]The reference category: Does not own

(ii) Wald test significance: ***p<0.001, **p<0.01, *p<0.05

(iii) AOR: adjusted odds ratio.

(iv) 95% CI: 95% confidence interval.

Table 4.16. Multinomial logistic regression of women's asset ownership (outcome group: joint ownership, reference group: does not own).

Variables	Joint ownership[a]			
	Cambodia	Indonesia	Myanmar	Philippines
	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)
Age				
<25 (ref)	1	1	1	1
25–29	2.49*** (2.12, 2.91)	2.10*** (1.89, 2.33)	1.62*** (1.32, 1.99)	2.13*** (1.83, 2.47)
30–34	5.35*** (4.40, 6.51)	3.67*** (3.28, 4.10)	2.93*** (2.36, 3.65)	3.14*** (2.68, 3.68)
35–39	10.70*** (8.15, 14.05)	5.49*** (4.88, 6.18)	3.92*** (3.09, 4.97)	4.16*** (3.53, 4.91)
40–44	14.17*** (10.51, 19.09)	8.63*** (7.59, 9.80)	5.58*** (4.30, 7.24)	5.30*** (4.45, 6.31)
45–49	20.81*** (14.68, 29.51)	11.41*** (9.97, 13.06)	7.44*** (5.63, 9.82)	7.31*** (6.10, 8.76)
Education				
No schooling/Primary (ref)	1	1	1	1
Secondary	1.19** (1.06, 1.35)	0.82*** (0.77, 0.88)	0.90 (0.78, 1.03)	0.91 (0.82, 1.02)
Tertiary	1.65** (1.21, 2.25)	1.14* (1.02, 1.27)	0.98 (0.78, 1.24)	1.06 (0.93, 1.21)
Work status				
Not working (ref)	1	1	1	1
Working	1.53*** (1.37, 1.71)	1.25*** (1.18, 1.32)	1.23*** (1.10, 1.38)	1.55*** (1.44, 1.67)
Exposure to mass media				
Not at all (ref)	1	1	1	1
Access one of the media less than once a week	0.95 (0.79, 1.15)	0.78* (0.64, 0.95)	1.20 (0.99, 1.46)	1.27* (1.01, 1.59)
Access one of the media at least once a week	1.11 (0.94, 1.31)	0.90 (0.76, 1.08)	1.40*** (1.17, 1.67)	1.48*** (1.21, 1.82)
Place of residence				
Urban (ref)	1	1	1	1
Rural	2.82*** (2.36, 3.36)	1.87*** (1.76, 1.98)	2.43*** (2.08, 2.84)	2.42*** (2.23, 2.61)

Table 4.16. continued.

Wealth index				
Poorest (ref)	1	1	1	1
Poorer	0.88 (0.73, 1.05)	0.88** (0.81, 0.96)	0.71*** (0.59, 0.85)	0.52*** (0.46, 0.58)
Middle	0.68*** (0.57, 0.82)	1.05 (0.96, 1.14)	0.55*** (0.45, 0.66)	0.36*** (0.31, 0.41)
Richer	0.76** (0.62, 0.92)	1.21*** (1.11, 1.33)	0.45*** (0.37, 0.55)	0.30*** (0.26, 0.35)
Richest	0.65*** (0.52, 0.82)	2.03*** (1.84, 2.25)	0.63*** (0.50, 0.79)	0.56*** (0.48, 0.65)
Age at first marriage				
< 18 (ref)	1	1	1	1
18–20	0.81** (0.71, 0.94)	0.73*** (0.67, 0.78)	1.01 (0.87, 1.18)	0.99 (0.88, 1.10)
21–23	0.67*** (0.57, 0.79)	0.54*** (0.50, 0.59)	0.91 (0.76, 1.10)	0.88* (0.78, 0.99)
At least 24	0.38*** (0.32, 0.47)	0.37*** (0.34, 0.41)	0.65*** (0.53, 0.79)	0.70*** (0.62, 0.80)
Number of living children				
No children (ref)	1	1	1	1
1	1.66*** (1.41, 1.94)	1.42*** (1.28, 1.59)	1.34** (1.11, 1.62)	1.07 (0.91, 1.26)
2	2.67*** (2.22, 3.22)	1.95*** (1.74, 2.18)	1.92*** (1.56, 2.37)	1.51*** (1.29, 1.77)
3	3.22*** (2.52, 4.12)	1.93*** (1.70, 2.20)	1.65*** (1.30, 2.10)	1.62*** (1.37, 1.92)
4	2.56*** (1.89, 3.47)	1.85*** (1.58, 2.17)	2.11*** (1.56, 2.85)	1.56*** (1.29, 1.88)
At least 5	3.13*** (2.11, 4.65)	1.54*** (1.27, 1.85)	2.14*** (1.54, 2.99)	1.31** (1.08, 1.58)

Notes:

(i) [a]The reference category: Does not own

(ii) Wald test significance: ***p<0.001, **p<0.01, *p<0.05

(iii) AOR: adjusted odds ratio.

(iv) 95% CI: 95% confidence interval.

Table 4.17. Multinomial logistic regression of women's asset ownership (outcome group: sole ownership, reference group: joint ownership).

Variables	Sole ownership[b]			
	Cambodia	Indonesia	Myanmar	Philippines
	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)
Age				
<25 (ref)	1	1	1	1
25–29	0.85 (0.66, 1.10)	1.13 (0.98, 1.30)	1.49** (1.12, 1.99)	0.80 (0.59, 1.07)
30–34	0.74* (0.56, 0.99)	1.26** (1.09, 1.44)	1.63** (1.23, 2.16)	0.81 (0.60, 1.09)
35–39	0.98 (0.71, 1.33)	1.21** (1.05, 1.39)	1.83*** (1.37, 2.45)	0.82 (0.60, 1.11)
40–44	0.77 (0.56, 1.07)	1.27** (1.10, 1.47)	2.03*** (1.52, 2.73)	0.93 (0.68, 1.27)
45–49	0.62* (0.43, 0.89)	1.34*** (1.16, 1.55)	1.88*** (1.38, 2.56)	0.98 (0.72, 1.34)
Education				
No schooling/Primary (ref)	1	1	1	1
Secondary	1.24* (1.04, 1.48)	0.90** (0.84, 0.96)	1.07 (0.93, 1.24)	1.18 (0.98, 1.43)
Tertiary	0.85 (0.51, 1.42)	0.95 (0.85, 1.06)	0.60** (0.45, 0.81)	1.20 (0.95, 1.51)
Work status				
Not working (ref)	1	1	1	1
Working	0.80** (0.68, 0.94)	0.91*** (0.86, 0.96)	1.17* (1.03, 1.32)	0.79*** (0.69, 0.90)
Exposure to mass media				
Not at all (ref)	1	1	1	1
Access one of the media less than once a week	1.00 (0.77, 1.30)	0.93 (0.78, 1.10)	0.67*** (0.55, 0.81)	0.65* (0.46, 0.91)
Access one of the media at least once a week	1.13 (0.91, 1.42)	0.74*** (0.63, 0.86)	0.78** (0.66, 0.92)	0.58** (0.42, 0.80)
Place of residence				
Urban(ref)	1	1	1	1
Rural	0.87 (0.67, 1.12)	0.79*** (0.75, 0.84)	0.89 (0.75, 1.06)	0.69*** (0.60, 0.79)

Table 4.17. continued.

Wealth index				
Poorest (ref)	1	1	1	1
Poorer	1.01 (0.79, 1.28)	1.26*** (1.15, 1.38)	1.04 (0.87, 1.24)	1.15 (0.93, 1.41)
Middle	0.97 (0.76, 1.25)	1.20*** (1.09, 1.32)	1.16 (0.97, 1.39)	1.34* (1.06, 1.68)
Richer	1.03 (0.80, 1.32)	1.34*** (1.22, 1.46)	1.25* (1.03, 1.52)	1.81*** (1.44, 2.29)
Richest	0.93 (0.68, 1.26)	1.22*** (1.11, 1.34)	1.08 (0.85, 1.37)	1.66*** (1.20, 2.12)
Age at first marriage				
< 18 (ref)	1	1	1	1
18–20	1.06 (0.87, 1.29)	0.99 (0.92, 1.06)	0.69*** (0.59, 0.80)	0.94 (0.78, 1.13)
21–23	1.20 (0.96, 1.50)	0.90** (0.83, 0.97)	0.87 (0.73, 1.04)	0.77* (0.62, 0.95)
At least 24	1.79*** (1.40, 2.29)	0.98 (0.90, 1.08)	0.79* (0.65, 0.95)	0.83 (0.67, 1.03)
Number of living children				
No children (ref)	1	1	1	1
1	0.74* (0.57, 0.96)	0.97 (0.85, 1.11)	1.27 (0.98, 1.65)	0.73* (0.54, 0.98)
2	0.57*** (0.43, 0.75)	0.82** (0.72, 0.94)	1.05 (0.80, 1.36)	0.85 (0.65, 1.13)
3	0.42*** (0.30, 0.58)	0.83** (0.72, 0.95)	1.04 (0.79, 1.39)	0.81 (0.60, 1.08)
4	0.36*** (0.25, 0.53)	0.72*** (0.62, 0.85)	1.05 (0.76, 1.43)	0.72 (0.52, 1.00)
At least 5	0.45*** (0.31, 0.67)	0.74** (0.62, 0.88)	0.99 (0.71, 1.36)	0.76 (0.54, 1.05)

Notes:
(i) [b]The reference category: Does not own
(ii) Wald test significance: ***p<0.001, **p<0.01, *p<0.05
(iii) AOR: adjusted odds ratio.
(iv) 95% CI: 95% confidence interval.

4.3.8 Summary

Cambodian and Filipino women have a higher level of empowerment in household decision–making. However, the proportion of women not condoning wife–beating was lower in Cambodia and Myanmar compared to Indonesia and the Philippines. Married women across the selected four Southeast Asian countries were more prone to having the joint ownership of assets than sole ownership. Overall, women's demographic and

socioeconomic status greatly influenced women's empowerment across Southeast Asian countries.

4.4 Women's empowerment and IPV

This section discusses the relationship between women's empowerment and IPV. The sample in this sub–section was confined to those that answered the domestic violence module. The sample encompassed 2,977 Cambodian, 2,750 Burmese and 10,778 Filipino married women. Indonesia was excluded from this chapter as the IDHS 2017 did not cover questions about IPV. Cross–tabulations and the Chi–square test or Fisher's exact test were used to test the bivariate association of IPV with women's empowerment and other independent variables. Binary logistic regression was applied to examine the association between women's empowerment and the three forms of IPV.

4.4.1 Prevalence of IPV across the countries

Figure 4.2 presents the prevalence of IPV experienced in the past 12 months. In general, the proportion of women who experienced emotional IPV in Cambodia, Myanmar and the Philippines was 17.6%, 9.2% and 6.2%[6], respectively. In Cambodia, 9.1% of married women reported having experienced physical IPV in the past 12 months. In comparison, 9.9% of Burmese women and 4.3% of Filipino women had experienced physical IPV in the past 12 months. Sexual IPV was the least reported type of IPV across the three countries, ranging from 2.1% in Myanmar to 3.9% in Cambodia.

