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ABSTRACT

Previous literature has found that, among other religions, Buddhism tends to be relatively less discriminatory against members of the LGBT community. However, this assessment is based solely on cross-country comparisons rather than analyses of discrimination at the individual level. The present study therefore uses an individual-level dataset that comprises a national representative sample of 27,855 observations to examine discrimination against LGBT people in Thailand, as a case study of such discrimination in a Buddhist country. It also examines the influence of Buddhist thoughts concerning prosocial behavior and positive emotions, which might be expected to reduce LGBT discrimination. Using an order-probit model, we find that while those who practice Buddhism tend to discriminate against members of this community less than do adherents of other religions, older generations tend to discriminate against LGBT people more than do their younger counterparts. Buddhist teachings regarding prosocial behavior such as reciprocating benefactors and donating money and goods as well as fostering positive emotions such as sincerely forgiving others and feeling gratified after helping others tend to reduce discrimination against LGBT individuals.

Introduction

Attitudes and perceptions matter in terms of social inclusion because people act based on how they feel and think (Warneken & Tomasello, 2006). Several recent studies have traced the changes in attitudes toward members of the lesbian, gay, bisexual and transgender (LGBT) community worldwide.[1] Globally, a study in 174 countries from 1981 to 2017 shows that the level of acceptance of LGBT people has increased over time (Eisenberg, 1982; Eisenberg & Fabes, 1998; Flores, 2019), not only in developed countries but in developing countries as well (Gerson & Neilson, 2014; Hadler & Symons, 2018; Henshaw, 2014; Jäckle & Wenzelburger, 2015; Jackson, 1995, 1998; Janssen & Scheepers, 2018; Kenny & Patel, 2017).

Nevertheless, the levels of acceptance of LGBT people in both developed and developing countries varies according to the level of economic development. Residents in countries with higher economic development are found to be more accepting of LGBT persons than are those who live in countries with lower economic development.[2] Many researches have repeatedly discovered that attitudes toward LGBT individuals are mainly associated with socioeconomic factors such as gender, age, level of education, occupation, and religion.[3] For example, as for gender, men are more likely than women to reject LGBT people.[4] The older generation also tends to be less accepting than is the younger generation.[5] People with less education tend to discriminate more than do those with more education.[6] As for income status, lower-income people tend to be less accepting than are higher-income people, and those who are single tend to be more accepting than those who are married or widowed.[7] Married people seem to be more accepting of homosexuality than are unmarried people while those with more children tend to be more accepting than those without children. Regarding employment status, self-employed persons tend to have lower homonegativity than do retirees, housewives, and the unemployed (Jäckle & Wenzelburger, 2015).[8]

Among such socioeconomic factors, religion plays one of the most important roles in forming attitudes toward LGBT people (Jäckle & Wenzelburger, 2015; Rowat et al., 2006). For example, a study using cross-country data from 37 countries tested the levels of religious belief and tolerance toward homosexuality and found that high levels of religious belief created a significant a Rowatnd negative impact on attitudes toward homosexuality (Gerson & Neilson, 2014; Hadler & Symons, 2018; Henshaw, 2014). Another study, which used cross-country three-wave data, confirmed that religious groups were less accepting of homosexuality than were groups without religious affiliations (Gerson & Neilson, 2014; Hadler & Symons, 2018).

Comparisons among different religions indicated that Muslims were least accepting of homosexuality, followed by Hindus, Christians, Jews, and, lastly, Buddhists (Adamczyk & Pitt, 2009; Janssen & Scheepers, 2018).

Furthermore, another study found a strong relationship between religiosity and attitudes toward homosexuality. Using cross-country data, researchers, who collected data from two waves of the World Values Survey (1999–2004, 2005–2009) and used multilevel analysis of 79 countries, found that people who attributed great importance to God in their lives or who described themselves as religious were more homonegative than those who were not. In terms of homonegative ranking, Islam turned out to be the most homonegative while Buddhism, Taoism, and Confucianism were the least. This confirms that Muslims and Christians are more homonegative than Buddhists (Jäckle & Wenzelburger, 2015).

