

## UNDERSTANDING COLLEGE STUDENTS' ATTITUDE TOWARDS GENDER EQUALITY AMONG MALE, FEMALE, AND NON-BINARY IN THAILAND

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### Abstract

Gender equality is crucial for achieving peaceful societies and creating sustainable development. Over the past decade, most studies have been concentrated on investigating males' and females' attitudes towards gender equality. None focuses on comparing the attitudes of young male, female, and non-binary genders. Consequently, this study aimed to fill this research gap by exploring differences among male, female, and non-binary undergraduate students' attitudes towards gender equality, including its three domains, which are gender restriction, gender attribute, and gender domination. An online questionnaire was utilized to collect data. The samples were 225 undergraduate students. Data were analyzed using descriptive statistics, Welch's ANOVA, and Games-Howell post-hoc test. The results were that male undergraduate students had a high attitude towards gender equality ( $\bar{x}_{\text{male}} = 1.8719$ , S.D. = 0.44), while female and non-binary undergraduate students had strongly high attitudes towards gender equality ( $\bar{x}_{\text{female}} = 1.5205$ , S.D. = 0.35;  $\bar{x}_{\text{non-binary}} = 1.4875$ , S.D. = 0.32). The undergraduate students of all three genders had mean scores of gender attribute ( $\bar{x}_{\text{male}} = 2.3184$ , S.D. = 0.72;  $\bar{x}_{\text{female}} = 1.8681$ , S.D. = 0.60;  $\bar{x}_{\text{non-binary}} = 1.8491$ , S.D. = 0.51) that fell into the interpretation score range higher than those of gender restriction ( $\bar{x}_{\text{male}} = 1.6813$ , S.D. = 0.46;  $\bar{x}_{\text{female}} = 1.4047$ , S.D. = 0.35;  $\bar{x}_{\text{non-binary}} = 1.3781$ , S.D. = 0.40) and those of gender domination ( $\bar{x}_{\text{male}} = 1.6797$ , S.D. = 0.60;  $\bar{x}_{\text{female}} = 1.2888$ , S.D. = 0.34;  $\bar{x}_{\text{non-binary}} = 1.2188$ , S.D. = 0.37). The Welch's ANOVA showed a statistically significant difference in undergraduate students' attitudes towards gender equality ( $F(df) = 17.211(2)$ ,  $p = .000^*$ ), a statistically significant difference in undergraduate students' attitudes towards gender restriction ( $F(df) = 9.550(2)$ ,  $p = .000^*$ ), a statistically significant difference in undergraduate students' attitudes towards gender attribute ( $F(df) = 10.190(2)$ ,  $p = .000^*$ ), and a statistically significant difference in undergraduate students' attitudes towards gender domination ( $F(df) = 12.890(2)$ ,  $p = .000^*$ ). Games-Howell post-hoc test showed that female and non-binary undergraduate students had lower attitude mean scores towards gender restriction, gender attribute, and gender domination than those of male undergraduate students at a statistical significance level of .05. Hence, female and non-binary undergraduate students had attitude mean scores towards gender equality higher than male undergraduate students at

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a statistical significance level of .05. Nevertheless, there was no statistically significant difference between the female and non-binary undergraduate students' attitude mean scores towards gender equality, including its three domains. Profit and non-profit organizations can promote gender equality by using large-scale media, public events, social media, community-based initiatives, aspirational reference groups, or celebrity appeals to influence the young generation's attitudes. The Thai government may consider new policies, regulations, or facilities that support gender equality, such as equal rights, responsibilities, and opportunities for all genders.

**Keywords:** Gender Quality, Attitude, Undergraduate Students, Non-binary

## Introduction

Gender equality is seen as one of 17 Sustainable Development Goals (SDGs) that most countries try to achieve. Reaching this goal can benefit the living standards of Thai citizens in areas such as health, rights, and welfare. Discriminatory government regulations, policies, unequal access to resources, unfair marriage and divorce practices, or discriminatory service availability and access seem to be challenges that researchers face (Cislaghi et al., 2022). Gender equality is not only a fundamental human right, but it is also a prerequisite for a society that is peaceful, wealthy, and sustainable. In comparison to males and boys, women and girls continue to face discrimination and have restricted access to opportunities and rights (UNDP Thailand, 2022). The issue of sexual violence in Thailand is becoming more serious on a daily basis because Thailand is a patriarchal society or has a masculine culture. In this society, men tend to have more authority than women, who are classified as the weaker gender, the second class, and victims of sexual violence through a convoluted