[6] The prevalence of emotional IPV in the Philippines was lower than the reported statistics because three out of seven items were used in this study to ensure consistency with the three items available for the other two countries.

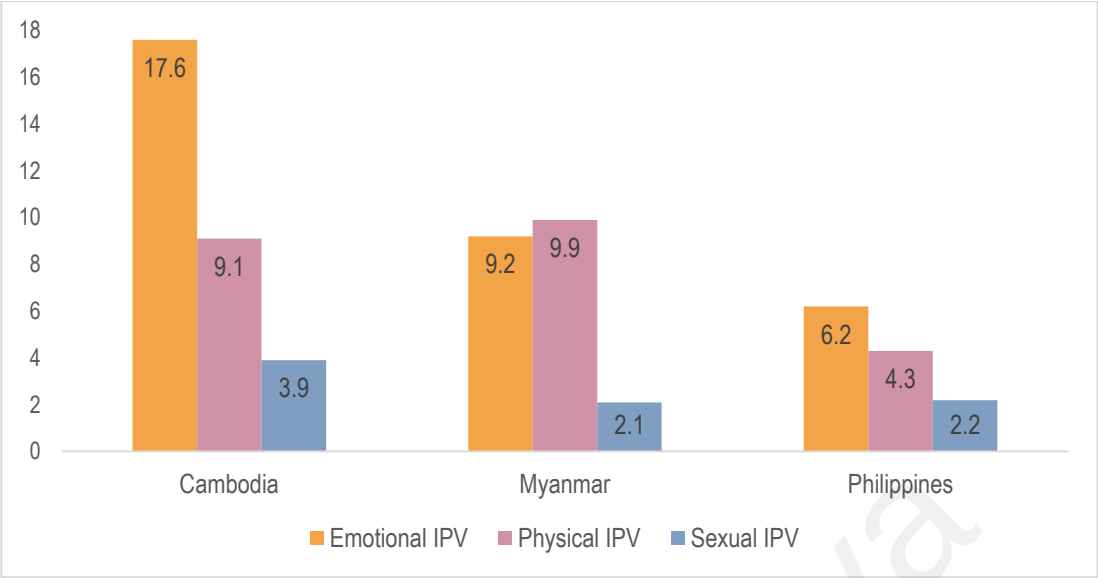

Figure 4.2. The prevalence of IPV.

Table 4.18 to Table 4.20 present the prevalence of all forms of IPV experienced in the past 12 months by selected variables. Women who owned assets solely were more likely to experience all forms of IPV in Cambodia. Moreover, Filipino women who owned assets solely were more likely to report being abused physically and sexually. Women with a high level of empowerment in household decision–making were less likely to experience all forms of IPV in the Philippines. The prevalence of physical IPV in Myanmar was lower among women with high levels of empowerment in household decision–making. The prevalence of emotional IPV was lower among women who did not condone wife–beating in Cambodia and the Philippines. In contrast, women who did not condone wife–beating demonstrated experiencing lower physical and sexual IPV across the countries, whereby the effect was slightly stronger in the Philippines.

The bivariate analysis showed that the prevalence of emotional and physical IPV was positively correlated with women's age in Cambodia. Additionally, Filipino women aged below 25 years old were more prone to experience emotional and physical IPV. In addition, the prevalence of physical IPV was higher among Burmese women aged 34 and below. The prevalence of experiencing all forms of IPV was higher among those who had witnessed father–to–mother IPV in Myanmar and the Philippines. Cambodian women

who witnessed father–to–mother IPV reported a higher prevalence of emotional and physical IPV.

Women that had no schooling or studied only up to the primary level had a higher prevalence of experiencing sexual IPV in Cambodia and the Philippines. The prevalence of emotional and physical IPV decreased with an increase of women's education across the countries. In addition, the percentage of women experiencing all forms of IPV was higher among those from the poorest and poorer families across the countries.

A higher proportion of rural women experienced emotional IPV than urban women in Cambodia and the Philippines. Rural Filipino women also reported a higher prevalence of sexual IPV. In Cambodia and Myanmar, rural women had a higher prevalence of physical IPV. In addition, exposure to mass media was negatively associated with all forms of IPV in Cambodia and Myanmar. In the Philippines, working women were more prone to experience emotional IPV.

Furthermore, women's age at first marriage was negatively associated with emotional and physical IPV in Myanmar and negatively associated with all forms of IPV in the Philippines. In contrast, the number of living children was positively related to all forms of IPV in Cambodia. Consequently, the number of living children was positively associated with emotional and physical IPV in Myanmar, and emotional and sexual IPV in the Philippines. The prevalence of all forms of IPV decreased with the husband's education across the countries. In all three countries, the percentage of women who experienced all forms of IPV was significantly higher if their husbands had a controlling behavior and often got drunk, and the effect was found to be more prominent in Cambodia.

Table 4.18. Prevalence of emotional IPV by selected variables.

Variables	Cambodia		Myanmar		Philippines	
	n	%	n	%	n	%
Total	2,977	17.6	2,750	9.2	10,778	6.2
Women's asset ownership		***				
Does not own any asset	529	11.7	882	10.2	5,479	5.9
Joint ownership	2,242	18.4	1,240	9.2	4,451	6.7
Sole ownership	206	24.3	628	8.0	848	5.8
Women's household decision–making power						***
Low empowerment	390	19.7	967	10.4	1,612	12.5
High empowerment	2,586	17.3	1,782	8.6	9,166	5.1
Women's attitude towards wife–beating		***				***
Low empowerment	1,671	20.2	1,560	9.7	1,319	13.4
High empowerment	1,305	14.3	1,189	8.5	9,460	5.2
Age		***				***
<25	546	12.1	398	10.1	1,526	9.4
25–29	553	13.7	436	11.0	1,904	5.3
30–34	675	18.7	549	8.6	1,939	5.4
35–39	405	22.5	531	9.0	2,017	5.6
40–44	441	22.2	432	8.3	1,685	6.6
45–49	356	19.1	404	8.4	1,707	5.5
Education		***		*		***
No schooling/Primary	2,029	21.8	1,730	10.2	2,000	7.9
Secondary	893	9.0	810	8.1	5,299	7.0
Tertiary	55	3.6	208	5.3	3,480	4.0
Work status						**
Not working	795	18.6	1,025	8.6	5,402	5.6
Working	2,182	17.3	1,725	9.6	5,377	6.8
Exposure to mass media		***		**		
Not at all	542	21.8	416	11.3	402	5.3
Access one of the media less than once a week	504	22.8	576	11.8	1,298	6.4
Access one of the media at least once a week	1,931	15.1	1,757	7.9	9.078	6.2
Place of residence		**				***
Urban	441	12.0	708	7.9	4,826	5.2
Rural	2,536	18.6	2,041	9.7	5,942	7.0

Table 4.18. continued.

Wealth index		***		***		***
Poorest	567	24.5	602	13.1	2,176	9.2
Poorer	563	23.1	562	12.5	2,186	8.7
Middle	625	16.6	536	6.7	2,194	6.4
Richer	614	16.2	524	6.7	2,252	3.6
Richest	608	8.7	525	6.5	1,970	3.1
Age at first marriage				***		***
<18	898	18.3	710	11.6	2,349	9.1
18–20	971	19.2	872	11.1	3,117	6.2
21–23	631	16.0	523	7.3	2,490	5.7
At least 24	476	15.5	645	5.6	2,822	4.3
Number of living children		***		**		**
No children	294	8.5	305	5.9	917	3.9
1	653	14.5	758	9.5	2,242	6.0
2	795	16.7	715	8.5	2,867	5.9
3	576	19.1	511	7.4	2,069	6.0
4	319	24.4	229	13.1	1,182	8.1
At least 5	339	24.8	232	14.7	1,502	7.6
Witnessed father–to–mother IPV		***		***		***
No	2,418	15.7	2,256	7.4	8,701	5.0
Yes	559	26.0	494	17.4	2,077	11.5
Husband's education level		***		*		***
No schooling/Primary	1,638	22.5	1,551	10.4	2,775	8.5
Secondary	1,169	12.7	991	8.3	4,565	6.6
Tertiary	158	3.8	166	4.8	3,433	3.8
Having control behavior		***		***		***
Not at all	2,203	10.0	1,986	4.0	6,866	2.0
Yes	773	39.2	763	22.7	3,913	14.1
Frequency of getting drunk		***		***		***
Never	101	5.0	57	12.3	207	4.6
Sometimes	1,970	13.6	897	9.4	6,117	6.5
Often	470	45.1	297	34.7	681	27.4

Notes:
(i) Missing values are excluded from the calculations.
(ii) Chi-square/Fisher exact test significance: ***p<0.001, **p<0.01, *p<0.05.

Table 4.19. Prevalence of physical IPV by selected variables.

Variables	Cambodia	Myanmar	Philippines
	%	%	%
Total	9.1	9.9	4.3
Women's asset ownership	**		*
Does not own any asset	6.1	11.2	4.6
Joint ownership	9.5	9.0	3.8
Sole ownership	13.5	9.9	5.3

Table 4.19. continued.

Women's household decision–making power		*	***
Low empowerment	7.9	11.8	8.3
High empowerment	9.3	8.9	3.7
Women's attitude towards wife–beating	**	**	***
Low empowerment	10.3	11.5	8.3
High empowerment	7.6	7.8	3.8
Age	**	**	***
<25	6.8	12.3	9.6
25–29	6.0	11.9	3.8
30–34	10.8	11.1	4.3
35–39	11.9	8.5	3.3
40–44	11.1	9.7	3.6
45–49	9.0	5.4	2.3
Education	***	**	***
No schooling/Primary	11.7	10.6	5.4
Secondary	3.7	9.9	5.0
Tertiary	3.6	3.4	2.8
Work status			
Not working	10.2	8.8	4.7
Working	8.7	10.6	4.0
Exposure to mass media	***	**	
Not at all	14.8	14.4	4.7
Access one of the media less than once a week	11.1	9.2	4.4
Access one of the media at least once a week	7.0	9.0	4.3
Place of residence	***	**	
Urban	4.3	6.8	4.0
Rural	10.0	10.9	4.6
Wealth index	***	***	***
Poorest	16.0	15.1	6.9
Poorer	11.0	12.5	5.3
Middle	9.0	9.5	3.7
Richer	6.9	6.7	4.1
Richest	3.3	4.8	1.4
Age at first marriage		***	***
<18	9.9	13.5	6.7
18–20	9.1	11.2	5.5
21–23	8.4	7.8	3.1
At least 24	8.8	5.7	2.2
Number of living children	***	**	
No children	4.4	11.1	4.2
1	6.6	9.4	4.1
2	9.4	8.3	4.5
3	9.0	8.6	4.1
4	12.8	10.9	4.3
At least 5	14.2	16.5	4.8

Table 4.19. continued.

