

Factors Influencing Malaysian Men's Perceptions of Gender Equity in Family Planning

Endut N, Bagheri R, Azmawati AA, Hashim IHM, Selamat NH, Mohajer L

Endut N, Bagheri R, Azmawati AA, et al. Factors Influencing Malaysian Men's Perceptions of Gender Equity in Family Planning. *Malays Fam Physician*. 2020;15(3):43–53.

Keywords:

Family planning, gender equity, masculine traits, domestic violence

Authors:

Reyhaneh Bagheri

(Corresponding author)

PhD

Centre for Research on Women and Gender (KANITA), Universiti Sains Malaysia, Malaysia

Email: reyhaneh_b2004@yahoo.com

Noraida Endut

Professor and Director

Centre for Research on Women and Gender (KANITA), Universiti Sains Malaysia, Malaysia

Azman Azwan Azmawati

Associate Professor

School of Communication, Universiti Sains Malaysia, Malaysia

Intan Hashimah Mohd Hashim

Professor

School of Social Sciences, Universiti Sains Malaysia, Malaysia

Nor Hafizah Selamat

Associate Professor

School of Social Sciences, Universiti Sains Malaysia, Malaysia

Leila Mohajer

Senior lecturer

Centre for Research on Women and Gender (KANITA), Universiti Sains Malaysia, Malaysia

Abstract

Introduction: Various factors influence men's perceptions regarding gender equity in family planning (FP). Identifying these factors can contribute to a deeper understanding of the roles that men play in family planning and ultimately leads to women's reproductive health outcomes.

Objectives: This paper aims to investigate factors influencing Malaysian men's perceptions of gender equity in family planning. To achieve this, the effects of sociodemographic characteristics (age, education, and marital status), masculine traits, and attitudes towards domestic violence are investigated.

Methodology: This is a cross-sectional study undertaken by administering questionnaires to a sample of 168 men in Malaysia. The data are analyzed by applying partial least squares–structural equation modeling (PLS-SEM) and by using WarpPLS 6.0.

Results: The results confirmed the significant effects of masculine traits and attitudes supporting domestic violence on perceived gender equity in family planning. In other words, the results showed that men's masculine traits and attitudes supporting domestic violence negatively influenced gender equity in family planning. The hypothesized effects of sociodemographic characteristics on perceived gender equity in family planning could not be verified.

Conclusions: This study suggests some practical implications for local authorities to implement interventions that take a gender transformative approach to reduce men's masculine traits and improve their attitudes towards domestic violence to enhance gender equity in family planning.

Introduction

Despite the growing interest in men's studies, research concerning Malaysian men's perceptions of gender equity in family planning has not been adequately explored.¹ The United Nations Population Fund (UNFPA) has a good history of working with men and boys by applying a gender perspective in their health-related programs. From this perspective, understanding the roles of men and the influence of their gender attitudes are considered as important factors for family health outcomes.² The Program of Action of the International Conference on Population and Development (ICPD) stated that: "Men play a key role in bringing about gender equality since, in most societies, men exercise preponderant power in nearly every sphere of life, ranging from personal decisions regarding the size of families to the policy and program decisions taken at all levels of government".³ In light of this definition, gender equity in family planning, in this study, refers to including men in family planning and sharing contraceptive responsibility among partners.⁴

Several factors influence men's perceptions regarding gender equity in this area. Identifying these factors can contribute to a deeper understanding of the roles men play in family planning that lead to improvement in women's reproductive health outcomes.

Previous studies have investigated the effects of factors influencing men's participation and gender equity in family planning.^{5,6} Of the various theories applied in these studies, the dominant theory is the gender-relations approach.⁷ According to this, gender dynamics and other contextual factors are important elements that influence both the role men play and gender equity in family planning. This perspective suggests that a context should be provided in which men are integrated as responsible and supportive actors in family planning practices and as contraceptive users. Recent studies applying this perspective have shown that gender relations and attitudes are significant to family planning decisions and practices.^{8–10}

Several studies suggest that traditional masculine role expectations alone have

negative implications for close relationships.¹¹ For instance, Mosher (1991) found that highly masculine personality traits in men were positively associated with reports of their aggressive sexual behavior.¹² Pleck et al. (1993) define masculine personality traits as the degree to which a man possesses the characteristics expected in men. It is assessed by the masculinity subscales in measures such as the Sex Role Inventory (BSRI) developed by Bem in 1974.^{13,14} Many studies regard the predominant culture in society as central to whether there is adherence to masculine traits and inequitable gender norms.^{15,16} According to the literature, traditional patriarchal cultural values concerning masculinity, men's dominance over women and gender inequity put family planning and women's reproductive health in jeopardy.¹⁷ One form of culturally-specific masculinity that impacts family planning is the disapproval by husband of contraceptive use by their wives. In some studies conducted in developing societies, it was shown that if the husband does not approve the contraceptive use by his wife, the likelihood of contraceptive adoption is significantly reduced.¹⁸ There are different motivations behind this disapproval. For example, men who adhere to masculine norms may think that making a woman pregnant validates their masculinity¹⁹ or they may otherwise consider family planning and pregnancy prevention as being the woman's responsibility.²⁰ Studies show that men's adherence to masculine gender norms was a critical barrier in achieving gender equity in family planning and reproductive health. This leads to men's control over condom use, sexual decision-making, and male pleasure predominating in sexual encounters.^{21,22}