social process. Societal values are associated with gender inequality. People believe that men and women are different in terms of physical and spiritual. Physical strength is the main feature of men, which can protect women. The major role of women is to look after family, while men should be leaders of family violence (Taweelerdwuttikul & Devakul Na Ayuttaya, 2021; Aeknarajindawat et al., 2023). Hence, unequal proportions of men and women in societal positions, such as Thai women typically have lower incomes, are less educated, make less money, and have fewer opportunities to develop policy (Rungreangkulkij, 2017). Besides, uneducated Thai women are likely to experience physical and emotional abuse. In regard to the inequality of women's rights study, it revealed that an alcohol-addicted husband is the cause of domestic violence and poverty is a consequence of domestic violence (Taweelerdwuttikul & Devakul Na Ayuttaya, 2021; Aeknarajindawat et al., 2023). Every year, the Ministry of Public Health receives reports on 30,000 incidents of violence against women (UNDP Thailand, 2022).

Nevertheless, penalizing those who commit sexual violence could not solve this issue in the long run. Thus, our society must focus on solving problems at the root cause by providing education to promote equality between the genders and changing the attitudes of members of society (Taweelerdwuttikul & Devakul Na Ayuttaya, 2021), as according to the theory of reasoned action, an individual's intention drives that behavior, and the attitudes have an impact on behavior by influencing intentions (Fishbein & Ajzen, 1975). Besides women, according to the study by the World Bank Group (2018) about the economic inclusion of LGBTI groups in Thailand, it showed that 20 percent of gay men, 30 percent of lesbians, and 60 percent of transgender people reported experiencing prejudice at work. More than half of respondents claimed that the reason their job applications were turned down was because they identified as LGBTI or non-binary people. Therefore, understanding the current attitudes of male, female, and non-binary students is crucial for improving gender equality in Thai society.

From recent studies about gender equality, there is no study that highlights the difference in attitudes towards gender equality among males, females, and non-binary genders. Besides, there are scarce numbers of studies about attitude towards gender equality at the undergraduate level in Thailand. Therefore, this study aimed to bridge these research gaps by exploring the current attitude level towards gender equality of undergraduate students of all three genders and whether there are

differences in attitudes about gender equality among these genders by adopting the attitude towards gender equality questionnaire of Jha et al. (2020) which covers 3 domains of gender equality, which are gender restrictions, gender attributes, and gender domination domains. The findings from the study could be utilized to promote attitudes towards gender equality, especially among the young generation in Thailand. Additionally, the findings from the study could be utilized for policy-making and practical strategy-setting by educational institutions and the government in Thailand.

## Objective

To explore differences among male, female, and non-binary undergraduate students' attitudes towards gender equality.

## Literature Review

### Gender Equality

Alexander and Welzel (2012) summarized from literature that there are four viewpoints about gender equality, which are: 1) the classical modernization viewpoint that emphasizes economic growth; 2) the more recent human development viewpoint that emphasizes emancipatory culture shifts that promote values of self-expression and attitudes towards gender equality; 3) the historical legacies viewpoint that emphasizes how political and cultural traditions have an effect; and 4) the institutional design viewpoint, which is crucial when considering political engineering. From these four viewpoints, the viewpoint of human development is the focus of this study.

Gender equality is defined as the situation where gender has no bearing on who can access certain opportunities or rights. Gender inequality affects persons of all genders, including women, men, and non-binaries (United Way of the National Capital Area, 2024), such as physical health, mental health, and relationship satisfaction (Fisher & Ryan, 2021; Cerrato & Cifre, 2018). Gender equality implies that all people are free to develop their personal abilities and make decisions without being constrained by stereotypes and prejudices about gender roles. It also implies that the interests, needs, and priorities of men and women, as well as girls and boys, are taken into consideration, acknowledging the diversity of different groups (UNICEF, 2017). Therefore, gender equality can be defined as a matter when all genders have equal access to opportunities and rights and are free to explore their own potential and make decisions without being influenced by stereotypes and societally expected gender roles.