Witnessed father–to–mother IPV	***	***	***
No	7.6	8.0	3.4
Yes	15.6	18.4	8.4
Husband's education level	***	**	***
No schooling/Primary	12.6	10.9	6.4
Secondary	5.3	9.3	4.4
Tertiary	1.9	3.6	2.6
Having control behavior	***	***	***
Not at all	3.9	5.8	1.3
Yes	23.9	20.4	9.6
Frequency of getting drunk	***	***	***
Never	1.0	12.1	9.2
Sometimes	5.3	11.4	4.4
Often	30.6	26.9	19.8

Notes:
(i) Missing values are excluded from the calculations.
(ii) Chi-square/Fisher exact test significance: ***p<0.001, **p<0.01, *p<0.05.

Table 4.20. Prevalence of sexual IPV by selected variables.

Variables	Cambodia	Myanmar	Philippines
	%	%	%
Total	3.9	2.1	2.2
Women's asset ownership	**		*
Does not own any asset	4.0	2.3	1.9
Joint ownership	3.4	2.2	2.5
Sole ownership	7.8	1.4	2.8
Women's household decision–making power			***
Low empowerment	4.6	2.6	4.0
High empowerment	3.8	1.8	1.9
Women's attitude towards wife–beating	**	*	***
Low empowerment	4.7	2.6	4.6
High empowerment	2.8	1.3	1.9
Age			
<25	3.1	2.8	2.8
25–29	3.3	3.0	2.1
30–34	3.4	1.3	2.1
35–39	5.2	1.9	2.4
40–44	3.8	2.3	2.4
45–49	5.3	1.5	1.6
Education	*		**
No schooling/Primary	4.4	2.5	2.9
Secondary	2.6	1.4	2.5
Tertiary	1.8	1.0	1.5
Work status			
Not working	3.3	1.9	2.1
Working	4.1	2.1	2.4

Table 4.20. continued.

Exposure to mass media	***	*	
Not at all	6.5	3.6	3.5
Access one of the media less than once a week	4.2	2.6	2.7
Access one of the media at least once a week	3.1	1.5	2.1
Place of residence			***
Urban	2.3	1.4	1.7
Rural	4.1	2.3	2.7
Wealth index	**	**	***
Poorest	6.5	3.3	3.7
Poorer	4.3	3.0	3.1
Middle	2.6	2.1	2.5
Richer	3.3	0.6	1.0
Richest	2.8	0.8	0.8
Age at first marriage			**
<18	3.9	2.3	3.2
18–20	4.4	2.5	2.3
21–23	3.5	2.1	2.1
At least 24	3.2	1.2	1.5
Number of living children	*		**
No children	3.1	2.0	1.6
1	2.6	2.2	1.5
2	4.3	1.8	2.0
3	3.0	1.8	2.5
4	5.3	1.7	2.6
At least 5	6.2	3.4	3.5
Witnessed father–to–mother IPV		***	***
No	3.6	1.6	1.8
Yes	5.2	4.3	3.9
Husband's education level	**		***
No schooling/Primary	4.8	2.5	3.5
Secondary	2.7	1.8	2.2
Tertiary	1.9	0.0	1.2
Having control behavior	***	***	***
Not at all	1.3	0.9	0.6
Yes	11.3	5.2	5.1
Frequency of getting drunk	***	**	***
Never	2.0	0.0	1.0
Sometimes	2.3	2.0	2.2
Often	13.8	5.7	11.2

Notes:

(i) Missing values are excluded from the calculations.

(ii) Chi-square/Fisher exact test significance: ***p<0.001, **p<0.01, *p<0.05.

4.4.2 Binary logistic regression analysis

The following discussion highlights the results that are statistically significant at $\alpha = 0.05$. Table 4.21 to Table 4.23 present the binary logistic regression of all forms of IPV. Women's asset ownership was associated with sexual IPV in Cambodia and the Philippines. Women that were more empowered in household decision–making had lower odds of experiencing emotional and physical IPV in the Philippines. In addition, Filipino women that disagreed with the justification of wife–beating were less likely to experience all forms of IPV compared to those that agreed with wife–beating. Contrary to expectation, there was no association between women's empowerment indicators and the three forms of IPV in Myanmar after controlling other variables.

Older Filipino women were less likely to experience emotional IPV compared to those aged below 25. The likelihood of women experiencing physical IPV declined with women's age in Myanmar and the Philippines. Women that studied up to the secondary level were less likely to experience emotional and physical IPV in Cambodia. Working Cambodian women were less likely to experience physical IPV than those who were not working. However, working women were more prone to emotional IPV in Myanmar and the Philippines. Filipino women who had exposure to mass media were less likely to experience sexual IPV.

Cambodian women who resided in rural areas had a higher chance of experiencing sexual IPV than their urban counterparts. The wealth index was significantly associated with emotional IPV in Cambodia and the Philippines. In addition, the odds of women being sexually abused were lower among women from better–off families than those from the poorest families in Myanmar. In the Philippines, the odds of women experiencing all forms of IPV were lower among those from the wealthiest families compared to those from the poorest families.

Cambodian women who married at the age of 18 to 20 were more likely to report emotional IPV compared to those who married before 18 years old. Burmese women who had more children were more prone to emotional IPV. Women who witnessed father–to–mother IPV had higher odds of experiencing emotional and physical IPV across the countries with its effect being stronger in Myanmar and the Philippines. In addition, Filipino women who have witnessed father–to–mother IPV had higher odds of experiencing sexual IPV. The likelihood of Cambodian women experiencing emotional IPV was lower if their husbands had obtained secondary education. In contrast, the likelihood of Filipino women experiencing physical IPV decreased with their husbands' education. Women whose husbands had controlling behaviors had higher odds of experiencing all forms of IPV across the three countries. Women whose husbands often got drunk had higher odds of experiencing emotional and physical IPV across the countries where the effect was more prominent in Cambodia. In addition, women who reported that their husbands often got drunk had higher odds of experiencing sexual IPV in Cambodia and the Philippines.

Table 4.21. Binary logistic regression of emotional IPV (outcome group: experienced emotional IPV; reference group: did not experience emotional IPV).

Variables	Cambodia AOR (95% CI)	Myanmar AOR (95% CI)	Philippines AOR (95% CI)
Women's asset ownership			
Does not own any asset (ref)	1	1	1
Joint ownership	1.41 (0.96, 2.08)	0.72 (0.47, 1.12)	1.04 (0.83, 1.29)
Sole ownership	1.68 (0.99, 2.86)	0.60* (0.35, 1.00)	0.88 (0.57, 1.34)
Women's household decision–making power			***
Low empowerment (ref)	1	1	1
High empowerment	0.81 (0.58, 1.14)	0.80 (0.55, 1.16)	0.58*** (0.47, 0.73)
Women's attitude towards wife–beating			***
Low empowerment (ref)	1	1	1
High empowerment	0.98 (0.77, 1.25)	0.92 (0.64, 1.33)	0.56*** (0.44, 0.72)

Table 4.21. continued.

Age			*
<25 (ref)	1	1	1
25–29	1.36 (0.85, 2.16)	1.00 (0.06, 1.98)	0.55** (0.39, 0.78)
30–34	1.60 (0.97, 2.64)	0.90 (0.44, 1.86)	0.59** (0.40, 0.86)
35–39	1.45 (0.83, 2.53)	0.68 (0.30, 1.53)	0.58** (0.39, 0.87)
40–44	1.94* (1.10, 3.40)	0.64 (0.26, 1.56)	0.72 (0.47, 1.11)
45–49	1.51 (0.82, 2.77)	0.91 (0.37, 2.25)	0.56* (0.35, 0.89)
Education	**		
No schooling/Primary (ref)	1	1	1
Secondary	0.57** (0.41, 0.78)	0.97 (0.59, 1.57)	1.09 (0.83, 1.43)
Tertiary	0.11 (0.01, 1.51)	0.97 (0.33, 2.86)	1.00 (0.68, 1.47)
Work status		*	***
Not working (ref)	1	1	1
Working	0.91 (0.70, 1.18)	1.55* (1.05, 2.30)	1.49*** (1.21, 1.83)
Exposure to mass media			
Not at all (ref)	1	1	1
Access one of the media less than once a week	1.39 (0.97, 2.00)	1.14 (0.65, 1.99)	0.75 (0.40, 1.39)
Access one of the media at least once a week	0.99 (0.71, 1.37)	0.82 (0.48, 1.41)	0.75 (0.42, 1.34)
Place of residence			
Urban (ref)	1	1	1
Rural	0.86 (0.54, 1.36)	0.90 (0.53, 1.53)	1.12 (0.90, 1.39)
Wealth index	*		***
Poorest (ref)	1	1	1
Poorer	1.35 (0.96, 1.91)	0.81 (0.50, 1.31)	1.11 (0.84, 1.47)
Middle	1.02 (0.70, 1.48)	0.71 (0.40, 1.27)	0.90 (0.66, 1.23)
Richer	1.20 (0.80, 1.79)	0.45* (0.23, 0.85)	0.46*** (0.31, 0.69)
Richest	0.65 (0.38, 1.11)	0.85 (0.30, 1.80)	0.42*** (0.27, 0.66)
Age at first marriage	*		
<18 (ref)	1	1	1
18–20	1.49** (1.12, 1.99)	1.24 (0.79, 1.95)	0.76* (0.59, 0.99)
21–23	1.13 (0.80, 1.62)	0.73 (0.40, 1.32)	0.93 (0.68, 1.26)
At least 24	1.09 (0.73, 1.65)	0.86 (0.46, 1.63)	1.00 (0.71, 1.42)

Table 4.21. continued.

Number of living children		*	
No children (ref)	1	1	1
1	1.76* (1.01, 3.08)	2.63* (1.20, 5.77)	1.37 (0.89, 2.13)
2	1.33 (0.75, 2.38)	1.97 (0.86, 4.51)	1.38 (0.89, 2.14)
3	1.55 (0.84, 2.88)	2.13 (0.86, 5.24)	1.25 (0.77, 2.02)
4	2.25* (1.17, 4.32)	4.59** (1.73, 12.15)	1.87* (1.12, 3.12)
At least 5	1.63 (0.82, 3.23)	3.60* (1.27, 10.22)	1.50 (0.88, 2.54)
Witnessed father–to–mother IPV	*	**	***
No (ref)	1	1	1
Yes	1.34* (1.02, 1.77)	1.91** (1.26, 2.88)	1.97*** (1.60, 2.43)
Husband's education level	*		
No schooling/Primary (ref)	1	1	1
Secondary	0.75* (0.57, 0.99)	1.13 (0.74, 1.74)	0.91 (0.71, 1.16)
Tertiary	0.38 (0.14, 1.02)	0.81 (0.25, 2.59)	0.83 (0.58, 1.18)
Having control behavior	***	***	***
Not at all (ref)	1	1	1
Yes	4.78*** (3.76, 6.09)	5.28*** (3.64, 7.64)	5.24*** (4.19, 6.56)
Frequency of getting drunk	***	***	***
Never (ref)	1	1	1
Sometimes	3.38* (1.28, 8.93)	0.72 (0.30, 1.73)	1.48 (0.74, 2.95)
Often	13.35*** (4.97, 35.82)	3.10* (1.28, 7.54)	6.35*** (3.09, 13.05)
Constant	0.01***	0.05***	0.06***

Notes:

(i) Wald test significance: ***p<0.001, **p<0.01, *p<0.05

(ii) AOR: adjusted odds ratio.