Several studies have documented negative associations between domestic violence and gender equity in family planning decisions and practices. Connell (2013) argues that domestic violence can in certain circumstances, be used by men to assert their manhood. However, this may lead to poor and risky reproductive outcomes for women such as sexual and reproductive coercion, unintended pregnancy and induced abortion.²⁴⁻²⁷

In addition to the above factors, some studies have demonstrated that socio-demographic characteristics such as age, education level, marital status, race and religion affect the attitudes of men towards gender equity in

family planning practices.^{28,29} For instance, research has shown that educated men may have progressive views concerning gender equality and may be aware of its importance^{30,31} and that this leads to a significant improvement in men's contraceptive use.^{32,33} Moreover, some studies have found that age influences the support of men for gender-equitable norms.³⁴ Younger men may have more modern and positive attitudes towards gender equity, men's participation in family planning and using modern contraceptives such as condoms.³⁵ The influence of religion on sexual and reproductive behaviors has long been recognized by social scientists. However, inconsistent results have been reported regarding the association between religiosity and contraceptive use.³⁶ For instance, Movahed and Tourajian (2007) found that Islamic religious values have a significant and positive effect on men's attitudes towards their participation in family planning.³⁷ In contrast, Charles (2014) in a study in Tanzania found the Islamic religion and its teaching and practices a significant hindering the use of contraceptives by men.³⁸ Such variation in results may be due to the variations in the interpretations of religion to concerning fertility control.

Despite increasing interest in these issues, there has been little research in the Malaysian context to understand how men's perceptions of gender influence family planning and the field remain undeveloped in the literature. This paper, therefore, aims to investigate factors influencing Malaysian men's perceptions of gender equity in family planning. To achieve this, the effects of men's age, education, marital status, masculine traits, and attitudes supporting domestic violence are investigated.

This study, for which the conceptual framework is set out in Figure 1, examines the following five hypotheses concerning family planning:

- H1:** Age has a significant effect on men's perceived gender equity in FP.
- H2:** Education has a significant effect on men's perceived gender equity in FP.
- H3:** Marital status has a significant effect on men's perceived gender equity in FP.
- H4:** Masculine traits has a significant effect on men's perceived gender equity in FP.
- H5:** Attitudes supporting domestic violence has a significant effect on men's perceived gender equity in FP.

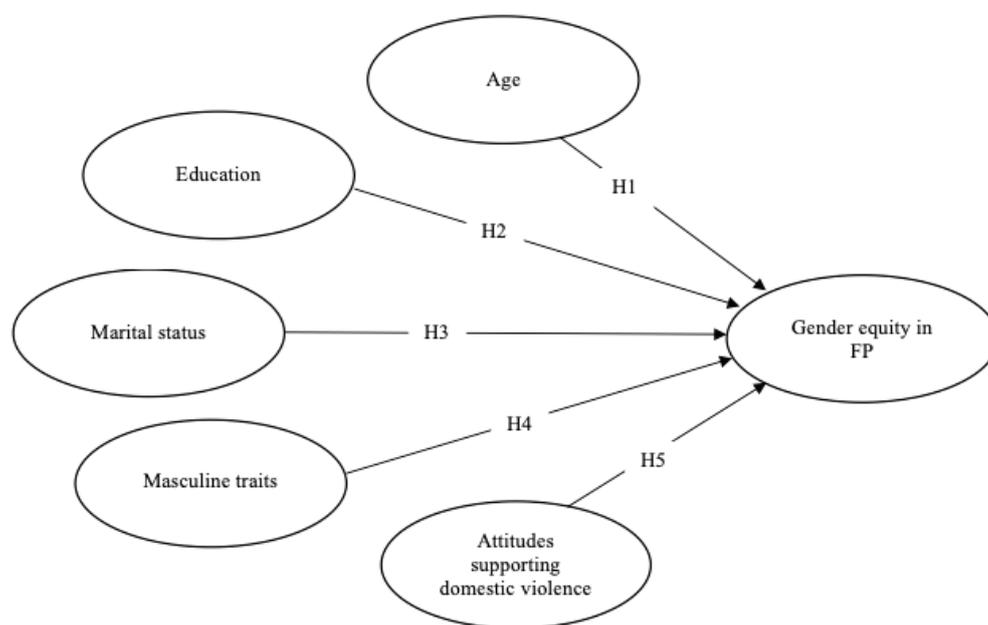


Figure 1. Conceptual framework

Methods

Research Instruments

In this study we applied a quantitative approach by using a questionnaire containing several items or question-statements adapted from instruments widely used in gender research as well as locally developed scales. The 20 items used to measure masculinity were adapted from the Bem Sex Role Inventory Scale (BSRI) on a 7-point Likert scale, which was created by Sandra Bem to measure an individual's identification with traditionally masculine and feminine personality traits.^{14,39}