While studies of the impacts of religiosity on LGBT discrimination, such as those mentioned above, find that Buddhism tends to be more accepting of LGBT individuals than are other religions, those studies relied on cross-country comparisons, which are not subtle enough to capture variables related to individuals' attitudes and religious teachings in each region that affect homonegativity in different ways. Since there is as yet no study investigating this relationship between religious doctrine and individuals' attitudes in various geographical regions, further investigation is necessary.

One of the reasons that might explain Buddhism's least homonegative ranking among other religions is the compassion promoted within Buddhist teachings, which fosters prosocial behavior and positive emotions. Prosocial behavior is a form of social behavior that benefits others whether motivated by positive or negative external or internal forces or with or without intention (Eisenberg, 1982; Eisenberg & Fabes, 1998). For example, actions that involve helping, sharing and comforting, volunteering, and donating are all considered prosocial behavior.[9] And positive emotions include sincerely forgiving others, empathy for others, and feeling happy when helping others.

Thus, the present study examines whether individuals' socioeconomic profiles influence their possible discriminatory attitudes against LGBT people in a Buddhist country. Thailand was therefore chosen as a case study since it is the second most predominantly Buddhist country, with about 93.2% of its population Buddhist (after Cambodia, with 96.9% Buddhist).[10] Even though Thailand is currently in the process of implementing legal same-sex unions, previous surveys show that while Thai people may be tolerant toward LGBT people, they may still not yet fully accept them (Suriyasarn, 2014). This is borne out by the fact that some LGBT groups continue to experience discrimination. Many gays and lesbians still feel the need to hide their true sexuality either at home, in school or in the workplace as they have to conform to their expected gender roles. However, transgender women and men whose sexual transition is complete or near complete and whose appearance and behavior are most like those of naturally born women and men tend to enjoy more tolerance and acceptance (Suriyasarn, 2014).

To investigate these phenomena, this study aims therefore to measure LGBT discrimination in Thailand as case study of a Buddhist country. We make use of a nationally representative data from the Survey on Conditions of Society, Culture and Mental Health in Thailand, which was conducted by the Thailand National Statistical Office in 2018. The dataset contains a nationally representative sample that covers 27,855 Thai people aged 13 and over. And, to investigate the role of Buddhism on LGBT discrimination, this study also aims to discover the influence of Buddhist doctrine in terms of prosocial behavior and individuals' positive emotions on LGBT discrimination.

This present study consists of five sections. The next section presents a literature review on Buddhism and attitudes toward LGBT people and includes a discussion of Buddhist teachings, prosocial behavior, and positive emotions. Section 3 explains the dataset. Section 4 conducts an econometrics estimation that examines the impact of individual factors, prosocial behavior, and positive emotions on LGBT discrimination among Thai people. And Section 5 provides a conclusion and policy recommendations.

Buddhism and attitudes toward LGBT: Literatures and concepts

Although Buddhism does not believe in a creator god, in the past many traditional Buddhist countries adopted Western views, which include negative attitudes on homosexuality (Vermeulen, 2017). However, existing research has demonstrated that Buddhism tends to be relatively less discriminatory toward LGBT people (Adamczyk & Pitt, 2009; Jäckle & Wenzelburger, 2015). A study of Buddhism and homosexuality in four Buddhist countries (India, China, Japan, and Tibet) provides substantial reasons to support the position that Buddhist doctrine is essentially neutral on the question of homosexuality (Cabezón, 1993).[11]

There are five major Buddhist precepts, which are: not taking life of a living being, not taking what is not given, not engaging in sexual misconduct, not engaging in false and idle speech, and not consuming alcohol and intoxicants. They aim at preventing people from harming themselves and others (Ariyabuddhiphongs & Jaiwong, 2010). The precept regarding sexual misconduct stipulates the types of sexual misconduct that should be avoided by lay people, monks, and nuns. As for homosexuality, Buddhist doctrine explains that it is the karmic consequence of past sexual misconduct but that it is not sinful in itself and does not have future karmic consequences (Jackson, 1995).