(iii) 95% CI: 95% confidence interval.

Table 4.22. Binary logistic regression of physical IPV (outcome group: experienced physical IPV; reference group: did not experience physical IPV).

Variables	Cambodia AOR (95% CI)	Myanmar AOR (95% CI)	Philippines AOR (95% CI)
Women's asset ownership			
Does not own any asset (ref)	1	1	1
Joint ownership	1.26 (0.75, 2.12)	0.71 (0.46, 1.09)	0.92 (0.71, 1.19)
Women's sole ownership	1.73 (0.88, 3.41)	0.79 (0.48, 1.29)	11.35 (0.88, 2.06)
Women's household decision–making power			**
Low empowerment (ref)	1	1	1
High empowerment	1.30 (0.80, 2.09)	0.88 (0.61, 1.26)	0.69** (0.53, 0.89)
Women's attitude towards wife–beating			**
Low empowerment (ref)	1	1	1
High empowerment	1.16 (0.84, 1.59)	0.78 (0.54, 1.12)	0.69** (0.53, 0.90)
Age		*	***
<25 (ref)	1	1	1
25–29	0.86 (0.46, 1.60)	0.84 (0.45, 1.58)	0.34*** (0.23, 0.49)
30–34	1.27 (0.67, 2.42)	1.14 (0.59, 2.20)	0.43*** (0.29, 0.65)
35–39	0.90 (0.44, 1.86)	0.56 (0.26, 1.22)	0.31*** (0.20, 0.49)
40–44	1.16 (0.55, 2.42)	0.36* (0.15, 0.87)	0.34*** (0.21, 0.55)
45–49	0.98 (0.44, 2.18)	0.37* (0.15, 0.94)	0.21*** (0.12, 0.36)
Education	**		
No schooling/Primary (ref)	1	1	1
Secondary	0.49** (0.30, 0.79)	1.40 (0.89, 2.20)	1.05 (0.78, 1.42)
Tertiary	0.08 (0.00, 7.23)	1.44 (0.49, 4.24)	0.98 (0.64, 1.51)
Work status	*		
Not working (ref)	1	1	1
Working	0.68* (0.49, 0.95)	1.43 (0.98, 2.09)	1.01 (0.80, 1.27)

Table 4.22. continued.

Exposure to mass media			
Not at all (ref)	1	1	1
Access one of the media less than once a week	0.86 (0.54, 1.35)	0.60 (0.35, 1.02)	0.61 (0.32, 1.17)
Access one of the media at least once a week	0.67 (0.44, 1.02)	0.71 (0.44, 1.15)	0.69 (0.38, 1.25)
Place of residence			
Urban (ref)	1	1	1
Rural	1.46 (0.75, 2.83)	1.43 (0.84, 2.43)	0.99 (0.78, 1.25)
Wealth index			**
Poorest (ref)	1	1	1
Poorer	0.87 (0.56, 1.34)	0.78 (0.49, 1.24)	0.88 (0.64, 1.20)
Middle	0.97 (0.60, 1.56)	0.66 (0.38, 1.14)	0.82 (0.58, 1.17)
Richer	0.99 (0.58, 1.69)	0.44* (0.24, 0.82)	0.97 (0.66, 1.44)
Richest	0.73 (0.35, 1.52)	0.47 (0.21, 1.01)	0.35*** (0.20, 0.61)
Age at first marriage			
<18 (ref)	1	1	1
18–20	1.23 (0.84, 1.80)	1.14 (0.74, 1.75)	1.02 (0.77, 1.34)
21–23	0.96 (0.60, 1.52)	0.84 (0.47, 1.48)	0.75 (0.52, 1.07)
At least 24	1.25 (0.74, 2.11)	1.02 (0.54, 1.92)	0.87 (0.57, 1.32)
Number of living children			
No children (ref)	1	1	1
1	1.15 (0.56, 2.36)	1.01 (0.54, 1.89)	0.78 (0.50, 1.23)
2	1.29 (0.62, 2.68)	1.00 (0.51, 1.96)	1.10 (0.70, 1.71)
3	0.99 (0.44, 2.19)	0.96 (0.45, 2.08)	1.13 (0.68, 1.87)
4	1.64 (0.71, 3.76)	1.33 (0.55, 3.24)	1.12 (0.64, 1.96)
At least 5	1.25 (0.52, 3.00)	2.82* (1.11, 7.16)	1.23 (0.69, 2.17)
Witnessed father–to–mother IPV	*	**	***
No (ref)	1	1	1
Yes	1.16* (1.08, 2.14)	1.96** (1.32, 2.91)	1.75*** (1.39, 2.21)

Table 4.22. continued.

Husband's education level			*
No schooling/Primary (ref)	1	1	1
Secondary	0.63* (0.43, 0.92)	1.04 (0.69, 1.58)	0.70* (0.54, 0.92)
Tertiary	0.56 (0.15, 2.14)	0.68 (0.20, 2.33)	0.63* (0.43, 0.93)
Having control behavior	***	***	***
Not at all (ref)	1	1	1
Yes	5.51*** (4.00, 7.58)	3.33*** (2.33, 4.75)	4.31*** (3.34, 5.56)
Frequency of getting drunk	***	***	***
Never (ref)	1	1	1
Sometimes	8.43 (0.70, 101.96)	0.80 (0.33, 1.95)	0.51* (0.30, 0.88)
Often	45.50** (3.75, 551.77)	2.06 (0.83, 5.08)	2.37** (1.33, 4.21)
Constant	0.00***	0.15**	0.34*

Notes:
(i) Wald test significance: ***p<0.001, **p<0.01, *p<0.05
(ii) AOR: adjusted odds ratio.
(iii) 95% CI: 95% confidence interval.

Table 4.23. Binary logistic regression of sexual IPV (outcome group: experienced sexual IPV; reference group: did not experience sexual IPV).

Variables	**Cambodia**	**Myanmar**	**Philippines**
	AOR (95% CI)	**AOR (95% CI)**	**AOR (95% CI)**
Women's asset ownership	*		*
Does not own any asset (ref)	1	1	1
Joint ownership	0.60 (0.31, 1.15)	0.62 (0.26, 1.49)	1.15 (0.82, 1.62)
Sole ownership	1.47 (0.65, 3.31)	0.45 (0.15, 1.34)	2.10** (1.25, 3.52)
Women's household decision–making power			
Low empowerment (ref)	1	1	1
High empowerment	0.73 (0.41, 1.30)	0.75 (0.35, 1.58)	0.75 (0.53, 1.05)

Table 4.23. continued.

Women's attitude towards wife–beating			*
Low empowerment (ref)	1	1	1
High empowerment	0.85 (0.54, 1.33)	0.64 (0.28, 1.40)	0.67* (0.47, 0.95)
Age			
<25 (ref)	1	1	1
25–29	1.77 (0.78, 4.02)	2.10 (0.49, 9.02)	0.68 (0.39, 1.19)
30–34	1.64 (0.66, 4.03)	1.74 (0.37, 8.90)	0.73 (0.40, 1.32)
35–39	2.06 (0.77, 5.53)	1.92 (0.35, 10.58)	0.85 (0.46, 1.57)
40–44	1.60 (0.56, 4.56)	2.74 (0.44, 16.98)	0.60 (0.31, 1.20)
45–49	2.88 (0.98, 8.45)	1.02 (0.13, 8.31)	0.43* (0.21, 0.91)
Education			
No schooling/Primary (ref)	1	1	1
Secondary	0.85 (0.46, 1.58)	0.96 (0.35, 2.63)	1.04 (0.70, 1.55)
Tertiary	1.32 (0.17, 10.07)	0.07 (0.00, 328.35)	1.18 (0.67, 2.09)
Work status			
Not working (ref)	1	1	1
Working	1.27 (0.77, 2.08)	1.91 (0.82, 4.49)	1.22 (0.89, 1.67)
Exposure to mass media			*
Not at all (ref)	1	1	1
Access one of the media less than once a week	0.70 (0.37, 1.32)	0.70 (0.24, 2.04)	0.42* (0.20, 0.90)
Access one of the media at least once a week	0.59 (0.33, 1.03)	0.76 (0.28, 2.07)	0.42* (0.21, 0.83)
Place of residence	*		
Urban (ref)	1	1	1
Rural	2.53* (1.08, 5.95)	0.52 (0.17, 1.57)	1.26 (0.92, 1.76)
Wealth index		*	**
Poorest (ref)	1	1	1
Poorer	0.77 (0.42, 1.42)	0.23** (0.08, 0.67)	1.06 (0.71, 1.60)
Middle	0.76 (0.37, 1.55)	0.56 (0.20, 1.57)	1.16 (0.74, 1.82)
Richer	1.30 (0.62, 2.68)	0.10* (0.02, 0.61)	0.41** (0.21, 0.80)
Richest	1.57 (0.64, 3.85)	0.15* (0.02, 0.94)	0.40* (0.19, 0.85)

Table 4.23. continued.

Age at first marriage			
<18 (ref)	1	1	1
18–20	1.26 (0.76, 2.09)	1.40 (0.55, 3.56)	1.00 (0.67, 1.49)
21–23	0.66 (0.34, 1.25)	1.30 (0.42, 4.12)	1.23 (0.77, 1.95)
At least 24	0.73 (0.34, 1.56)	0.93 (0.23, 3.71)	1.30 (0.76, 2.21)
Number of living children			
No children (ref)	1	1	1
1	0.60 (0.25, 1.48)	2.00 (0.46, 8.66)	0.88 (0.43, 1.81)
2	0.94 (0.39, 2.29)	1.15 (0.25, 5.42)	1.13 (0.56, 2.27)
3	0.51 (0.18, 1.43)	1.22 (0.23, 6.40)	1.57 (0.75, 3.29)
4	0.74 (0.25, 2.16)	2.01 (0.32, 12.55)	1.41 (0.64, 3.14)
At least 5	0.82 (0.27, 2.46)	1.38 (0.19, 9.93)	1.74 (0.78, 3.89)
Witnessed father–to–mother IPV			*
No (ref)	1	1	1
Yes	0.93 (0.56, 1.52)	2.10 (0.95, 4.67)	1.48* (1.08, 2.03)
Husband's education level			
No schooling/Primary (ref)	1	1	1
Secondary	0.72 (0.42, 1.23)	1.22 (0.50, 2.96)	0.80 (0.56, 1.15)
Tertiary	0.72 (0.18, 2.91)	-	0.63 (0.37, 1.09)
Having control behavior	***	***	***
Not at all (ref)	1	1	1
Yes	6.86*** (4.25, 11.06)	4.30*** (1.91, 9.67)	5.84*** (3.98, 8.57)
Frequency of getting drunk	***		***
Never (ref)	1	1	1
Sometimes	1.23 (0.24, 6.21)	3.80 (0.09, 153.87)	2.42 (0.54, 10.88)
Often	5.06* (1.00, 25.69)	6.46 (0.16, 262.97)	9.91** (2.17, 45.38)
Constant	0.01***	0.01*	0.01***

Notes:

(i) Wald test significance: ***p<0.001, **p<0.01, *p<0.05

(ii) AOR: adjusted odds ratio.