Concerning attitudes supporting domestic violence, the seven statements used were adapted from a previous study conducted by the Centre for Research on Women and Gender (KANITA), at Universiti Sains Malaysia (USM).⁴⁰ Researchers there conducted the first extensive study to provide and prepare comparable data on the impact of gender-based violence against women on their general well-being. In their 2013 study, Shuib and her collaborators adapted and validated the questionnaire from the WHO's multi-country study on women's health and domestic violence against women.⁴¹ The items concerning attitudes to domestic violence were answered on a 7-point Likert scale, from 1 [strongly disagree] to 7 [strongly agree]. Higher scores on this construct indicate

greater support for domestic violence against women. In other words, men with higher scores on this construct tend to present higher levels of acceptability of this violence.

To measure perceived gender equity in family planning, we applied a version of the Gender-Equitable Men Scale (GEM) localized for the Malaysian context in 2013 by Sukumaran.⁴² The Malaysian version of the GEM scale contains twenty-one items of which seven items concern gender equity in family planning, on a 3-point Likert scale with possible responses of "disagree," "partially agree," and "agree." Higher scores on this scale indicate greater support for gender equity. The scales and related items used in the current study are set out in **Table 1**.

Before conducting the survey, we asked three academic experts to review and provide comments on the questionnaires. The questionnaires were administered in the Bahasa Malay language. We also conducted a pilot test with 100 male respondents to assess the reliability and validity in the questionnaire of the adapted and localized scales. The findings of this pilot study indicated that the questionnaire was valid and reliable.⁴³

Data Collection Process

The process of data collection began with identifying suitable respondents according to the inclusion criteria. This study recruited only

Table 1. Instrument measures and related items

Scale	Subscale	Items
Bem Sex Role Inventory (BSRI)	Masculine Traits (MT)	<ul style="list-style-type: none"> Self-reliant Independent Assertive Self-sufficient Masculine Aggressive Competitive Willing to take risks Has a strong personality Make decisions easily Defends own beliefs Athletic Forceful Dominant Acts as a leader Individualistic Ambitious Analytical Has leadership abilities Willing to take a stand
Gender Equitable Men (GEM)	Gender Equity (GE)	<ul style="list-style-type: none"> • The couple should decide together if they want to have children. • Either a man or a woman can suggest using a condom. • If a guy gets a woman pregnant, the child is the responsibility of both. • Man/woman should know what his/her partner likes during sex. • The participation of the father is important in raising children, even if he is no longer with the mother. • A man and a woman should decide together what type of contraceptive to use. • A real man can take care of his children as done by a woman.
KANITA Domestic Violence against Women	Attitudes Supporting Domestic Violence (ASDV)	<ul style="list-style-type: none"> • Violence can be tolerated under certain circumstances. • Wives could be scolded by their husbands when they disagreed or opposed their husbands. • Wives can be beaten by their husbands when they disagreed or opposed their husbands. • In a romantic relationship, a boyfriend can scold his girlfriend if she does something that boyfriend does not like. • The wives can be beaten by the husbands when they nag. • The wife can be beaten by the husband when she has cheated on him. • The issue of domestic violence is better solved privately.

Malaysian men from urban areas in Peninsular Malaysia aged between 20 and 64 years with different levels of education but with adequate proficiency in Bahasa Malaysia. Data was collected using a convenience sampling method. Before respondents were given the questionnaire, enumerators provided a brief description of this study, assured them of the confidentiality of the study results and asked the respondents to sign an informed-consent form. While the respondents answered the questionnaire the enumerators were available for questions and to respond to any doubts on the parts of the participants. In total, 168 of 200 questionnaires were returned as completed (a response rate of 84%). This research was approved by the Ethics Committee of Universiti Sains Malaysia.

Data Analysis

We used partial least squares–structural equation modeling (PLS-SEM) to assess our proposed conceptual framework, included our measurement and structural models. PLS-SEM is a non-parametric technique that can be executed using small sample sizes, and which does not require a normal distribution of data.⁴⁴ It also can be applied to different types of research.^{45,46} Also, PLS-SEM can be used when the model is inclusive of reflective and formative constructs.⁴⁷ We chose PLS-SEM because our study framework contains both reflective and formative constructs. Moreover, by applying PLS-SEM, we can assess the validity and reliability of constructs, while simultaneously analyzing the relationships between all the variables

in the conceptual model.⁴⁸ WarpPLS 6.0⁴⁹ was used to analyze the data and to perform the PLS-SEM analysis.

To compute the suitable sample size for this study, we used G*Power 3.1, a statistical power analysis program for model testing.⁵⁰ Based on a power of 0.95, with 5 constructs, 0.05 significance level (α), and the effect size (ES) of 0.15, it was calculated that we need a minimum sample size of 100. Moreover, given the “ten times rule” for PLS-SEM analysis⁵¹ and previous studies indicating the acceptability of a sample threshold of as little as 100 samples for PLS-SEM,⁵² we could conclude that a sample size of 168 was acceptable to test our proposed model.