Since from the Buddhist point of view homosexuality is the karmic result of sexual misconduct in previous lifetimes, Thai Buddhists are enjoined not to criticize homosexuals but rather to treat them with compassion or *karuṇā* (Jackson, 1998), which is a key Buddhist precept. There are four such precepts or sublime states (Brahma-*vihāra*) in Buddhist teachings: *mettā* (exhibiting love or loving-kindness toward all beings equally without discrimination), *karuṇā* (showing compassion to all), *muditā* (sympathetic joy, rejoicing at the happiness and success of others, and *upekkhā* (equanimity, even-mindedness, steadiness, or equanimity in facing the vicissitudes of life). These four are the correct, righteous ways individuals should conduct themselves toward other living beings. They promote not only harmonious communities but also human brotherhood against the forces of egotism (Nyanaponika, 1999), which Nyanaponika helps reduce discrimination against others.

Some empirical studies explain that Buddhist teachings, such as showing compassion to others, can explain why Buddhists in general tend to tolerate and discriminate less against others. For example, a study testing 116 Western Buddhists who valued universalism found that Buddhist concepts such as compassion, tolerance of contradictions, and oneness with others decreased prejudice not only toward potential ethnic and religious targets but also toward convictional (nonbelievers) and moral (homosexuals) outgroups (Brandt, Chambers, Crawford, Wetherell, & Reyna, 2015; Butrus & Witenberg, 2012; Cabezón, 1993; Chambré & Einolf, 2008; Cheng, 2015, 2018).

Another study, investigating Buddhist attitudes toward homosexual persons and how Buddhist lesbians, gays, and bisexuals (LGBs) accept their sexual orientation, revealed that in a compassionate culture, Buddhists respect and accept LGB people, while Buddhist LGBs cultivate self-acceptance through Buddhist teachings concerning equality, proper interpretation of precepts, and the identification of essence and manifestation. These teachings also encourage inclusiveness (Brandt et al., 2015; Butrus & Witenberg, 2012; Cabezón, 1993; Chambré & Einolf, 2008; Cheng, 2015, 2018).

Moreover, compassion precipitates an effort to help others who are suffering, which eventually leads to finally helping them unconditionally, without any intention of receiving rewards. This is called altruistic behavior (De Steno, 2015). Altruism reduces discrimination toward others in accord with the Buddhist perspective that helping others is following the bodhisattva path, which aims at serving sentient beings through the four sublime states and which is motivated by an enlightened mind. When helping others, Buddhists are concerned not only with their own self-interest but also that of other individuals, society, and their environment—a holistic view that leads to an inclusive society (Brandt et al., 2015; Butrus & Witenberg, 2012; Cabezón, 1993; Chambré & Einolf, 2008; Cheng, 2015).

Previous studies have found that compassion relates to prosocial behavior (Marshall, Ciarrochi, Parker, & Sahdra, 2019; World Bank, 2013; Yang, Guo, Kou, & Liu, 2019), promotes positive emotions (Park, Long, Choe, & Schallert, 2018), and develops positive mental health by ameliorating depression and generating greater life satisfaction (Neff, 2003). In the context of Buddhist's country, Pholphirul (2015) used a household dataset from Thai Buddhists to investigate impacts of both religious and nonreligious giving that leads to a higher happiness level than not giving at all.

However, previous studies have not directly examined the correlation between prosocial behavior and attitude toward discrimination against LGBT people. Although some studies have tested the linkage between openness or empathy, or prosocial behavior and individual attitudes toward human diversity, such as race and homosexuality, they have not done so with regard to discrimination (Butrus & Witenberg, 2012;
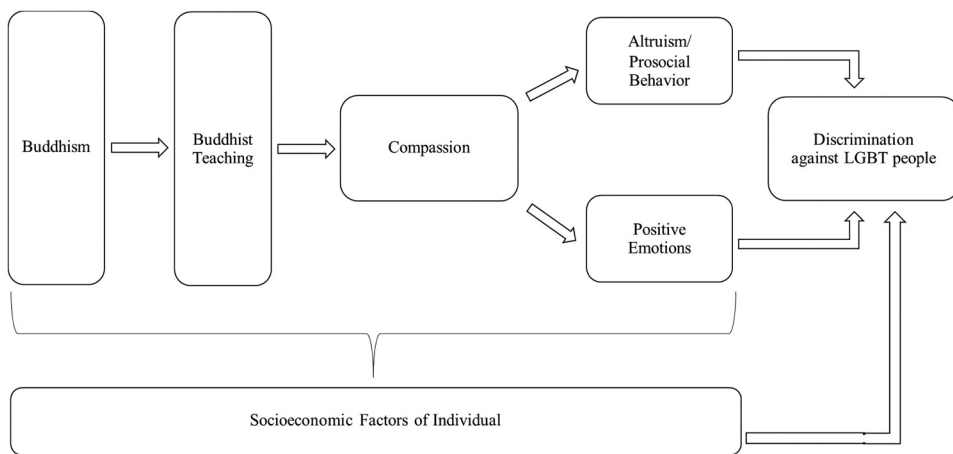
Figure 1. Diagram of Buddhism and discrimination against LGBT people.