(iii) 95% CI: 95% confidence interval.

4.4.3 Summary

Briefly, emotional IPV was the most common type of abuse in Cambodia and the Philippines, while the prevalence of physical IPV was higher than other forms of abuse in Myanmar. Women's empowerment, socioeconomic status, intergenerational IPV, and husband's characteristics significantly influenced women's experience of IPV in all three selected countries. In the multivariate context, women's empowerment had greater influence on IPV in the Philippines, whereby empowered women were less likely to be abused by their spouses. Moreover, women's empowerment indicators have a relatively weaker influence on IPV in Cambodia. Women's empowerment has no influence on IPV in Myanmar. The husband's characteristics, particularly having controlling behaviors and the high frequency of getting drunk, had significant effects on women's experience of the three forms of IPV in the selected countries. In addition, women's experience of having witnessed father–to–mother IPV had significant effect on women's experience of IPV.

4.5 Women's empowerment and modern contraceptive use

This section discusses the relationship between women's empowerment and modern contraceptive use. Cross–tabulations and the Chi–square test or Fisher's exact test was used to examine the bivariate association of modern contraceptive use with women's empowerment and other independent variables. Binary logistic regression was applied to examine the net effect of women's empowerment indicators and socio–demographic factors on modern contraceptive use.

4.5.1 Contraceptive prevalence rate (CPR)

Table 4.24 displays the percentage distribution of married women by method type. The oral pill was the most popular modern method in Cambodia and the Philippines, while the injection was the most used modern method in Indonesia and Myanmar. About 18% of Cambodian women and 14% of Filipino women opted for the traditional contraceptive

method. Among the traditional methods, withdrawal was the popular choice where approximately 14% of Cambodian women and 10% of Filipino women used this method. The percentage of Indonesian women and Burmese women using traditional contraceptive methods was low, at 6.4% and 1.0%, respectively.

Table 4.24. Percentage distribution of married women by method type.

	Cambodia (%)	Indonesia (%)	Myanmar (%)	Philippines (%)
n	**11,668**	**34,467**	**7,870**	**15,445**
Modern method	**38.8**	**57.0**	**51.1**	**40.3**
Pill	17.7	12.1	13.8	20.9
IUD	4.4	4.7	2.8	3.5
Injections	9.1	29.0	27.6	5.0
Implants	2.2	4.7	0.9	1.1
Sterilization (Female and Male)	3.1	3.9	5.0	7.5
Condom (Female and Male)	2.1	2.5	1.0	1.7
Lactation amenorrhea (LAM)	0.1	0.1	0.0	0.5
Other modern method	0.1	0.0	0.0	0.1
Traditional method	**17.5**	**6.4**	**1.0**	**13.9**
Periodic abstinence	3.0	1.9	0.3	3.5
Withdrawal	14.4	4.2	0.6	10.3
Other traditional method	0.1	0.3	0.1	0.1
Not using	**43.7**	**36.4**	**47.8**	**45.7**

Table 4.25 presents the modern CPR by women's empowerment and socio–demographic characteristics. Women's asset ownership was positively associated with modern contraceptive use across the countries except for Myanmar. In general, women with joint asset ownership reported a higher use of modern contraception. In contrast, women's household decision–making power was positively associated with modern contraceptive use across the countries apart from Indonesia. Intriguingly, Cambodian women who condoned wife–beating reported higher use of modern contraception.

Women's age was significantly associated with modern contraceptive use in all countries. Women in their 30s reported the highest use of modern contraception across the age groups. Education was significantly associated with modern contraceptive use across the countries. Interestingly, women who had no schooling or studied up to the primary level reported a higher use of modern contraception than their higher educated counterparts in Cambodia, Indonesia, and the Philippines.

In Cambodia and Myanmar, working women had a higher use of modern contraception than non–working women, but the reverse was true in Indonesia. Exposure to mass media was positively associated with modern contraceptive use across the countries, whereby the factor had a slightly stronger impact in Indonesia and Myanmar. In comparison, modern CPR was higher among women who had heard of family planning via mass media across the countries except for Cambodia.

Place of residence and the wealth index were significantly associated with modern contraceptive use across the countries. Surprisingly, modern CPR was higher among rural women than their urban counterparts in Cambodia, Indonesia, and the Philippines. Furthermore, modern CPR was the lowest among those from the richest families in these three countries.

Women's age at first marriage was negatively associated with modern contraceptive use across the countries. The number of living children was significantly associated with modern contraceptive use across the countries where the effect was stronger in Indonesia. Women with two to three children reported the highest use of modern contraception across the number of children's categories.

Table 4.25. Modern CPR by selected variables.

Variables	Cambodia	Indonesia	Myanmar	Philippines
	%	%	%	%
Total	38.8	57.2	51.3	40.4
Women's asset ownership	***	***		***
Does not own	29.4	54.1	53.1	39.0
Sole ownership	37.6	57.3	50.3	36.9
Joint ownership	41.2	59.3	50.5	42.6
Women's household decision–making power	**		*	*
Low empowerment	35.4	57.6	49.4	38.1
High empowerment	39.4	57.0	52.3	40.7
Women's attitude towards wife–beating	*			
Low empowerment	39.6	57.3	51.0	41.4
High empowerment	37.8	57.1	51.6	40.2
Age	***	***	***	***
<25	31.6	53.4	58.0	41.2
25–29	43.8	55.7	57.9	43.2
30–34	47.5	61.0	57.1	46.9
35–39	47.4	63.9	61.8	44.7
40–44	38.4	60.8	46.6	40.0
45–49	18.6	44.6	22.3	24.4
Education	***	***	***	***
No schooling/Primary	39.8	60.4	47.4	40.2
Secondary	37.6	57.8	58.0	43.9
Tertiary	26.4	45.5	57.2	35.2
Work status	***	**	*	***
Not working	32.1	58.0	49.8	40.5
Working	41.5	56.5	52.1	40.2
Exposure to mass media	*	***	***	***
Not at all	40.2	44.3	39.4	32.1
Access one of the media less than once a week	40.7	53.0	48.0	39.4
Access one of the media at least once a week	38.0	58.1	55.1	40.8
Heard family planning on media in the past few months		*	***	*
No	39.8	56.5	48.6	39.0
Yes	38.1	57.7	56.5	41.0
Place of residence	***	***	***	***
Urban	32.8	55.0	57.3	38.1
Rural	39.9	59.2	49.1	42.2

Table 4.25. continued.

Wealth index	***	***	***	***
Poorest	39.5	56.3	46.2	43.8
Poorer	42.4	61.4	50.3	46.2
Middle	38.3	59.6	49.8	41.1
Richer	39.2	56.3	54.7	36.9
Richest	34.6	52.3	55.9	33.4
Age at first marriage	***	***	***	***
<18	44.1	62.5	53.3	47.0
18–20	41.2	62.2	52.0	44.5
21–23	36.4	55.5	53.7	39.4
At least 24	26.9	45.1	46.1	31.4
Number of living children	***	***	***	***
No children	4.3	4.3	29.9	2.6
1	36.9	50.6	56.1	31.8
2	46.6	68.0	60.2	46.1
3	47.0	66.4	56.2	51.6
4	42.6	64.5	49.4	46.1
At least 5	34.6	48.5	31.2	43.8

Notes:
(i) Missing values are excluded from the calculations.
(ii) Chi-square/Fisher exact test significance: ***p<0.001, **p<0.01, *p<0.05.

4.5.2 Binary logistic regression analysis

The following discussion highlights the results that are statistically significant at α = 0.05. Table 4.26 presents the binary logistic regression of modern contraceptive use. Women's asset ownership was positively associated with modern contraceptive use in Cambodia and the Philippines. Filipino women who were more empowered in household decision–making were more likely to opt for the modern contraceptive method than their less empowered counterparts. Indonesian women that did not condone wife–beating had higher odds of using the modern contraceptive method.

The likelihood of using modern contraception decreased with women's age across the four countries, with the age effect being stronger in Myanmar. Moreover, the odds of using a modern contraceptive method was higher among secondary educated women than those with primary or no education in Myanmar and the Philippines, but the reverse was true in Indonesia. Working women were more likely to opt for a modern contraceptive method across the four countries where the effect was stronger in Cambodia.

Women who had access to mass media were more likely to use modern contraception than those who had no access to mass media across the countries except for Cambodia. Women who had heard of family planning via mass media were also more likely to use a modern contraceptive method in Indonesia and Myanmar. Rural women were more likely to use the modern contraceptive method in Indonesia but less likely to opt for the modern contraceptive method in Myanmar. The likelihood of using modern contraception increased with the wealth of the families in the four countries.

Cambodian women and Indonesian women who married after the age of 23 were less likely to use a modern contraceptive method than those who married before 18 years old. Modern contraceptive use was positively associated with the number of children across the four countries.

Table 4.26. Binary logistic regression of modern contraceptive use (outcome group: using a modern contraceptive method; reference group: not using a modern contraceptive method).

Variables	Cambodia	Indonesia	Myanmar	Philippines
	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)	AOR (95% CI)
Women's asset ownership	**			*
Does not own (ref)	1	1	1	1
Sole ownership	1.24* (1.03, 1.49)	0.99 (0.92, 1.06)	1.13 (0.98, 1.31)	0.92 (0.80, 1.06)
Joint ownership	1.24*** (1.11, 1.40)	1.02 (0.96, 1.08)	1.11 (0.98, 1.25)	1.10* (1.01, 1.19)
Women's household decision–making power				**
Low empowerment (ref)	1	1	1	1
High empowerment	1.06 (0.94, 1.20)	0.98 (0.94, 1.03)	1.10 (0.99, 1.22)	1.16*** (1.05, 1.28)

Table 4.26. continued.