Table 2. Instrument measures and related items

Characteristics	Frequency	Percentage (%)
<i>Age (years)</i>		
20-29	68	40.5
30-39	42	25.0
40-49	37	22.0
50 and above	21	12.5
<i>Level of education</i>		
Diploma and below	92	54.8
Higher education (Degree/Master/Ph.D.)	76	45.2
<i>Marital status</i>		
Single	75	44.6
Married	93	55.4

Descriptive Analysis

The result of descriptive analysis for the respondents' masculine traits, attitudes supporting domestic violence, and perceptions of gender equity in family planning are indicated in **Table 3**. As shown in the table, the responses for the items associated with masculine traits ranged from 2.98 to 5.54. The mean values of the items associated with the attitudes supporting domestic violence were less than the mean values associated with the masculine traits, ranging from 1.83 to 4.50. The highest mean value was for the statement, “the issue of domestic violence is better solved privately” while the item with the lowest mean value was the statement, “the wives can be beaten by the husbands when they nag”. The mean values for the items associated with the perceptions of gender equity in family planning ranged from 2.48 to 2.83. The item with the highest mean value was, “if a guy gets a woman pregnant, the child is the responsibility of both.” Conversely, the item with the lowest mean value was, “either a man or a woman can suggest using a condom”. These results indicated that most of the respondents have favorable perceptions of gender equity in family planning.

Results

Profile of Respondents

As shown in Table 2, the respondents were categorized into four age groups: 20-29 years (40.5%); 30-39 years (25.0%); 40-49 years (22.0%); and 50 years and above (12.5%). As indicated, most of the respondents were under 40 years of age. The majority of respondents had either a diploma or a lower level of education (54.8%) and rest had a degree in higher education level (45.2%). Most of the respondents were married (55.4%), and the remainder were single (44.6%), with a minuscule number of respondents divorced in the preceding years.

Assessment of Model Using PLS-SEM

To assess the model using PLS-SEM, both measurement and structural models should be assessed.^{51,53}

1. *Assessment of Measurement Model*

In assessing the measurement model, the relationships between each variable and its associated observable items were subject to testing. The conceptual framework for the current study involved three single-item variables (age, education, and marital status), two reflective variables (perceived gender equity in FP, and attitudes supporting domestic violence), and one formative variable (masculine traits). Single-item variables were excluded from the assessment of the measurement model.

To assess the reliability and validity of the reflective variables, the Composite Reliability (CR) and Average Variance Extracted (AVE) should be assessed.⁵¹ To establish indicator and variable reliability, the loading of each

Table 3. The results of descriptive analysis

Items	Mean Value	Standard Deviation
<i>Perceived gender equity in family planning</i>		
The couple should decide together if they want to have children.	2.70	0.54
Either a man or a woman can suggest using a condom.	2.48	0.61
If a guy gets a woman pregnant, the child is the responsibility of both.	2.83	0.40
Man/woman should know what his/her partner likes during sex.	2.70	0.49
The participation of the father is important in raising children, even if he is no longer with the mother.	2.79	0.44
A man and a woman should decide together what type of contraceptive to use.	2.75	0.43
A real man can take care of his children as done by a woman.	2.78	0.41
<i>Domestic violence supportive attitudes</i>		
Violence can be tolerated under certain circumstances.	2.25	1.45
Wives could be scolded by their husbands when they disagreed or opposed their husbands.	3.45	1.74
Wives can be beaten by their husbands when they disagreed or opposed their husbands.	2.29	1.49
In a romantic relationship, a boyfriend can scold his girlfriend if she does something that boyfriend does not like.	3.10	1.70
The wives can be beaten by the husbands when they nag.	1.83	1.26
The wife can be beaten by the husband when she has cheated on him.	2.91	1.79
The issue of domestic violence is better solved privately.	4.50	1.70
<i>Masculine traits</i>		
Self-reliant	5.19	1.16
Defends own beliefs	5.29	1.01
Independent	5.54	1.06
Athletic	3.76	1.62
Assertive	4.95	1.21
Has a strong personality	5.14	1.10
Forceful	2.98	1.49
Analytical	5.06	1.18
Has leadership abilities	5.32	1.14
Willing to take risks	5.03	1.35
Makes decisions easily	4.63	1.40
Self-sufficient	4.99	1.41
Dominant	3.76	1.42
Masculine	4.75	1.39
Willing to take a stand	4.98	1.11
Aggressive	3.72	1.55
Acts as a leader	4.81	1.37
Individualistic	3.62	1.55
Competitive	4.99	1.17
Ambitious	5.44	1.14

observable item on its associated variable should be higher than 0.7 to be considered acceptable.^{46,47} Table 3 shows that most items had a loading higher than 0.7 and that the CR for the reflective variables were higher than 0.7. Items with loadings below 0.4 were removed if their CR and AVE didn't exceed the threshold of 0.7 for CR and 0.5 for AVE.⁵¹

Convergent validity should be checked to assess the validity of the reflective variables.⁵¹ For acceptable convergent validity, the AVE of the variable should be greater than 0.5. **Table 4** shows that all of the reflective variables had an AVE above 0.5. Therefore, the results indicate

an acceptable level of reliability and convergent validity for the reflective variables in the model.