Shackelford & Besser, 2007). For example, one study demonstrated that empathy significantly and positively predicted openness to diversity (Gerson & Neilson, 2014) while openness was also found to have a significant positive correlation with tolerance of human diversity in terms of race and ethnicity in the belief dimension. But the important predictor of tolerance in the speech and act dimensions was empathic concern (Butrus & Witenberg, 2012).

A test of the relationship between openness and tolerance toward dissimilar people and ideas also showed that people who were more open appeared to be more tolerant of diverse worldviews compared with people who were less open. However, people of both high and low openness were more intolerant of groups whose worldviews conflicted with their own (Brandt et al. (2015). More importantly, people who scored higher on the personality dimension of openness tended to have a less negative attitude toward homosexuality (Shackelford & Besser, 2007). Figure 1 presents framework of statements above.

Data

The present study investigates individual-level data that include socioeconomic factors, prosocial behavior, and positive emotions that influence discrimination against LGBT people in Thailand. This serves as a case study for a Buddhist country where most of the population are Buddhists. The dataset of this present study was obtained from the Survey on Conditions of Society, Culture and Mental Health in Thailand, which was conducted by the Thailand's National Statistical Office in 2018. The dataset is a national representative sample that covers approximately 27,855 Thai people aged 13 and

over. In this present study, the dataset collected attitudes toward four groups of LGBTs: 1) transgender men, 2) transgender women, 3) gays, and 4) lesbians.[12]

As shown in Table 1, the dataset includes 39.1% male and 60.9% female respondents. According to the definition of generations, 4.1% of all respondents were from Generation Z (13–21 years old), 16.0% were Millennials (22–37), 33.6% were Generation X (38–53), 36.9% were Baby Boomers (54–72), and 9.4% belonged to the Silent Generation (73 years and above). The majority of participants had completed primary-secondary school (59.9%), followed by those who had completed high school (16.2%), the uneducated (12.5%), and at those with at least some college education (11.4%). Regarding marital status, the majority were married (64.6%), 20.8% were divorced/separated/widowed and 14.6% were single. The majority of respondents were Buddhists (93.2%) while 6.8% belonged to other religions. In terms of occupation, 32.3% were unemployed, 25.6% were farmers, 13.7% were salespersons/service workers, 11.8% were factory workers, 6.4% were crafts workers, 3.6% were professionals, 2.3% were technicians, 2.2% were clerks, and 2.1% were judges/executive public servants/managers. As for residence, 4.7% lived in Bangkok, 27.4% in the central region, 24.7% in the northern region, 26.5% in the northeastern region, and 16.7% in the southern region. Male respondents seemed to discriminate against transgender women, transgender men, gays, and lesbians by 38.4%, 38.4%, 49.4%, and 47.2%, respectively. These rates are slightly higher compared with the rates for female respondents as their scores were shown as 37.3%, 37.8%, 49%, and 47.2%, respectively.

Regarding respondents' age or generation, the Silent Generation (aged 73 years and over) discriminated against transgender women, transgender men, gays, and lesbians by 53.1%, 53.7%, 63.9%, and 62.4%, respectively. This Silent Generation discriminated against LGBT people at the highest rates, compared to other age groups. They were followed by the Baby Boomers (aged 54–72), who discriminated against transgender women, transgender men, gays, and lesbians by 44.2%, 44.5%, 55.5%, and 53.9%, respectively. Generation X (aged 38–53) discriminated against transgender women, transgender men, gays, and lesbians by 34.7%, 35%, 46.7%, and 44.5%, respectively. In contrast, Millennials (aged 22–37) discriminated against transgender women, transgender men, gays, and lesbians less, at rates of 24.9%, 25.1%, 35.7%, and 33.1%, respectively Generation Z (13–21) discriminated much less than other groups as their rates of discrimination against transgender women, transgender men, gays, and lesbians were only 19.6%, 19.4%, 29.9%, and 28%, respectively. Overall, this indicates that the younger generations discriminated less against LGBT people than did older generations.