Women's attitude towards wife–beating		*		
Low empowerment (ref)	1	1	1	1
High empowerment	0.95 (0.88, 1.03)	1.06* (1.01, 1.11)	1.01 (0.91, 1.11)	1.08 (0.97, 1.20)
Age	***	***	***	***
<25 (ref)	1	1	1	1
25–29	1.01 (0.87, 1.17)	0.51*** (0.46, 0.57)	0.51*** (0.42, 0.62)	0.67*** (0.58, 0.76)
30–34	0.91 (0.77, 1.06)	0.41*** (0.36, 0.45)	0.40*** (0.33, 0.49)	0.59*** (0.51, 0.69)
35–39	0.79* (0.66, 0.95)	0.37*** (0.33, 0.41)	0.43*** (0.35, 0.54)	0.47*** (0.40, 0.55)
40–44	0.52*** (0.43, 0.62)	0.31*** (0.28, 0.35)	0.21*** (0.17, 0.27)	0.36*** (0.30, 0.42)
45–49	0.19*** (0.16, 0.24)	0.15*** (0.14, 0.17)	0.07*** (0.05, 0.09)	0.16*** (0.14, 0.19)
Education		***	***	***
No schooling/Primary (ref)	1	1	1	1
Secondary	1.07 (0.97, 1.19)	0.88*** (0.83, 0.94)	1.29*** (1.14, 1.46)	1.21*** (1.09, 1.34)
Tertiary	0.86 (0.64, 1.16)	0.69*** (0.63, 0.76)	1.18 (0.95, 1.47)	1.09 (0.96, 1.24)
Work status	***	***	***	***
Not working (ref)	1	1	1	1
Working	1.58*** (1.44, 1.73)	1.10*** (1.05, 1.15)	1.30*** (1.17, 1.44)	1.23*** (1.14, 1.33)
Exposure to mass media		***	***	***
Not at all (ref)	1	1	1	1
Access one of the media less than once a week	1.11 (0.96, 1.27)	1.59*** (1.36, 1.86)	1.35*** (1.14, 1.59)	1.44** (1.16, 1.79)
Access one of the media at least once a week	1.06 (0.94, 1.20)	1.90*** (1.64, 2.19)	1.66*** (1.42, 1.93)	1.64*** (1.34, 2.01)
Heard family planning on media in the past few months		*	**	
No (ref)	1	1	1	1
Yes	0.96 (0.88, 1.04)	1.06* (1.01, 1.11)	1.20** (1.07, 1.34)	1.05 (0.97, 1.14)

Table 4.26. continued.

Place of residence		***	**	
Urban (ref)	1	1	1	1
Rural	1.15 (0.99, 1.32)	1.12*** (1.06, 1.18)	0.80** (0.70, 0.92)	1.04 (0.96, 1.12)
Wealth index	*	***	**	**
Poorest (ref)	1	1	1	1
Poorer	1.19** (1.05, 1.35)	1.22*** (1.13, 1.32)	1.18* (1.02, 1.38)	1.20** (1.07, 1.34)
Middle	1.04 (0.91, 1.19)	1.17*** (1.08, 1.26)	1.275** (1.09, 1.49)	1.04 (0.92, 1.17)
Richer	1.12 (0.98, 1.29)	1.08 (1.00, 1.18)	1.36*** (1.14, 1.60)	0.98 (0.86, 1.11)
Richest	0.98 (0.83, 1.15)	1.03 (0.94, 1.13)	1.36** (1.11, 1.66)	0.94 (0.81, 1.08)
Age at first marriage	***	***		
<18 (ref)	1	1	1	1
18–20	0.92 (0.84, 1.02)	1.03 (0.97, 1.10)	1.00 (0.88, 1.14)	0.99 (0.89, 1.09)
21–23	0.84** (0.75, 0.94)	0.93 (0.87, 1.00)	1.08 (0.93, 1.26)	0.96 (0.86, 1.08)
At least 24	0.68*** (0.59, 0.79)	0.89** (0.82, 0.96)	1.09 (0.92, 1.28)	0.94 (0.83, 1.06)
Number of living children	***	***	***	***
No children (ref)	1	1	1	1
1	12.84*** (9.50, 17.35)	28.16*** (23.14, 34.26)	4.06*** (3.37, 4.88)	18.14*** (12.57, 26.18)
2	20.19*** (14.82, 27.51)	85.48*** (69.82, 104.66)	7.42*** (6.02, 9.14)	42.480*** (29.40, 61.38)
3	24.22*** (17.55, 33.44)	91.17*** (74.05, 112.25)	8.08*** (6.41, 10.18)	62.75*** (43.19, 91.16)
4	23.75*** (16.98, 33.21)	89.23*** (71.63, 111.15)	7.88*** (6.03, 10.29)	55.13*** (37.62, 80.79)
At least 5	21.83*** (15.44, 30.86)	51.34*** (40.81, 64.59)	5.15*** (3.87, 6.86)	61.48*** (41.83, 90.38)
Constant	0.03***	0.04***	0.25***	0.02***

Notes:

(i) Wald test significance: ***p<0.001, **p<0.01, *p<0.05

(ii) AOR: adjusted odds ratio.

(iii) 95% CI: 95% confidence interval.

4.5.3 Summary

In general, modern CPR was the highest in Indonesia, followed by Myanmar. A substantial proportion of Cambodian women and Filipino women still opted for the traditional contraceptive method. Overall, women's empowerment, demographic, and socioeconomic status, as well as the exposure to family planning via mass media significantly influenced modern contraceptive use across the countries. In the multivariate context, women's empowerment had a greater influence on modern contraceptive use in the Philippines, whereby empowered women were more likely to use modern contraception. In addition, women's asset ownership was positively associated with modern contraceptive use in Cambodia. Indonesian women who disagreed with wife–beating were more likely to use a modern contraceptive method.

CHAPTER 5: DISCUSSION AND CONCLUSION

This chapter begins with the summary of findings. The key findings are discussed with consideration given to the existing literature to achieve the objectives of this research. This discussion is followed by the policy implications, recommendations, and limitations of the present study.

5.1 Summary of study

This section summarizes the findings of this study. This study aims to examine the internal consistencies of the measures of women's empowerment in Southeast Asian countries. Besides that, the study also aims to examine the level of women's empowerment and its associated factors, as well as to examine the association of women's empowerment with IPV and modern contraceptive use across Southeast Asian countries.

The TGP concept and Kabeer's proposed dimensions of empowerment were adapted in this study to construct the measures of women's empowerment. EFA, binary, and multinomial logistic regressions were implemented in accordance with the research objectives using the DHS dataset.

EFA was conducted using the selected ten items in constructing the measures of women's empowerment. The measures of women's empowerment constructed were women's household decision–making power (consisting of three indicators), women's attitude towards wife–beating (consisting of five indicators) and women's asset ownership (consisting of two indicators). The model adequacy analysis showed that the model constructed in the four countries were adequate. Consequently, the reliability test also indicated that the subscale of the measures had an adequate level of reliability.

Binary and multinomial logistic regressions were conducted to identify the factors influencing women's empowerment. Overall, it was deduced that women's demographic and socioeconomic status significantly influenced women's empowerment across the countries. The age of women was imperative in influencing women's empowerment. In addition, the place of residence was a significant predictor of women's empowerment except for the household decision–making power variable in Indonesia. Wealth index was significant in affecting women's empowerment in all countries under study, except for women's attitude towards wife-beating variable in Myanmar. The number of living children had a considerable effect on women's empowerment in Cambodia, Indonesia, and Myanmar. In addition, women's education, work status and exposure to mass media were significant in influencing women's empowerment in Indonesia. The same was found for the variable of work status in Myanmar.

Binary logistic regression was conducted to examine the relationship between women's empowerment and the three forms of IPV. Indonesia was excluded from the analysis as the IDHS 2017 did not cover any questions related to IPV. In general, women's empowerment significantly influenced women's experience of IPV across the three remaining selected countries in the bivariate context. In the multivariate context, it was found that women's empowerment was negatively associated with IPV in the Philippines. The association was weaker in Cambodia and insignificant in Myanmar. Intergenerational IPV and the husband's characteristics, particularly having controlling behavior and the frequency of getting drunk, had significant effects on women's experience of the three forms of IPV across the three selected countries.

This study also examined the relationship between women's empowerment and modern contraceptive use. In the bivariate analysis, women's empowerment was significantly associated with modern contraceptive use across the countries. However, the effect of women's empowerment on modern contraceptive use in the multivariate context

varied across the countries. Women's asset ownership was significant in affecting modern contraceptive use in Cambodia and the Philippines. Furthermore, it was deduced that women's household decision–making power was significant in affecting modern contraceptive use in the Philippines. In Indonesia, women's attitude towards wife–beating was significant in affecting modern contraceptive use. Overall, women's demographic and socioeconomic status had significant effects on modern contraceptive use across the four countries.

5.2 Discussion on key research findings

This section is divided into four subsections based on the research objectives of the present study. The discussion of this study is based on the linkage between the research objectives and the research findings in comparison with previous studies.

5.2.1 Discussion: Measures of women's empowerment

This section discusses the measures of women's empowerment constructed in this study. Ten items were selected from the DHS dataset following the concept of TGP and the proposed framework of women's empowerment by Kabeer (1999). Malhotra et al. (2002) mentioned that the agency component is the essence of women's empowerment. Thus, the items of empowerment selected in this study focused on the dimension of agency in constructing the measures of women's empowerment.

Past studies have identified women's household decision–making power (Kishor & Subaiya, 2005; Lamidi, 2016; Malhotra et al., 2002; Sanawar et al., 2019; Thandar et al., 2019), women's attitude towards wife–beating (Abreha et al., 2020; Blackstone, 2016; Nakamura et al., 2018; Wekwete et al., 2014), and women's asset ownership (Do, 2019; Pereira et al., 2017; Peterman et al., 2017; Tadesse et al., 2013) as the measures of women's empowerment. Women's household decision–making power and asset ownership were examples of instrumental agency, while women's attitude towards wife–

beating was an example of intrinsic agency. The three identified measures in this study were consistent with the concept of TGP as these measures could be classified into one of the three component structures of TGP, particularly, sexual division of labor (women's asset ownership), the structure of power (women's household decision–making power) and the structure of cathexis (women's attitude towards wife–beating).

The present study applied EFA to construct the measures of women's empowerment using the DHS dataset. The finding was consistent with the past studies that performed similar analysis using DHS dataset (Abreha et al., 2020; Htun et al., 2021; Some et al., 2021; Tadesse et al., 2013). This study's internal consistency of the measures of women's empowerment was relatively lower than that in the past studies conducted in Ethiopia, which ranged from 0.71 to 0.88 (Abreha et al., 2020), and in Burkina Faso, which ranged from 0.65 to 0.88 (Some et al., 2021). Meanwhile, a study conducted in Myanmar showed that the KMO measure sampling adequacy was higher (0.73) compared to this finding (Htun et al., 2021). This study's relatively lower model adequacy and reliability may be explained by the different items included in the analysis. Nevertheless, model adequacy and reliability test results indicated that the three measures of women's empowerment constructed in this study using the DHS dataset were reliable.

5.2.2 Discussion: Women's empowerment and its associated factors

It is evident that women's empowerment depends on a multitude of factors. A better understanding of these factors is essential for the formulation and implementation of strategies and policies to improve the status of women. This section discusses factors relevant to the empowerment of women in Southeast Asian countries.

Women's age was positively associated with women's empowerment across the selected Southeast Asian countries. Older women had a higher level of empowerment compared to younger women aged below 25 years. This finding was consistent with past studies (Acharya et al., 2010; Ali Sheikh et al., 2016; Brajesh & Shekhar, 2015; Musonera

& Heshmati, 2017; Pambè et al., 2014; Samari & Pebley, 2015). The positive association between women's empowerment and age may be attributed to the heightened role of women within the family as they aged (Akram, 2017). Under the patriarchal system across Southeast Asian countries, it is common that newly married women have limited autonomy in the family as they are responsible for performing household chores under the supervision of their mother–in–laws (Abbas et al., 2021; Acharya et al., 2010; Akram, 2017). In addition, older women had gained their spouses' trust over time, which led them to have a more influential voice and increased power in the family (Abbas et al., 2021; Acharya et al., 2010).