To assess the formative variable, the Variance Inflated Factor (VIF) or collinearity between the items associated with the formative variable should be less than five and the outer weight of the items should be significant (51,53). Table 3 shows that each of the items associated with perceived masculinity as a formative variable had an acceptable degree of VIF (<5) and that the outer weight of these items was significant (p-value<0.05).

2. Assessment of Structural Model

To assess the structural model or test the proposed hypotheses, the relationships between the variables were examined. In this regard, the value of R² depends on the research area and the significance of path coefficients should be checked.^{51,53} In this study, the R² value was 0.26 which is considered both high and acceptable for behavioral research.⁵¹

Table 4. Instrument measures and related items

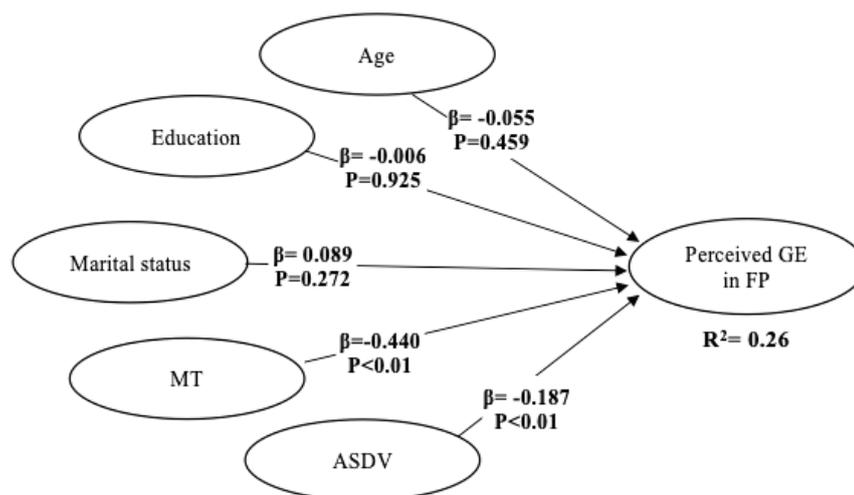
Items	Construct type	Loading/weights	CR	AVE	p- value	Full Collinearity / VIFs
<i>Perceived gender equity in FP</i> If a guy gets a woman pregnant, the child is the responsibility of both. Man/woman should know what his/her partner likes during sex. The participation of the father is important in raising children, even if he is no longer with the mother. A man and a woman should decide together what type of contraceptive to use.	Reflective	.766 .748 .764 .737	.840	.568		1.03
<i>Domestic violence supportive attitudes</i> Violence can be tolerated under certain circumstances. Wives can be beaten by their husbands when they disagreed or opposed their husbands. The wives can be beaten by husbands when they nag. The wife can be beaten by the husband when she has cheated on him.	Reflective	.695 .903 .813 .602	.844	.581		1.04
<i>Masculine traits</i> Self-reliant Defends own beliefs Independent Athletic Assertive Has a strong personality Forceful Analytical Has leadership abilities Willing to take risks Makes decisions easily Self-sufficient Dominant Masculine Willing to take a stand Aggressive Acts as a leader Individualistic Competitive Ambitious	Formative	.238 .383 .010 .282 .011 .416 .550 .223 .333 .292 .333 .123 .005 .295 .135 .058 .106 .220 .325 .268	NA	NA	<0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05	1.91 2.50 1.97 1.59 1.87 2.03 1.45 1.43 2.32 1.93 1.40 1.49 1.67 1.45 1.75 1.51 1.81 1.44 1.58 1.93

Table 5 and **Figure 2** indicate the results of the hypothesis testing. The results of this study support the significant and negative effects of perceived masculinity and attitudes supporting violence (H4 and H5) on gender equity in family planning. The findings do not support this being impacted by

sociodemographic characteristics including age, education and marital status (H1-H3). Also, the results indicate that the effect of masculinity on gender equity in family planning is much stronger than the effect of attitudes supporting domestic violence.

Table 5. Results of hypothesis testing.

Hypothesis				Path coefficient	P-value	Supported
H1	Age	→	Perceived GE in FP	-0.066	0.340	No
H2	Education	→	Perceived GE in FP	0.010	0.878	No
H3	Marital Status	→	Perceived GE in FP	0.137	0.064	No
H4	MT	→	Perceived GE in FP	-0.445	<0.01	Yes
H5	ASDV	→	Perceived GE in FP	-0.145	<0.05	Yes

**Figure 2.** Results of structural model assessment

Discussion

This study demonstrated that men had favorable perceptions of gender equity in family planning. However, men's adherence to masculine traits and attitudes supporting domestic violence negatively affected their perceptions of gender equity in family planning. The results were, therefore, consistent with previous studies confirming that masculinity and these attitudes towards domestic violence reinforce gender inequity particularly within the context of family planning.^{24,26,35,54,55} The data analysis did not show associations between men's age, education level and marital status, and their perceptions of gender equity in family planning.