### Genders

Gender identity is the focus of this study. Biological sex is defined as a biological concept that includes chromosomal measurement, sex organs, endogenous hormones, and other features encoded in DNA that usually characterize differences between men and women. In contrast, gender identity is explained as socially constructed, and it may consist of enacted roles and behaviors that occur in historical and cultural contexts (Stites et al., 2023). In regards to the study of

Jha et al. (2020), the term gender refers to the differences in the social roles of different sexes. Similarly, Philip (2005) describes gender as the roles and expectations attributed to males and females in particular societies. It can be changed over time, place, and life stage.

According to a study by Li et al. (2022), gender has a huge impact on gender equality awareness and mental health. Lack of gender equality perceptions and mental health can have a negative influence on the psychological and physical health of individuals.

The study revealed that there were significant differences in attitudes towards gender equality. Females had a more positive attitude towards gender equality than males (Jha et. al. 2020). Similarly, the research by Suman et al. (2020) found that women are likely to have a better attitude towards gender equality. While Thai college males' attitudes toward gender roles were higher than Thai college females, reflecting that male is a dominant gender where males hold more power and privileges than females (Pinyaphong et. al., 2022).

The non-binary seems to be a group of gender identities that researchers have not paid enough attention to. Non-binary refers to those whose identities fall outside of the categories of male and female identities. Besides non-binary, genderqueer and gender diverse are used with the same intention of including all terms other than male and female (Thorne et al., 2019). A study by Pinyaphong et al. (2022) found that Thai non-binaries are

more likely to face discrimination on the basis of their gender identity compared to Thai heterosexuals.

This study categorized genders into 3 groups, which are male, female, and non-binary. Knowing the attitudes towards gender equality among three different genders is crucial when it comes to promoting gender equality. Because a comparison of attitudes towards gender equality among three genders, particularly non-binary, remains unexplored, understanding how these people view gender equality may be necessary for improving the living standards of people in Thai society.

#### **Attitude towards Gender Equality Measurements**

The Gender-Equitable Men (GEM) Scale was developed by Population Council/Horizons and Equimundo (Center for Masculinities and Social Justice) to examine attitudes toward gender norms by using two subscales—equitable and inequitable norms—to gauge opinions regarding gender norms in close relationships or varying social expectations for men and women. It covered domestic abuse, relationships, everyday activities and responsibilities, and health topics (Pulerwitz & Barker, 2007).

The International Men and Gender Equality Survey (IMAGES) was developed by Equimundo (formerly Promundo) and the International Center for Research on Women (ICRW) in 2008. IMAGES is one of the most extensive studies to examine men's and women's attitudes and behaviors in relation to gender equality led by Equimundo. It focuses on gender equality issues, which are

gender-based violence, health and health-related practices, household division of labor, men's participation in caregiving and as fathers, men's and women's attitudes about gender and gender-related policies, transactional sex, men's reports of criminal behavior, and quality of life.

Lately, Jha et al. (2020) developed the attitude towards gender equality questionnaire from the Gender Equitable Men (GEM) Scale and International Men and Gender Equality Survey (IMAGES) questionnaire. This questionnaire covers 3 domains of gender equality, which are gender restrictions, gender attributes, and gender domination domains. The gender restrictions refer to any constraints imposed on individuals because of their gender that affect equality. The gender attribute is about how three different genders perform as the expectations in society. And lastly, gender domination refers to the way in which one gender interacts unequally with the other gender. It was used to measure the school students' attitude towards gender equality.

This study adopted Jha et al.'s questionnaire because it was used in a comparable Asian cultural setting and with a similar student group.

Gender restriction is defined as any exclusion that is made on the basis of sex, which can influence the basis of equality, human rights, and basic freedoms in political, economic, social, cultural, civil, or any other field. Gender restrictions refer to constraints that women or men may experience that are a consequence of their gender (United Nations, 2022).