Education significantly influenced all women's empowerment measures in Indonesia. The result was consistent with findings from past studies (Cinar & Kose, 2018; Ng & Tey, 2018; Tabassum et al., 2019). Education enhances women's self–confidence, which could stimulate the level of empowerment (Akram, 2017). In addition, education exposes women to new ideas and alternative gender norms and behavior that could alter long–standing gender roles and status (Gurmu & Endale, 2017; Musonera & Heshmati, 2017). Thus, this study proves that women with higher education would not condone wife–beating. It was also found that women with higher education were more likely to own assets solely and/or jointly with their spouses across the countries except for Myanmar. This was consistent with a previous study conducted in Pakistan, where women who received secondary education had higher odds of owning assets than those without schooling (Abbas et al., 2021). In the contrary, findings showed that Burmese women that received tertiary education had lower odds of solely owning assets. This might be influenced by the existing sociocultural belief that prioritizes men over women in inheritance (Abbas et al., 2021).

Moreover, findings proved that working women had a higher level of empowerment in household decision–making across the countries, and they were more likely to own the assets (solely or jointly). The result was consistent with a handful of past studies conducted in Asia (Abbas et al., 2021; Rammohan & Johar, 2009; Tabassum et al., 2019; Thandar et al., 2019). Women with paid jobs are more expressive with their opinions and have power and position in the family as they contribute financially (Ali Sheikh et al., 2016; Brajesh & Shekhar, 2015; Pambè et al., 2014). Thus, this makes working women more empowered than their non–working counterparts. However, working women in Indonesia and Myanmar were more prone to accepting justifications of wife–beating compared to their non–working counterparts. This was consistent with past studies done by Cinar and Kose (2018) and Sanawar et al. (2019). Cinar and Kose (2018) found that working women were still responsible for performing household duties that resulted in exploitative work conditions and proved to be burdensome to women instead of empowering them.

Women's exposure to mass media was significant in affecting women's empowerment across the countries. Contrary to past studies that found women who were exposed to mass media were more empowered (Akram, 2017; Brajesh & Shekhar, 2015; Dasgupta, 2019; Musonera & Heshmati, 2017; Tabassum et al., 2019), there were mixed results in this study. Women who were exposed to mass media had higher levels of empowerment in household decision–making in Cambodia and Indonesia. Mass media is a source of learning that raises awareness of modern perceptions and ideas on women's role, which directly empowers them (Ali Sheikh et al., 2016; Musonera & Heshmati, 2017). On the contrary, Indonesian women that had exposure to mass media were more prone to accepting wife–beating. This could be explained by the fact that domestic violence has not received public and media attention in the country (Lawoko et al., 2007); thus, women might still accept domestic violence although they have been exposed to mass media. In

addition, Indonesian women that had exposure to mass media had lower odds of owning any assets, which might be due to the Islamic law of inheritance (Sharia) that prioritizes men over women in Muslim countries (Abbas et al., 2021).

Rural women were more prone to accepting the justification of wife–beating across the countries. Additionally, Burmese women residing in rural areas had a lower level of household decision–making power. This was consistent with past studies (Abbas et al., 2021; Acharya et al., 2010; Gurmu & Endale, 2017; Kazembe, 2020; Ng & Tey, 2018) that found that urban women were more empowered compared to their rural counterparts. Urban women had more access to economic opportunities and workforce participation that made them financially independent and obtain higher socioeconomic status (Ali Sheikh et al., 2016; Brajesh & Shekhar, 2015). In addition, women residing in urban areas had better access to education and health facilities and infrastructures (Akram, 2017), making them more empowered in the household. Interestingly, rural women had higher odds of owning assets jointly or solely compared to urban women. One possible explanation is that a majority of the rural women in this study were involved in the agriculture sector, whereby the government had implemented efforts to increase rural women's land ownership under the SDGs (SDG Goal 5.a) (UN DESA, 2015). Another possibility is that the percentage of urban women who were not working were higher than rural women in this study, explaining the higher asset ownership among rural women.

The effect of wealth status on women's empowerment varied across the dimensions of women's empowerment. Indonesian women from wealthier families showed a higher level of empowerment from the aspects of asset ownership and not accepting wife–beating. According to past studies (Abbas et al., 2021; Akram, 2017; Lamidi, 2016; Musonera & Heshmati, 2017; Pambè et al., 2014), women from wealthier families had higher socioeconomic status (e.g. higher education and better job opportunity) that enabled them to be more aware of their rights and financially independent (Akram, 2017).

Women from wealthier families in Cambodia and Indonesia had lower levels of empowerment in household decision–making. Such a phenomenon can be explained by the influence of sociocultural norms embedded in society for generations. Women from wealthier families had lower levels of empowerment if women did not contribute to the family financially (Kazembe, 2020). In addition, the traditional gender roles of women were deeply rooted in society, which resulted in women being valued by their contribution to the family and household (Rustagi, 2016). Such sociocultural norms fueled the families' restriction of women being independent and thus, positioned them in inferior status (Banu, 2016; Rustagi, 2016).

This study found that women who married at an older age (18 years old and above) had a lower level of empowerment from the aspect of asset ownership across the countries. Such phenomenon may be due to the patriarchal structure whereby men are recognized as the main "breadwinner" who generally be issued the land and other assets entitlements (Pradipta, 2020). In addition, Burmese women who married later in life were less empowered in decision–making. This finding was inconsistent with the past study by Musonera and Heshmati (2017), where women who married later were more empowered. This might be explained by the sociocultural settings which dictate that women must marry at an early age in order to save the family's dignity (Imron et al., 2020). Women who married at an older age were treated as taboo or attracted the stigma of being a spinster (Sudarso et al., 2020). However, these past studies focused on the rural context, which could explain the situation in Myanmar, as the majority of women interviewed were from rural areas. Therefore, women that married later might be empowered depending on the sociocultural settings in each country. Hence, future studies should examine women's empowerment from the perspective of society's cultural norms in each Southeast Asian country.

The result was mixed for women's perception on wife–beating. Women who married at the age of 18 and above had a higher level of empowerment in not accepting wife–beating in Cambodia, Indonesia and the Philippines. The result was consistent with a past study done in India where women who married early were more likely to consider wife–beating justified as they grew up in families with strong traditional cultures and they had experiences that continued to enforce the concept of traditional gender roles throughout their lives (Santhya et al., 2010).

The number of living children was positively associated with women's empowerment, namely household decision–making power and asset ownership. This was consistent with past studies (Abbas et al., 2021; Acharya et al., 2010; Akram, 2017; Musonera & Heshmati, 2017). Asian women are still valued by their contribution towards the family and childbearing, which was a way for them to obtain respect and involvement in the family (Musonera & Heshmati, 2017; Rustagi, 2016). Briefly, improving women's living standards and socioeconomic status would raise women's awareness of their rights that society had neglected. This is an important approach in the attempt to uplift women's status in society.

5.2.3 Discussion: Association between women's empowerment and IPV

This section discusses the association between women's empowerment and IPV. Indonesia was excluded from this analysis as IDHS 2017 did not cover the domestic violence module.

Women's empowerment has dissimilar effects on IPV across the countries. In the multivariate context, women's asset ownership was significantly associated with sexual IPV in Cambodia and the Philippines. This finding was consistent with past studies done across low–middle income countries (LMICs), whereby women's asset ownership was found to be statistically significant in influencing IPV (Pereira et al., 2017; Peterman et al., 2017). In the Philippines, the finding was consistent with the past study by Ward and

Harlow (2021), where women that owned assets had higher odds of experiencing IPV. Women's asset ownership threatens men's masculinity resulting in the use of violence in order to fan his ego and protect his pride (Murshid, 2017).

Consistent with the past study by Gautam and Jeong (2019), Filipino women with greater empowerment in household decision–making (mostly joint decision-making with their husbands) had lower odds of experiencing emotional and physical IPV. A past study conducted in the Philippines discovered that women who made joint decisions with their spouses had a lower risk of experiencing IPV compared to women or husbands who made decisions alone (Hindin & Adair, 2002).

The factors that strengthen women's empowerment, such as women's education, employment, and exposure to mass media, appeared relatively important in influencing IPV. Most past studies identified that higher educated women had lower odds of experiencing IPV (Abramsky et al., 2011; Dalal, 2011; Lawoko et al., 2007; Ogum Alangea et al., 2018; Sanawar et al., 2019). The present study also produced comparable results. Cambodian women that studied up to the secondary level had lower odds of experiencing emotional and physical IPV. Women with limited access to resources such as education was a reflection of poverty which was identified as one of the factors triggering the occurrence of IPV (Dalal, 2011). Educated women were exposed to information that help them deal with conflict in a relationship better and avoid situations of abuse (Ogum Alangea et al., 2018). In addition, higher educated women would have a better–paid job opportunities which provide them with the authority to voice opinions and be economically independent in the family. Thus, uplifting their status and gaining respect from their partners (Ogum Alangea et al., 2018).

Past studies showed that working women had higher odds of experiencing IPV (Dalal, 2011; Lawoko et al., 2007; Rahman et al., 2011; Stöckl et al., 2021). This present study identified comparable results whereby working women were more vulnerable in experiencing emotional IPV in Myanmar and the Philippines. This was due to the influence of discriminatory social norms and expectations whereby women should be dependent on men, and men should be the main "breadwinner" of the family while women are expected to be responsible for reproductive aspects of family life (Dalal, 2011; Fulu, Warner, et al., 2013). Female employment was treated as an action that challenged the family hierarchy and authority which sometimes led to men using violence as a way of reasserting their dominant position in the household. According to the Social Institutions and Gender Index (SIGI) 2021, about 22% of the population in Southeast Asia have negative attitudes towards working women as it is seen as unacceptable for women to have a paid job (Organisation for Economic Co–operation and Development, 2021). Such negative perception could become a trigger for violence against women.

However, Cambodian working women were found to be less likely to experience physical IPV in this study. This can be explained as working women had their own source of income and were economically independent from their partners. A past study in Turkey found that empowering women economically (employed and had personal income) reduced the risk of experiencing IPV (Dildar, 2021).

Meanwhile, Filipino women who were exposed to mass media were less likely to experience sexual IPV. This findings was consistent with past studies (Oyediran & Isiugo-Abanihe, 2005; Uthman et al., 2009), where women with mass media exposure were less likely to accept and support violence. Mass media acted as a bridge for women to the world and exposed them to modern ideas and perceptions of gender norms (Ali Sheikh et al., 2016; Musonera & Heshmati, 2017). Thus, women became more aware of their rights and did not condone wife–beating.

5.2.4 Discussion: Association between women's empowerment and modern contraceptive use

Modern contraceptive use was positively associated with women's empowerment, but its effect varied across the countries. Like past studies (Do, 2019; O'Regan & Thompson, 2017), women's asset ownership was positively associated with modern contraceptive use in Cambodia and the Philippines. The ownership over assets indicated that women had authority in the household, providing them with greater rights to make choices, including when it came to reproductive matters (O'Regan & Thompson, 2017).