With regard to level of education, uneducated individuals discriminated against transgender women, transgender men, gays, and lesbians by 48.2%, 48.9%, 58.1%, and 56.5%, respectively. This means that those who had not

Table 1. Attitudes toward LGBT people with socioeconomic factors by tabulation.

Variables	Transgender Women			Transgender Men			Gays			Lesbians			Total
	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	
Gender													
Male (39.1 percent)	37.5	24.1	38.4	37.2	24.4	38.4	27.9	22.7	49.4	29.3	23.6	47.2	100
Female (60.9 percent)	39.2	23.4	37.3	38.7	23.5	37.8	29	22.1	49	30.2	22.6	47.2	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100
Age (years)													
13-21: Generation Z (4.1 percent)	54.2	26.3	19.6	54.5	26.1	19.4	44.5	25.5	29.9	45.8	26.2	28	100
22-37: Millennial (16 percent)	49.9	25.2	24.9	49.2	25.7	25.1	39.8	24.5	35.7	41.6	25.2	33.1	100
38-53: Generation X (33.6 percent)	41.3	24	34.7	40.9	24.2	35	30.4	22.8	46.7	31.8	23.6	44.5	100
54-72: Baby Boomer (36.9 percent)	32.8	23	44.2	32.4	23.1	44.5	23.2	21.3	55.5	24.2	21.9	53.9	100
73+: Silent Generation (9.4 percent)	25.1	21.8	53.1	24.5	21.8	53.7	16.7	19.4	63.9	17.8	19.8	62.4	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100
Level of Education													
Uneducated (12.5 percent)	28.8	23.1	48.2	28	23.2	48.9	20.1	21.8	58.1	21.2	22.3	56.5	100
Primary-Secondary school (59.9 percent)	37.1	23.6	39.4	36.7	23.7	39.6	27	22	51	28.3	22.6	49	100
High school (16.2 percent)	45.6	24.5	29.9	45.3	24.9	29.8	34.7	24	41.3	36.5	24.5	39	100
At least college (11.4 percent)	47.2	23.8	29.1	46.5	24.1	29.4	37.1	22.2	40.7	37.9	23.4	38.7	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.6	22.3	49.1	29.9	23	47.2	100
Marital Status													
Single (14.6 percent)	48.3	25.9	25.8	47.7	26.3	26.1	38.5	25.1	36.3	40	25.7	34.3	100
Married (64.6 percent)	38.1	23.1	38.9	37.7	23.3	39	27.9	21.7	50.3	29.2	22.4	48.4	100
Divorced/separated/widowed (20.8 percent)	33.2	24.1	42.6	32.8	23.9	43.2	23.5	22.2	54.3	24.8	22.9	52.4	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100
Religion													
Buddhism (93.2 percent)	40.2	24.2	35.6	39.8	24.4	35.8	29.9	23	47.2	31.2	23.7	45.1	100
Other religions (6.8 percent)	15.3	16.6	68.1	14.9	16.8	68.3	10.5	13.3	76.2	10.8	13.3	75.8	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100
Occupation													
Judge/Executive public servant/Manager (2.1 percent)	43.1	23.9	32.9	42	24.3	33.6	34.4	23.8	41.9	34.7	23.9	41.3	100
Professionals (3.6 percent)	50.6	23.3	26	50.6	23.7	25.7	39.8	21.8	38.4	41	23.2	35.8	100
Technicians (2.3 percent)	47.4	27.2	25.3	46.9	27.6	25.5	38.2	25.7	36.1	39.1	27.4	33.5	100

(Continued)

Table 1. (Continued).