The studies revealed that gender inequality is associated with cultural practices where males have to perform certain roles of which females are incapable. Most countries agreed that women should have an opportunity to work outside their home, but some countries still believe that the role of women is to take care of family members (Wike et al., 2010); females take on more responsibilities in taking care of households and children than males in Spain and Ecuador (Cerrato & Cifre, 2018; Ramos-Galarza et al., 2018); inequalities can have an impact on females' physical health, mental health, and relationship satisfaction (Fisher & Ryan, 2021; Cerrato & Cifre, 2018) as Canadian females tend to experience mental disorders such as depression or anxiety (Ramos-Galarza et al., 2018); in Indian culture, eating last is the way that women show respect for their husbands and family members, resulting in negative consequences on women such as mental health and being underweight due to undernutrition (Hathi et al., 2021); in India and Thailand, brides who provide insufficient amounts of dowry may get abused or some might be killed (Laiphrakpam & Aroonsrimorakot, 2016); females have lower chances than males to access education and have to deal with inequality and racism (Wallace, 2023; Ohlsson-Wijk et al., 2022); women were likely to have higher education, and women entered the labor market during the second half of the 1900s, resulting in being more independent and not relying on males for economic security (Ohlsson-Wijk et al., 2022); women who have low and middle incomes do not

have an equal chance to access education, the labor force, or healthcare (Azad et al., 2020) because of their parents' misunderstandings, wrong beliefs, conservative attitudes, and socioeconomic factors (Mir & Lone, 2023). On the contrary, parents who are well educated have more awareness towards the education of girls (Devi, 2020); Hindu women had equal inheritance rights with their brothers. However, there was a positive relation between the amount of dowry and women's empowerments (Makino, 2022).

Therefore, gender restriction can be defined as any constraints imposed on individuals because of their gender that affect equality, and this study covered issues such as getting married, giving dowry, doing housework, working, getting an education, and accessing health services.

Gender attributes are defined as the roles that different genders carry out and the expectations that are put on each different gender (Pacific Power Association, 2017). The term gender attribute or stereotype is explained as perspective about attributes, characteristics, or roles that different genders should or should not have (Stites et al., 2023). In sociology and psychology, the term "gender role" refers to the expected actions, attitudes, and traits related to a person's gender identity. Attributes associated with gender are the outcome of learning in compliance with cultural norms or guidelines (Greenglass, 2001).

The studies found that one third of parents believed that males are better at playing sports than girls (Bailey, 2021); females



did not have the same right as males to participate in physical activities due to their physical weakness (Meier et al., 2021); non-binaries were not likely to engage in sport and physical activity due to the gendering of available sports opportunities (Pridesport, 2019); most girls recognized that mathematics and science were too hard to do and these subjects fit with boys due to physical and mental (Nationalnumeracy, 2015); gender diverse adults had lower educational attainment because they experienced minority stress and lower achievement in secondary school (Wilkinson et al., 2021); women's time spent on unpaid care work was six times higher than that of men. As a housewife, a woman plays an important role in preparing and cooking meals, including housekeeping, and taking care of children (Mkandawire et al., 2022); when a woman gets married, she belongs to her husband and his family (Dailytrust, 2022); the husband is the person who recognizes the need for products and makes the final decision for purchase (Marcus, 2018).

Therefore, gender attributes can be defined as the roles that different genders perform as the gender identity expectations resulted from cultural norms learning, and this study covered matters in decision, sports, study, housework, and family.

Gender domination refers to societal standards such as the way in which women and men interact with each other, the role of gender households, etc. (Instituto Promundo and the International Center for Research on Women, 2011). While the term of male

dominance describes the unequal power dynamics between the male and female populations (Sanday, 2001) such that males emerge as key decision makers, leaving the female gender playing a supportive role in the discussion.

The studies showed that in Islam, refusing the husband is forbidden (Dahlan & Shamsudin, 2019); 63 percent of Palestinian men believed that women should tolerate violence to keep the family together because they are economically dependent. Hence, they are indirectly forced to stay in offensive relationships (UNDP, 2018); in India, disobedience may lead to domestic violence. Forty-five percent of Indian women experienced physical and psychological violence from their husbands, while Muslim women faced the same problems. In the Western world, only 25 percent of women had such problems. Unfortunately, cases of domestic violence go unreported by victims due to personal embarrassment and societal inequality between men and women (Gracia, 2004); some women believe that they should get beaten up due to their inappropriate actions (Kaur & Garg, 2008). According to a study by Worthen and Jones (2022), non-binaries are likely to experience discrimination, harassment, and violence due to negativities that relate to violations of heteronormality.