This study found that women's household decision–making power was positively associated with modern contraceptive use in the Philippines, which was consistent with many past studies (Abbasi & Alimandegari, 2010; Adebowale et al., 2016; Do & Soelaeman, 2017; Lai & Tey, 2020; Palamuleni & Adebowale, 2014; Tadesse et al., 2013; Yaya et al., 2018). In addition, women's attitudes against wife–beating were positively associated with modern contraceptive use in Indonesia.

Disempowered women seldom communicate openly and freely with their spouses about household matters, including their own reproductive health and rights (Patrikar et al., 2014). A study in Burkina Faso found that spousal communication had a significant impact on contraceptive use, whereby spouses that communicate about family planning were more likely to practice contraception than those who did not communicate (Klomegah, 2006). This indicated that women with greater empowerment were independent and had enhanced rights in decision–making to improve their health status (Palamuleni & Adebowale, 2014).

In addition, women with greater empowerment in education and employment as well as those who had mass media exposure were more likely to use a modern contraceptive method. Women's education was positively associated with modern contraceptive use in Myanmar and the Philippines, and this was consistent with the findings of past studies

(Chavoshi et al., 2004; Islam, 2017; Lai & Tey, 2020; Larsson & Stanfors, 2014; Lasong et al., 2020; Yaya et al., 2018). The increased likelihood of using modern contraceptive methods among highly educated women was due to better knowledge regarding family planning that created more favorable attitudes towards the usage of modern contraceptive methods (Biswas et al., 2022; Lasong et al., 2020; Nkoka et al., 2021; Samarakoon & Parinduri, 2015). Surprisingly, a negative association was found between women's education and modern contraceptive use in Indonesia. The finding was consistent with a past study done in Indonesia (Gayatri & Utomo, 2019). Better educated Indonesian women opted for the traditional method instead of the modern method due to fewer or no negative side effects and no risk of subfecundity (Gayatri & Utomo, 2019). The IDHS 2017 report showed that 11.5% of the tertiary educated Indonesian women used a traditional contraceptive method compared to 3.9% among those with primary or no education. Additionally, a recent study in Nigeria found that if men had strong negative attitudinal norms towards contraception, women's education is insignificant in improving contraceptive uptake (Mejía-Guevara et al., 2021).

Working women were more likely to use a modern contraceptive method across the countries, and this was consistent with the results of past studies (Islam, 2017; Lai & Tey, 2020; Maqsood et al., 2015; Singh et al., 2019; Tadesse et al., 2013). Working women contributed and supported the family financially. Therefore, they have higher bargaining powers in getting the rights of utilizing and practicing contraception (Maqsood et al., 2015). In addition, a study in Nigeria discovered that working women had a high tendency of using contraception, despite the strong negative perceptions of contraceptive use from men (Mejía-Guevara et al., 2021). This study also found that exposure to mass media was positively associated with modern contraceptive use, except in Cambodia. This was consistent with past studies done across selected Asian countries (Das et al., 2021; Ghosh et al., 2021; Islam, 2017; Singh et al., 2019). Mass media was a vital source of family

planning knowledge and increased the awareness of women on the matter (Das et al., 2021). A higher level of family planning knowledge among women is essential to increase the utilization of modern contraception.

5.3 Policy implications and recommendations

Based on the findings of the present study, several policy implications and recommendations can be drawn. Women's socioeconomic status greatly impacts women's empowerment across Southeast Asian countries. The government of each country and ASEAN have developed several policies in line with the SDGs in promoting women's empowerment and gender equality. These policies prioritized the improvement of the quality of livelihood (including education and employment) among women, which is in line with the SDGs' 5.4 target to recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate. It is also in line with target 5.a, which is to undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources, following national laws. The policies emphasize efforts in increasing women's accessibility to reproductive healthcare services, which is in line with SDGs' target 5.6 that ensures universal access to sexual and reproductive health and reproductive rights as agreed following the PoA of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences.

However, there is definite room for improvement to empower women further in these countries. The present study has discovered that education is one of the indicators that greatly influence women's empowerment, IPV and modern contraceptive use. Although universal primary education has been achieved, secondary and tertiary enrolment rates

are not up to par. This study found that the enrolment rates of Cambodian women at the secondary and tertiary levels remain unsatisfactory due to the negative gender stereotypes that prevent women from furthering their studies (Ministry of Women's Affairs, 2020b). In addition, this study found that the proportion of Cambodian and Filipino women using the traditional family planning method remains high due to religious beliefs and the lack of information on family planning. These indicate that women are still facing gender discrimination and that they have limited access to education and reproductive healthcare services. The government could allocate more funds to public education institutions in efforts to provide free or subsidized education for the people. In addition, the government could make primary and secondary schooling mandatory for all children. Moreover, Cambodian women with higher education attainment are less likely to become IPV victims. Hence, it is vital to provide quality education to women so that their quality of life could improve, which could enable them to gain power and authority and create awareness on their sexual and reproductive rights.

The government should embed the concept of gender equality through formal and informal curricula. The gender role and stereotypes in society often place women in a subordinate position, and their contribution towards the development and economy of countries are often neglected. Therefore, promoting gender equality among the younger generation through education creates awareness that there are no gender specific roles.

Sex education should also be introduced through formal curricula in schools. The government should break the stigma of sexual and reproductive health as a controversial topic and provide an organized sex education program in the school. Additionally, educating the reproductive health advocates and the public on gender, human rights, and the scientific aspects of reproductive health to avoid the denial of artificial contraception based on religious beliefs is required. The myths regarding modern contraception and the lack of knowledge on family planning are some of the obstacles preventing women from

choosing modern contraception. The present study revealed that highly educated Indonesian women were less likely to use modern contraception, probably due to the myths of negative side effects of modern contraceptive methods. It is therefore pivotal that women be exposed to proper family planning knowledge from an early age. Clear and detailed information regarding modern contraception should be provided to debunk the myths on contraception and educate women on the proper way of using modern contraceptives.

Employed women had a higher tendency of using modern contraception in all four countries. Increasing women's employability is indispensable as it could improve the quality of livelihood for women. Women that are working have a stable source of income that enables them to be economically independent and less dependent on their partner. They therefore are able to contribute to the household financially and get involved in the decision–making process. The government should provide more employment opportunities and training for women to encourage their involvement in the workforce. The government could also encourage women to become entrepreneurs by providing them with financial help and training.

While female employment is beneficial towards improving women's sexual and reproductive health, it must be noted that female labor force participation in the Philippines remained low, although the government had provided employment opportunities for women and encouraged them to become entrepreneurs. Hence, there is still a long way to go on the path in achieving gender equality in the country. Providing childcare facilities at the workplace, better compensations and benefits for women related to their health and maternity are some of the strategies that could increase female labor force participation.

Exposure to mass media greatly influences women's empowerment, IPV and modern contraceptive use. Social media is a useful tool in eliminating gender stereotypes and creating awareness among women on sexual and reproductive health and rights. Therefore, the government should take advantage and fully utilize social media in efforts to promote women's empowerment and gender equality. The information on family planning, gender equality and IPV could be spread via social media. This could attract the public's attention on IPV, family planning and gender equality. Unfortunately, only the Cambodian government utilizes social media to promote and reduce the occurrence of IPV under the NAPVAW 2019–2023. The other three countries should emulate this example and utilize mass media and social media to disseminate information on topics such as feminism, violence against women, and family planning that could expand women's views and expose them to modern gender ideology. Thus, it could create awareness among the public and assist in eliminating gender stereotypes embedded in society due to sociocultural norms and beliefs.

5.4 Contributions of study

Comparative studies on women's empowerment in Southeast Asia are limited. Therefore, this study aimed to fill the research gap by providing a comparative analysis of women's empowerment across Southeast Asian countries. In addition, research on the association between women's empowerment and reproductive health–related issues in Southeast Asia are scarce. Hence, this study aimed to provide insights on women's empowerment and its association with sexual and reproductive health and rights in selected Southeast Asian countries.

Many past studies do not explicitly describe the theoretical and conceptual frameworks in intellectualizing women's empowerment. Hence, the present study applies TGP, which is seldom used in explaining the construction of women's empowerment measures. In addition, this study focused on the direct measures of women's empowerment as proposed by Kabeer (1999). In this study, the measures of women's empowerment covered several dimensions and hence, provided information on the level of women's empowerment from various perspectives and the association with IPV and modern contraceptive use.

5.5 Strengths and limitations of study

This study utilized the DHS, which are the nationally representative surveys with a large sample size to examine women's empowerment and sexual and reproductive health issues across Southeast Asian countries where relevant past studies are scarce. The findings of this study will complement the existing literature on women's empowerment and provide more insights for policymakers in developing countries when considering intervention programs to promote women's empowerment and resolve sexual and reproductive health and rights issues.

Despite its strengths, a few limitations of this study should be noted. First, the measures of women's empowerment used in this study may not represent all dimensions due to the availability of data. Secondly, only women who were currently married or in a union were included in this study. In addition, the causal relationship between covariates and outcomes could not be established due to the cross–sectional nature of the dataset. The nature of self–reported questions in DHS might result in response bias as respondents may underreport sensitive incidences such as the experience of IPV.

Furthermore, IDHS 2017 did not cover the domestic violence module and was excluded from the IPV analysis in this study. The NDHS 2017 had asked seven questions on emotional IPV, but the study had selected only three questions, which were consistent with the questions available for the other two countries. This study focused on women's empowerment as the main study variable. Thus, the analysis link between IPV and modern contraceptive use was not established. Likewise, the influence of intergenerational IPV and the husband's characteristics on IPV was not discussed further in this study. Besides that, the findings of this study did not explain from the aspects of anthropology and sociology that narrowed the scope of study. In addition, the data on ethnicity and religion were not available for certain countries and thus unable to present and explain the analysis from the perspective of sociocultural norms.

5.6 Recommendations for future research

This study presented the level of women's empowerment and its associated factors across Southeast Asian countries. Besides that, the associations of women's empowerment with IPV and modern contraceptive use were also presented. However, a few things need to be considered in future research. Future studies can consider explaining the findings from the aspects of the country's historical, political, and anthropological background. In addition, more anthropological and quantitative analyses are recommended for future studies to understand better the levels, patterns, and consequences of women's empowerment across Southeast Asian countries. Besides that, future studies should also address the impacts of intergenerational IPV and the husband's characteristics on IPV. The linkage between IPV and modern contraceptive use should be considered in future studies.

5.7 Conclusion

This study found that demographic and socioeconomic status were significant in influencing women's empowerment across Southeast Asian countries. Women's empowerment was a key factor that influenced women's sexual and reproductive health rights, particularly IPV and modern contraceptive use. Therefore, improving the standard of living of women by providing quality education and economic opportunities is important to improve women's status and authority. This, in turn, would enable women to protect themselves from being abused and allow them to make decisions independently, including issues and rights in family planning. This study provided some insights to policymakers when considering and creating the appropriate policy interventions to uplift women's empowerment and tackle sexual and reproductive health–related issues in Southeast Asian countries.

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