The results reflect that gender-based attitudes of Malaysian men are central to their perceptions of gender equity in family planning. There is evidence that inter-spousal communication and gender relations are closely linked to successful family planning practices^{56,57} such as contraceptive adoption, use effectiveness and contraceptive continuation.^{54,58} Most studies carried out in Malaysia, however, conclude that there is inequality in gender relations and men hold a dominant position in family planning.⁵⁹

Considering the result of the current study, it can be concluded that men's perceptions and support of gender equity in family planning are of crucial importance, especially given the relative authority of Malaysian men in the home and community. Becoming aware of gender relations and power imbalances within couples would help to achieve better outcomes in family planning.⁶⁰

In response to such issues, the UNFPA has developed a program advisory note on 'partnering' as a new approach to gender relations and improving the outcome of family planning and reproductive health matters.⁶⁰ This approach sees family planning as an expression of gender and power relations between men and women.⁶¹ It emphasizes the importance of supportive and responsible partnership between the members of a couple in joint decisions and practices concerning family planning.

There are some strengths and limitations to this study. Since most developing countries including Malaysia, family planning programs are ill-equipped to cope with the goals emphasized by the gender equity approach, the main strength of this study is that it has some valuable practical implications for local authorities. Local

authorities should consider the importance of framing a practical agenda that engages with men to enhance their gender awareness and positive attitudes towards gender equity in family planning. Some intervention programs with a gender transformative approach are needed to enhance men's equal participation within the context of family planning. A gender transformative approach seeks to promote the transformation of gender norms and power balance and aims for a more gender-equitable relationship between men and women.^{62,63} This could be achieved through addressing and challenging traditional gender inequitable norms such as those concerning masculine roles and domestic violence against women. These interventions will increase men's awareness about the crucial roles that they can play as supportive and responsible partners in family planning and health outcomes.

Furthermore, this study not only examines the influence of gender related factors (masculine traits and attitudes supporting domestic violence) on perceptions of gender equity in family planning but also relies on data that is drawn directly from men. Much of the existing body of research on men in family planning is either limited to demographic and economic factors associated with their reported contraceptive use or targets women as respondents. The study of men's attitudes, particularly concerning gender related factors, therefore provides unique insights into family planning.³⁵ This study can be considered novel because, unlike previous related studies, it has applied partial least squares- structural equation modeling and thus contributes to the men and family planning literature both theoretically and methodologically. This study also contributed to addressing the paucity of literature on family planning in the context of Malaysia.

The result of this study, however, might have limited generalizability. In light of this, further

studies should be conducted with a focus on men who live in East Malaysia including Sabah, Sarawak and Labuan to obtain more generalizable results.

Conclusion

Overall, this study reflected the existence of gender-related factors hampering men's perceptions of gender equity in family planning. Promoting the adoption of attitudes among men supporting gender equity can result in men's supportive and responsible participation in family planning. This study, therefore, highlights the importance of enhancing gender equity in family planning, of intervention programs that have a gender transformative approach to reducing men's harmful reliance on certain masculine traits and attitudes towards domestic violence.

Acknowledgement

We would like to thank colleagues from the Centre for Research on Women and Gender (KANITA) who assisted in this project. We would also like to thank the Universiti Sains Malaysia for funding this research. Last but not least, we offer sincere gratitude to our Research Assistants who performed data collection, and all respondents who consented to answer the questionnaire.

Funding

This research is funded by Research Grants of Universiti Sains Malaysia (Grant Number: 1001/PKANITA/816246)

Conflicts of interest

The authors declared no conflicts of interest with this article.

How does this paper make a difference to general practice?

- This study reflected the existence of factors hampering gender equity in family planning.
- Masculine traits and attitudes supporting domestic violence negatively affect gender equity in family planning.
- This study showed that perceived gender equity in family planning is lower with men who had high levels of masculine traits and attitudes supporting domestic violence.
- Understanding men's gender-based attitudes are important to develop a successful family planning program.