Therefore, gender domination can be defined as societal culture that pertains to unequal power relations between one gender and the other gender, and this study covers the interactions in the couple's or married life.

From literature reviewing, this study focused on the current attitude level towards gender equality of undergraduate students of all three genders in Thailand and whether there is the same level of attitudes towards gender equality among these genders, including its three domains or not.

### Methodology

The population was undergraduate students in the academic year 2023. After data screening for missing and outlier values, the sample consisted of 225 undergraduate students, including 64 males, 129 females, and 32 non-binaries. The sample size numbers were higher than the minimum sample size of 25 respondents in each gender group calculated by using G\* Power version 3.1.9.7. The samples were collected using purposive and convenient samplings. Convenience sampling allows all sociodemographic subgroups to be sampled (Jager et al., 2017). Purposive sampling is a method of identifying and selecting respondents related to their characteristics as the purpose of the study (Palinkas et al., 2015), which are three genders, to ensure the number of non-binary students met the minimum required sample size, as non-binaries represent the smallest subgroup in the Thai population (Shoowong, 2023).

A questionnaire was used as a research tool. The questionnaire was adopted from the attitude and perception of gender equity questionnaire of Jha et al. (2020), in which the attitude towards gender equality score was derived from reversed scores of gender

restriction, gender attributes, and gender domination dimensions. The questionnaire was divided into 4 sections: personal information, gender restriction sub-scale (10 items), gender attributes sub-scale (6 items), and gender domination sub-scale (4 items). The 5-point Likert scale was used to measure attitude levels of all three sub-scales of attitude towards gender equality.

Before collecting data, the research tool qualification was measured the content validity by using the IOC (item objective congruence index) from three experts and the reliability of each sub-scale by using Cronbach Alpha with 49 undergraduate students who had similar characteristics to the sample. The results showed that the questionnaire had IOC scores between .67 (2 items in the gender restriction sub-scale) to 1.00 (18 items) which indicated that the research tools were validated (Turner & Carlson, 2003). The Cronbach's alpha coefficients of gender restriction, gender attributes, and gender domination sub-scales were .869, .784, .832 respectively, which indicated that the research tools were reliable (Streiner, 2003).

The data gathered through the questionnaire was analyzed using descriptive statistics and Welch's ANOVA (Tomarken & Serlin, 1986) because the sample sizes were unequal among gender groups, and the results from the assumption test showed that the variances of all groups were non-homogeneous. The Games-Howell test (Games & Howell, 1976 cited in Shingala & Rajyaguru,



2015) was used to compare the differences in each pair.

## Results

This study was survey research, which aimed to explore Thai undergraduate students' attitude about gender equality. The respondents were 129 females, accounting for 57.3 percent, 64 males, accounting for 28.4 percent, and 32 non-binaries, accounting for

14.2 percent. Most respondents aged 21 years old, accounting for 23.6 percent, and 19 years old, accounting for 26.7 percent, were in year 3, accounting for 25.3 percent, and year 4, accounting for 23.1 percent; studied in education field, accounting for 27.6 percent, business field, accounting for 12.9 percent, and logistics field, accounting for 11.1 percent; were Buddhist, accounting for 87.6 percent.

**Table 1** Attitude towards gender equality of male, female, and non-binary undergraduate students

Items	Male (N = 64)		Female (N = 129)		Non-binary (N = 32)	
	$\bar{x}$	S.D.	$\bar{x}$	S.D.	$\bar{x}$	S.D.
Gender Restriction	1.6813	0.46	1.4047	0.35	1.3781	0.40
	<i>Strongly low</i>		<i>Strongly low</i>		<i>Strongly low</i>	
Gender Attribute	2.3184	0.72	1.8681	0.60	1.8491	0.51
	<i>Low</i>		<i>Low</i>		<i>Low</i>	
Gender Domination	1.6797	0.60	1.2888	0.34	1.2188	0.37
	<i>Strongly low</i>		<i>Strongly low</i>		<i>Strongly low</i>	
Gender Equality	1.8719	0.44	1.5205	0.35	1.4875	0.32
	<i>High</i>		<i>Strongly high</i>		<i>Strongly high</i>	

From Table 1, it showed that male undergraduate students had a high attitude towards gender equality with a mean score of 1.8719 (S.D. = 0.44), while female and non-binary undergraduate students had strongly high attitudes towards gender equality with mean scores of 1.5205 (S.D. = 0.35) and 1.4875 (S.D. = 0.32), respectively.