Variables	Transgender Women			Transgender Men			Gays			Lesbians			
	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Total
Clerks (2.2 percent)	47.8	31.7	20.5	46.5	31.2	22.3	41.5	28.4	30.1	42.1	30.6	27.3	100
Sales persons/Service workers (13.65 percent)	42.5	25.4	32.1	42.3	25.7	32	32.8	24.8	42.3	34.4	25.7	39.9	100
Farmers (25.6 percent)	36.6	21.8	41.6	36	21.9	42.1	25.3	19.6	55.1	26.5	20.1	53.4	100
Crafts (6.4 percent)	40.4	23.9	35.7	40.1	24.3	35.6	29	24	47	31	24.4	44.6	100
Factory workers (11.8 percent)	41.7	26.7	31.6	41.4	27	31.6	31.6	26.1	42.3	33.6	26.9	39.5	100
Unemployed (32.3 percent)	34.5	23	42.5	34.1	23	42.9	25.5	21.4	53	26.6	21.9	51.5	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38.1	28.5	22.3	49.2	29.8	23	47.2	100
Region													
Bangkok (4.7 percent)	39.5	27	33.5	39.5	28	32.6	33.4	25.7	40.8	34	27.7	38.2	100
Central (27.4 percent)	41.4	28.2	30.4	41.2	28.5	30.3	31.6	27.6	40.8	33.4	28.5	38.1	100
Northern (24.7 percent)	36.7	24.5	38.9	36.5	24.4	39.1	27.1	21.7	51.2	28.8	22.4	48.9	100
Northeast (26.5 percent)	42.1	19.9	38	41.2	19.9	38.9	29.4	19.3	51.3	30.2	19.6	50.1	100
Southern (16.7 percent)	30.7	20.3	49	30.2	20.5	49.3	22.9	18.5	58.6	23.8	18.9	57.3	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100

Author's Calculation
Data Source: Thailand's National Statistical Office.

obtained formal education discriminated against LGBT people at the highest rates compared to those who attained a higher education. Individuals who had completed primary and secondary schools discriminated against transgender women, transgender men, gays and lesbians by 39.4%, 39.6%, 51%, and 49%, respectively, whereas respondents who had completed high school reportedly discriminated less against transgender women, transgender men, gays, and lesbians: 29.9%, 29.8%, 41.3%, and 39%, respectively.

In terms of marital status, respondents who were divorced or separated or widowed discriminated against transgender women, transgender men, gays, and lesbians by 42.6%, 43.2%, 54.3%, and 52.4%, respectively. This means that divorced or separated or widowed individuals discriminated against LGBT people more than did those with other marital statuses. Individuals who were married discriminated less against transgender women, transgender men, gays, and lesbians, at rates of 38.9%, 39%, 50.3%, and 48.4%, respectively, while single persons discriminated against transgender women, transgender men, gays, and lesbians by 25.8%, 26.1%, 36.4%, and 34.3%, respectively.

As for religion, respondents who were adherents to Buddhism discriminated against transgender women, transgender men, gays, and lesbians by 35.6%, 35.8%, 47.2%, and 45.1%, respectively, which means that they discriminated less against LGBT people than did adherents of other religions, such as Christianity and Islam. Meanwhile, respondents who followed other religions reportedly discriminated against transgender women, transgender men, gays, and lesbians by 68.1%, 68.3%, 76.2%, and 75.8%, respectively, which is relatively high.

In terms of occupations, respondents who were unemployed discriminated against transgender women, transgender men, gays, and lesbians by 42.5%, 42.9%, 53%, and 51.5%, respectively. This group discriminated more against LGBT people than did those from other occupations. This group was followed by farmers, who discriminated against transgender women, transgender men, gays, and lesbians by 41.6%, 42.1%, 55.1%, and 53.4%, respectively. On the contrary, clerks discriminated less against transgender women, transgender men, gays, and lesbians, at rates of 20.5%, 22.3%, 30.1%, and 27.3%, respectively. Technicians discriminated against transgender women, transgender men, gays, and lesbians by 25.3%, 25.5%, 36.1%, and 33.5%, respectively. Professionals discriminated against transgender women, transgender men, gays, and lesbians by 26%, 25.7%, 38.4%, and 35.8%, respectively. Workers who received monthly wages, had steady incomes, and whose jobs were secure discriminated less against LGBT people than did those workers whose wages, jobs, and income were less secure, such as farmers or those who were unemployed.