References

1. Radzi NSM, Hamid BDA, Bakar KA. The Discursive Construction of Modern Masculine Identities in Contemporary Malaysia. *GEMA Online* J Lang Stud*. 2018;18(3): 36–56.
2. UNFPA. Engaging Men and Boys: A Brief Summary of UNFPA Experience and Lessons Learned. 2013.
3. United Nations. International Conference on Population and Development (ICPD), Cairo, Egypt: United Nations. 1994. [Internet]. 1994 [cited 2015 Apr 12]. Available from: <http://www.un.org/popin/icpd2.htm>
4. Garg S, Singh R. Need for integration of gender equity in family planning services. *Indian J Med Res*. 2014;140(Suppl 1):S147.
5. Costenbader E, Zissette S, Martinez A, et al. Getting to intent: Are social norms influencing intentions to use modern contraception in the DRC? *PLoS One*. 2019;14(7), e0219617.
6. Cislaghi B, Heise L. Four avenues of normative influence: A research agenda for health promotion in low and mid-income countries. *Heal Psychol*. 2018;37(6):562–73.
7. Burger M. Reaching men to improve reproductive health for all. *Resource guide*. 2004.
8. Berhane A, Biadgilign S, Amberbir A, et al. Men's knowledge and spousal communication about modern family planning methods in Ethiopia. *Afr J Reprod Health*. 2011 Dec;15(4):24–32.
9. Kimuna SR, Adamchak DJ. Gender relations: Husband–wife fertility and family planning decisions in Kenya. *J Biosoc Sci*. 2001 Jan;33(1):13–23.
10. Walcott MM, Ehiri J, Kempf MC, et al. Gender norms and family planning practices among men in Western Jamaica. *Am J Mens Health*. 2015;9(4):307–16.
11. Pleck JH, Sonenstein FL, Ku LC. Masculinity ideology: Its impact on adolescent males' heterosexual relationships. *J Soc Issues*. 1993;49(3):11–29.
12. Mosher DL. Macho men, machismo, and sexuality. *Annu Rev Sex Res*. 1991;2(1):199–247.
13. Pleck JH, Sonenstein FL, Ku LC. Masculinity ideology and its correlates. *Gen Psychol Read*. 1993;49(3):308–26.
14. Bem SL. The measurement of psychological androgyny. *J Consult Clin Psychol*. 1974;42(2):155.
15. Tager D, Good GE. Italian and American masculinities: A comparison of masculine gender role norms. *Psychol Men Masc*. 2005;6(4):264–74.
16. Connell R. Masculinities. Blackwell Publishers, UK: Polity; Malden, MA.; 2005.
17. Barker G, Ricardo C, Nascimento M, et al. Questioning gender norms with men to improve health outcomes: evidence of impact. *Glob Public Health*. 2010;5(5):539–53.
18. Sternberg P, White A, Hubley JH. Damned if they do, damned if they don't tensions in Nicaraguan masculinities as barriers to sexual and reproductive health promotion. *Men Masc*. 2008;10(5):538–56.
19. Marston C, King E. Factors that shape young people's sexual behaviour: a systematic review. *Lancet*. 2006;368(9547):1581–6.
20. Mantell JE, Needham SL, Smit JA, et al. Gender norms in South Africa: implications for HIV and pregnancy prevention among African and Indian women students at a South African tertiary institution. *Cult Health Sex*. 2009;11(2):139–57.
21. Lotfi R, Tehrani FR, Khoei EM, et al. How do women at risk of HIV/AIDS in Iran perceive gender norms and gendered power relations in the context of safe sex negotiations? *Arch Sex Behav*. 2013;42(5):873–81.
22. Santana MC, Raj A, Decker MR, et al. Masculine gender roles associated with increased sexual risk and intimate partner violence perpetration among young adult men. *J Urban Heal*. 2006;83(4):575–85.
23. Connell RW. Gender and power: Society, the person and sexual politics. John Wiley & Sons; 2013.
24. Miller E, Jordan B, Levenson R, et al. Reproductive coercion: connecting the dots between partner violence and unintended pregnancy. *Contraception*. 2010;81(6):457–9.
25. Pallitto CC, García-Moreno C, Jansen HAFM, et al. Intimate partner violence, abortion, and unintended pregnancy: Results from the WHO Multi-country Study on Women's Health and Domestic Violence. *Int J Gynecol Obstet*. 2013;120(1):3–9.
26. Colarossi L, Breitbart V, Betancourt G. Barriers to screening for intimate partner violence: A mixed-methods study of providers in family planning clinics. *Perspect Sex Reprod Health*. 2010;42(4):236–43.
27. Silverman JG, Raj A. Intimate partner violence and reproductive coercion: global barriers to women's reproductive control. *PLoS Med*. 2014;11(9):e1001723.
28. Peltzer K, Pengpid S. Contraceptive non-use and associated factors among university students in 22 countries. *Afr Health Sci*. 2015;15(4):1056–64.
29. Nojomi M, Rafati MF, Jafari M. Study of education effect on knowledge of men from family planning in bord abad, in the year of 1998. *Razi J Med Sci*. 2002;9(30):455–61.
30. Greene M, Omar R, Pawlak P. Masculinities, social change, and development. *World Dev Rep*. 2012.
31. Lusey H, San Sebastian M, Christianson M, et al. Factors associated with gender equality among church-going young men in Kinshasa, Democratic Republic of Congo: a cross-sectional study. *Int J Equity Health*. 2017;16(1):213.
32. Oyediran K a., Ishola GP, Feyisetan BJ. Factors affecting ever-married men's contraceptive knowledge and use in Nigeria. *J Biosoc Sci*. 2002;34(4):497–510.
33. Afshani S, Askari NA, Zare SA, et al. The role of men in family planning and fertility control in the city of Yazd, Iran. *Soc Welfare (India)*. 2008;7(27):29–51.