When considering each domain of gender equality, the results showed that male undergraduate students had a strongly low

attitude towards gender domination with a mean score of 1.6797 (S.D. = 0.60) and gender restriction with a mean score of 1.6813 (S.D. = 0.46), respectively, and a low attitude towards gender attribute with a mean score of 2.3184 (S.D. = 0.72). While female undergraduate students had a strongly low attitude towards gender domination with the mean score of 1.2888 (S.D. = 0.34) and gender restriction with the mean score of 1.4047 (S.D. = 0.35), respectively, and a low attitude towards

gender attribute with the mean score of 1.8681 (S.D. = 0.60). Non-binary undergraduate students had a strongly low attitude towards gender domination with a mean score of 1.2188 (S.D. = 0.37) and gender restriction with a mean score of 1.3781 (S.D. = 0.40), respectively, and a low attitude towards gender attribute with a mean score of 1.8491 (S.D. = 0.51).

Therefore, considering each aspect, it was found that all genders had mean scores of gender attribute fell into the interpretation score range higher than those of the other two domains.

Although it was found that undergraduate students of all three genders had mean scores of all domains within the same interpretation score range, when the three domains' reversed scores were combined into an attitude score towards gender equality, it was found that the total score of male undergraduate students fell in the lower range of interpretation scores. The attitude scores towards gender equality of female and non-binary undergraduate students fell in the higher interpretation score range.

That was because, when considering the mean scores in each domain, it was found that in the gender restriction domain, the mean score of male undergraduate students was close to the upper bound of the interpretation range of 1.00-1.80., at 1.6797. Meanwhile, the mean scores of female and non-binary undergraduate students were close to the lower bound of the interpretation range, at 1.2888 and 1.2188, respectively. Male under-

graduate students had a mean score that was 30.33 percent higher than the mean score of female undergraduate students and 37.82 percent higher than the mean score of non-binary undergraduate students.

In the gender attribute domain, the mean score of male undergraduate students was close to the upper bound of the interpretation range of 1.81-2.60, at 2.3184, while the mean scores of female and non-binary undergraduate students were close to the lower bound of this range, at 1.8681 and 1.8491, respectively. Male undergraduate students had a mean score that was 24.10 percent higher than the mean score of female undergraduate students and 25.38 percent higher than the mean score of non-binary undergraduate students.

In the gender restriction domain, the mean score of male undergraduate students was close to the upper bound of the interpretation range of 1.00-1.80, at 1.6813, while the mean scores of female and non-binary undergraduate students were about in the middle of this range, at 1.4047 and 1.3781, respectively. Male undergraduate students had a mean score that was 19.69 percent higher than the mean score of female undergraduate students and 22.00 percent higher than the mean score of non-binary undergraduate students.

### **Comparison Results of Attitudes towards Gender Equality and Its Domains Regarding Gender**

Before starting to compare the attitude towards gender equality and its domains

regarding gender using ANOVA, its assumptions were tested. The results showed a significant Levene's test of all variables (gender restriction, gender attribute, gender domination, and gender equality), which means that the homogeneity of variances assumption was violated.

Due to unequal sample sizes among

gender groups and unequal variances of all groups resulting from the test of homogeneity of variances, Welch's ANOVA and the Games-Howell Post Hoc test were applied to compare the group means. Welch's One-way Analysis of Variance (ANOVA) was conducted to compare attitudes towards gender equality and its three domains regarding gender.