People living in different regions in Thailand also demonstrated varying takes on discrimination against LGBT people. Compared to other regions, residents in the southern region discriminated more against transgender

women, transgender men, gays, and lesbians, at rates of 49%, 49.3%, 58.6%, and 57.3%, respectively. The southern region is predominantly occupied by Muslims, who, according to the Thailand National Statistical Office, in 2018 comprised 5.4% of the Thai population. Residents in Bangkok, the capital, on the other hand, discriminated less against transgender women, transgender men, gays, and lesbians, at rates of 33.5%, 32.6%, 40.8%, and 38.2%, respectively. Meanwhile, residents in the central region discriminated against transgender women, transgender men, gays, and lesbians by 30.4%, 30.3%, 40.8%, and 38.1%, respectively, while those in the northern region discriminated against transgender women, transgender men, gays, and lesbians by 38.9%, 39.1%, 51.2%, and 48.9%, respectively. And residents in the northeast region discriminated against transgender women, transgender men, gays and lesbians by 38%, 38.9%, 51.3%, and 50.1%, respectively.

Furthermore, Table 2 presents the individual factors that influence the attitudes of respondents toward LGBT people. Two groups of factors were studied. First is the prosocial behavior group, which includes helping others, reciprocating benefactors, volunteering, donating money and goods, and helping others when there are opportunities to do so. Second are positive emotions, which include sincerely forgiving others, showing empathy with others, and being happy when helping others.

By tabulation, Table 2 indicates that when it comes to prosocial behavior, it is not clear whether people who help others accept or discriminate against transgender women and transgender men. However, they are shown to be more likely to discriminate against gays and lesbians. A similar pattern of discrimination against transgender women, transgender men, gays, and lesbians can be seen among people who reciprocate benefactors, volunteer, donate money and goods, and help others when there are opportunities to do so.

As for positive emotions, it is not clear whether people who sincerely forgive others accept or discriminate against transgender women and transgender men. However, these people are more likely to discriminate against gays and lesbians. These patterns of discrimination against transgender women, transgender men, gays, and lesbians occur in a similar manner among respondents who have empathy with others and those who are happy when helping others.

However, the analysis of discrimination against LGBT people in Thailand by tabulation above may reflect bias in the results. This is because the descriptive statistics did not control socioeconomic factors such as gender, age, and level of education. Therefore, in the next step, we investigate the socioeconomic factors, prosocial behavior, and positive emotions that influence discrimination against LGBT people via an econometrics estimation to control socioeconomic factors of individuals and prevent individual bias.

Table 2. Attitudes toward LGBT people with prosocial behavior and positive emotions factors by tabulation.

Variables	Transgender Women			Transgender Men			Gays			Lesbians			
	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Total
Frequency of helping others													
Never (7.1 percent)	40.4	27.7	31.9	39.7	27.8	32.5	29	27	44	30.1	27.6	42.3	100
Sometimes (35.6 percent)	38.1	26.4	35.5	37.8	26.7	35.5	28.3	25	46.7	29.9	25.8	44.4	100
Often (57.3 percent)	38.6	21.5	39.9	38.1	21.6	40.3	28.6	20.1	51.3	29.8	20.7	49.5	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100
Frequency of reciprocating benefactors													
Never (2.9 percent)	27.1	35.1	37.8	26.2	35.4	38.4	18.2	32.6	49.3	18.8	33.3	47.9	100
Sometimes (14.6 percent)	33.5	28.4	38.1	33	28.5	38.4	24.9	26.6	48.4	25.8	27.1	47	100
Often (82.4 percent)	39.8	22.5	37.7	39.4	22.6	37.9	29.6	21.2	49.3	30.9	21.9	47.2	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100
Frequency of volunteering													
Never (42.5 percent)	38.3	25.7	36	38	25.9	36.1	28.4	24.1	47.5	29.9	24.9	45.2	100
Sometimes (46.2 percent)	38.8	21.5	39.7	38.4	21.6	40	28.2	19.9	51.9	29.4	20.5	50.1	100
Often (11.3 percent)	40.6	19.5	39.8	39.8	20	40.2	30.9	19.6	49.4	32	20.1	47.9	100
Total (100 percent)	38.8	23.1	38.1	38.4	23.3	38.4	28.6	21.7	49.8	29.9	22.3	47.8	100
Frequency of donating money and goods													
Never (14.9 percent)	34.9	31.2	33.9	34.5	31.7	33.8	25.6	28.5	46	27.2	29.2	43.6	100
Sometimes (68.7 percent)	39	23.6	37.5	38.4	23.7	37.9	28.6	22.1	49.3	29.9	22.8	47.3	100
Often (16.4 percent)	40.1	17.4	42.5	40.1	17.7	42.2	31	17.7	51.3	32.2	18.1	49.6	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100
Frequency of helping others when there are chances													
Never (18.4 percent)	37.6	24.3	38.1	37.2	24.8	37.9	28.3	22.6	49	30	23.3	46.7	100
Sometimes (75.5 percent)	38	23.7	38.3	37.6	23.8	38.7	28	22	50	29.2	22.8	48	100
Often (6.2 percent)	37.5	21.3	41.2	37.4	21.5	41.1	27.4	20.4	52.2	29.1	21	50	100
Total (100 percent)	37.9	23.7	38.5	37.5	23.8	38.7	28	22	50	29.4	22.7	47.9	100
Frequency of sincerely forgiving others													
Never (4.4 percent)	28.3	34.4	37.4	27.9	33.7	38.4	19.8	30.4	49.8	21	31.2	47.8	100
Sometimes (29.7 percent)	37.3	26.1	36.6	37.1	26.3	36.6	27.9	24.9	47.3	29.3	25.8	44.8	100
Often (65.9 percent)	39.8	21.9	38.3	39.2	22.1	38.7	29.4	20.6	49.9	30.7	21.2	48.2	100
Total (100 percent)	38.5	23.7	37.8	38.1	23.9	38	28.5	22.3	49.1	29.8	23	47.2	100
Frequency of empathy with others													