34. Vu L, Pulerwitz J, Burnett-Zieman B, et al. Inequitable gender norms from early adolescence to young adulthood in Uganda: Tool validation and differences across age groups. *J Adolesc Heal*. 2017;60(2):S15–21.
35. Mishra A, Nanda P, Speizer IS, et al. Men's attitudes on gender equality and their contraceptive use in Uttar Pradesh India. *Reprod Health*. 2014;11(1):41.
36. Moreau C, Trussell J, Bajos N. Religiosity, religious affiliation, and patterns of sexual activity and contraceptive use in France. *Eur J Contracept Reprod Heal Care*. 2013;18(3):168–80.
37. Movahed M, Tourjian F. A survey on the relationship between social and cultural factors and male's attitude toward participation in family planning in the city of Shiraz. *J Popul Assoc Iran*. 2007;2(3):92–110.
38. Charles A. Social-Cultural Factors that Hinder Men's use of Contraceptive Methods: A case study of Micheweni District-North Pemba. *J Cult Soc Dev*. 2014;4:1–10.
39. Donnelly K, Twenge JM. Masculine and feminine traits on the Bem Sex-Role Inventory, 1993–2012: A cross-temporal meta-analysis. *Sex Roles*. 2017;76(9–10):556–65.
40. Shuib R, Endut N, Ali SH, et al. Domestic violence and women's well-being in Malaysia: Issues and challenges conducting a national study using the WHO multi-country questionnaire on women's health and domestic violence against women. *Procedia-Social Behav Sci*. 2013;91:475–88.
41. WHO. WHO multi-country study on women's health and domestic violence against women. Geneva: World Health Organization; 2002.
42. Sukumaran V. The Validation and Application of Bahasa Malaysia Gender Equitable Men (GEM) Scale: An Assessment of Equitable and Inequitable Gender Norms Among Male Student of a Malaysian University. Universiti Sains Malaysia; 2013.
43. Yinga K, Enduta N, Hashima IHM, et al. Validation of the Multicultural Masculinity Ideology Scale in the Malaysian Context. *Proc 3rd KANITA Postgrad*. 2016;16:328.
44. Ringle CM, Wende S, Will A. Finite mixture partial least squares analysis: Methodology and numerical examples. In: Handbook of partial least squares. Springer; 2010. p. 195–218.
45. Henseler J. Partial least squares path modeling: Quo vadis? *Qual Quant*. 2018;52(1):1–8.
46. Ali F, Rasoolimanesh SM, Sarstedt M, et al. An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *Int J Contemp Hosp Manag*. 2018;30(1):514–38.
47. Hair J, Ringle C, Sarstedt M. PLS-SEM: Indeed a silver bullet. *J Mark theory Pract*. 2011;19(2):139–52.
48. Sarstedt M, Ringle CM, Smith D, et al. Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *J Fam Bus Strateg*. 2014;5(1):105–15.
49. Kock N. WarpPLS user manual: Version 6.0. ScriptWarp Syst Laredo, TX, USA. 2017.
50. Erdfelder E, Faul F, Buchner A. GPOWER: A general power analysis program. *Behav Res methods, instruments, Comput*. 1996;28(1):1–11.
51. Hair J, Hult G, Ringle C, et al. A primer on partial least squares structural equation modeling (PLS-SEM). 2nd ed., Sage, Los Angeles, CA; 2017.
52. Reinartz W, Haenlein M, Henseler J. An empirical comparison of the efficacy of covariance-based and variance-based SEM. *Int J Res Mark*. 2009;26(4):332–44.
53. Chin WW. How to write up and report PLS analyses. In: Handbook of partial least squares. Springer; 2010. p. 655–90.
54. Hartmann M, Gilles K, Shattuck D, et al. Changes in couples' communication as a result of a male-involvement family planning intervention. *J Health Commun*. 2012 Aug;17(7):802–19.
55. Merkh RD, Whittaker PG, Baker K, et al. Young unmarried men's understanding of female hormonal contraception. *Contraception*. 2009 Mar;79(3):228–35.
56. Varga CA. The forgotten fifty per cent: a review of sexual and reproductive health research and programs focused on boys and young men in sub-Saharan Africa. *Afr J Reprod Health*. 2001;175–95.
57. Maharaj P. Male attitudes to family planning in the era of HIV/AIDS: evidence from KwaZulu-Natal, South Africa. *J South Afr Stud*. 2001;27(2):245–57.
58. Roslizla AM, Majdah M. Male participation and sharing of responsibility in strengthening family planning activities in Malaysia. *Malaysian J Public Heal Med*. 2010;10(1):23–7.
59. Ling JES, Tong SF. The roles of men in family planning—a study of married men at the UKM primary care clinic. *Malaysian Fam physician*. 2017;12(1):2.
60. Cohen SI, Burger M. Partnering: A new approach to sexual and reproductive health. New York: United Nations Population Fund.; 2000.
61. Montgomery CM, Lees S, Stadler J, et al. The role of partnership dynamics in determining the acceptability of condoms and microbicides. *AIDS Care*. 2008 Jul;20(6):733–40.
62. Barker G, Ricardo C, Nascimento M, et al. Engaging men and boys in changing gender-based inequity in health: Evidence from programme interventions. World Health Organization; 2007.
63. Kraft JM, Wilkins KG, Morales GJ, et al. An evidence review of gender-integrated interventions in reproductive and maternal-child health. *J Health Commun*. 2014;19(sup1):122–41.