**Table 2** Welch's One-way Analysis of Variance comparing attitude mean scores towards gender equality and its three domains regarding gender

	Source	SS	MS	Welch's F(df)	p
<b>Gender restriction</b>	Between groups	3.657	1.828	9.550(2)	.000*
	Within groups	33.809	.152		
	Total	37.466			
<b>Gender attribute</b>	Between groups	9.420	4.710	10.190(2)	.000*
	Within groups	86.153	.388		
	Total	95.573			
<b>Gender domination</b>	Between groups	7.631	3.816	12.890(2)	.000*
	Within groups	42.459	.191		
	Total	50.090			
<b>Gender equality</b>	Between groups	5.894	2.947	17.211 (2)	.000*
	Within groups	30.612	.138		
	Total	36.506			

**Note:** \*significant at the 0.01 level

From table 2, the calculation of the Welch's F values from attitude mean scores towards gender restriction revealed a difference undergraduate students 'attitudes towards gender restriction at statistically significant level of .01 ( $F(df) = 9.550(2)$ ,  $p = .000^*$ ), from attitude mean scores towards gender attribute revealed a difference in undergraduate

students' attitudes towards gender attribute at statistically significant level of .01 ( $F(df) = 10.190(2)$ ,  $p = .000^*$ ) from attitude mean scores towards gender domination revealed a difference in undergraduate students' attitudes towards gender domination at statistically significant level of .01 ( $F(df) = 12.890(2)$ ,  $p = .000^*$ ), and from attitude mean scores

towards gender equality revealed a difference in undergraduate students' attitudes towards gender equality at statistically significant level of .01 ( $F(df) = 17.211(2)$ ,  $p = .000^*$ ).

Because the Welch's ANOVA p-value of each variable was less than the significance level, which means that some of the pair-group means were different, the differences of means were examined to determine whether the mean difference between specific pair groups was statistically significant and to estimate how much they were different by using the Games-Howell post-hoc test.

The results found that undergraduate students who are male and female had different attitude mean scores towards gender restriction, gender attribute, and gender domination at a statistical significance level of .05. Besides, the undergraduate students who are male and non-binary had different attitude mean scores towards gender restriction, gender attribute, and gender domination at a statistical significance level of .05. However, there was no statistically significant difference between the female and non-binary undergraduate students' attitude mean scores towards gender restriction, gender attribute, and gender domination at .05.

The results found that undergraduate students who are male and female had different attitude mean scores towards gender equality at a statistical significance level of .05. In addition, the undergraduate students who are male and non-binary had different attitude mean scores towards gender equality at a statistical significance level of .05.

Nevertheless, there was no statistically significant difference between the female and non-binary undergraduate students' attitude mean scores towards gender equality at .05.

## Discussion

In regards to the finding, it revealed that female and non-binary undergraduate students had a lower attitude towards gender restriction than male undergraduate students. That might be because of the influence of gender norms. Gender norms are societal expectations and rules that specify how the gender identity of girls, boys, women, and men is expected to behave in accordance with their gender in society (United Way of the National Capital Area, 2023). One way in which socialization results in the internalization of macro-level gender norms is through housework. Socialization begins at a young age, resulting in differences in the interests, identities, and preferences of men and women, as well as between boys and girls (Cunningham 2001). Similar to research by Cerrato and Cifre (2018), which supported that there was unequal participation in household work, women are more likely to do housework than men, approximately 2.6 times more than men in the UK (McMunn, 2019). Besides, girls of all ages in sub-Saharan Africa and Western Asia are more likely than boys to be denied an education (Save the Children, 2024). Therefore, women and girls suffered more from these gender restrictions than men or boys.

This study showed that female and non-binary undergraduate students had a

lower attitude towards gender attribute than male undergraduate students. That might be because of the influence of gender roles. In Thailand, girls and women are frequently portrayed as having fewer roles, responsibilities, functions, and activities than men. Women are limited to being wives and playing little roles in society, while men are shown as having leadership and professional duties (Tansanguanwong, 2015). Beaver et al. (2019) explained that attitude towards masculinity is changing. Twelve percent of females in the UK disagreed that a man who takes care of and looks after a child is not masculine. However, Eighty-four percent of Korean women agreed that a man who stays home and takes care of a child is less of a man. Therefore, women and girls feel more confined to gender roles than men or boys.

This study revealed that female and non-binary undergraduate students had a lower attitude towards gender domination than male undergraduate students. That might be because Thailand is a country with a masculine culture. The concept of masculinity is a socially constructed set of behaviors inside a gender relations system based on unequal power dynamics between men and women (Connell, 1987 cited in Fahlberg & Pepper, 2016). Males must actively strive to maintain their dominating position in the gender hierarchy, as they profit from the patriarchal systems that control modern society (Connell & Messerschmidt, 2005).

In regards to the study by Anaba et al. (2021), its results demonstrated that wife

beating is considered intimate partner violence. Armenians and sub-Saharan Africans tend to accept wife-beating. Poverty, male-dominated society, marriage-related norms, and family structures seem to be factors that force women to accept or support wife-beating. Therefore, females and non-binaries who are the victims of what males have done, feel more unsatisfied with the gender domination than males, and it seems somewhat more normal for males.

This study found that female and non-binary undergraduate students had a higher attitude towards gender equality than male undergraduate students. This indicates that females and non-binaries tend to be more concerned about gender equality. The research by Jha et al. (2020), which found that female students had a better attitude toward gender equality than male students, confirms this result. Equivalently, the study by Orfan and Samady (2023), showed that female students' mean score for all the positive statements of gender equality is higher than male students, and the mean value for negative statements of gender equality tends to be lower than male students. That might be because women and non-binaries are faced with more gender inequality than men, such as situations of health care and gender violence for women (Jha et al., 2020), and victims of violence and mistreatment in school for non-binaries (James et al., 2016).

Lastly, this study showed that female and non-binary undergraduate students were not different in attitudes towards gender restriction, gender attribute, gender

domination, and gender equality. That might be because some non-binary students perceive femininity and/or masculineness in themselves; besides, some of them might perceive no specific gender at all (Schudson & Morgenroth, 2022). Both female and non-binary students might share the same attitude, as the result of the survey in New Zealand showed that females mentioned that when they were with non-binaries, they felt comfortable with them (Kalafatelis & Wood, 2021). Moreover, one study suggested that being androgynous, that is, neither feminine nor masculine, was advantageous for the growth of gender equality awareness (Li et al., 2022).

### Conclusion

In conclusion, because most studies in Thailand did not focus on the attitude of Thais towards gender equality and there is no study focusing on the difference in attitudes towards gender equality among males, females, and non-binary genders, this study aimed to bridge these research gaps by exploring differences among male, female, and non-binary undergraduate students' attitudes towards gender equality.

The results revealed that male undergraduate students had a high attitude towards gender equality, while female and non-binary undergraduate students had strongly high attitudes towards gender equality. Moreover, it was found that undergraduate students of all three genders had attitudes towards gender attribute higher

than their attitudes towards gender restriction and gender denomination.

The comparison of attitudes towards gender equality and its domains revealed that female and nonbinary undergraduate students significantly had lower attitude towards gender restriction, gender attribute, and gender domination than those of male undergraduate students. Hence, female and non-binary undergraduate students significantly had higher attitude towards gender equality than male undergraduate students. Nevertheless, there was no significant difference between the female and non-binary undergraduate students' attitude towards gender equality, including its three domains: gender restriction, gender attribute, and gender domination.

The results enhance the knowledge in gender studies focusing on attitude towards gender equality of Thai undergraduate students, such as unequal levels of attitude towards gender equality between male undergraduate students and female and non-binary undergraduate students. Moreover, the gender attribute domain is a variable that should be first focused on in order to improve attitudes towards gender equality of all three genders.

### Limitations and Recommendations

The sample size was small. It may prevent the results from being extrapolated. Furthermore, this investigation only employed the quantitative method, which may not be able to get insight into attitudes and opinions.



Hence, the qualitative method might be an effective tool to address how and why females and non-binaries are likely to be concerned about gender equality. Lastly, this study only explored differences among the attitudes of male, female, and non-binary undergraduate students towards gender equality. Future research may focus on exploring socioeconomic and cultural factors that can have an impact on people's attitudes. This study's findings revealed that there is still a gap in attitudes towards gender equality between male undergraduate students, and female and non-binary undergraduate students. Hence, profit and non-profit organizations may have to come up with campaigns which can promote gender equality. Large-scale media

can be used as medium to spread out to target audiences. Public events and social media seem to be the effective tool to communicate with young generations. Community based initiatives in local context may be able to mobilize and promote gender equality. Using aspirational reference groups or celebrity appeals might be applied to influence people's attitudes. These people are seen as role models. Thus, young generations are likely to follow and admire these behaviors. Lastly, the Thai government may consider new policies, regulations, or facilities that support gender equality such as equal rights, responsibilities, and opportunities for all genders.

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