(Continued)

Table 2. (Continued).

Variables	Transgender Women			Transgender Men			Gays			Lesbians			
	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Accept	Neutral	Dis-criminate	Total
Never (15.3 percent)	37.1	25.6	37.3	36.5	26.3	37.2	27.8	23.7	48.5	29.2	24.6	46.2	100
Sometimes (78.3 percent)	37.9	23.5	38.6	37.5	23.6	38.9	27.9	21.9	50.2	29.2	22.7	48.1	100
Often (6.4 percent)	39.6	20.9	39.4	39.6	21.1	39.3	30	18.9	51.1	31.5	19.5	49	100
Total (100 percent)	37.9	23.7	38.5	37.5	23.8	38.7	28	22	50	29.4	22.7	47.9	100
Frequency of being happy when helping others													
Never (11 percent)	35.1	26.5	38.3	34.9	27.2	37.9	26.3	24.6	49.1	27.6	25.2	47.2	100
Sometimes (79.4 percent)	38	23.4	38.6	37.6	23.5	38.9	28.1	21.7	50.1	29.4	22.5	48	100
Often (9.6 percent)	40.2	22.5	37.3	39.5	22.3	38.2	29.1	21.1	49.8	30.7	21.8	47.4	100
Total (100 percent)	37.9	23.7	38.5	37.5	23.8	38.7	28	22	50	29.4	22.7	47.9	100

Author's Calculation
Data Source: Thailand's National Statistical Office.

Econometrics estimation

This study adopts an econometrics model to quantitatively test the effects of socioeconomic factors, prosocial behavior, and positive emotions of individuals on discrimination against LGBT people. The independent variables include socioeconomic factors such as gender, age group, education level, marital status, nationality, religion, occupation, and region, as well as prosocial behavior and positive emotions. Prosocial behavior and positive emotions are classified according to three levels, namely, never, sometimes, and often. Prosocial behavior refers to activities that involve helping and volunteering. These include helping others, reciprocating benefactors, volunteering, donating money and goods, and helping others when an opportunity arises. Positive emotions include sincerely forgiving others, empathy, and being happy when helping others.

The dependent variable is the attitude of individuals toward members of the LGBT community, which is classified into three levels: acceptance = 1, neutrality = 2, and discrimination = 3. Due to this kind of dependent variable, the model estimation in this study is therefore based on the ordered probit model, which is used in cases where there are more than two outcomes of the ordinal dependent variable. After running the ordered probit model, "marginal effects" are estimated to determine the "probability of discrimination" against LGBTs among the Thai population.

Table 3 consists of eight models. The first four models show estimations of 1) transgender men, 2) transgender women, 3) gays, and 4) lesbians, respectively, by including socioeconomic variables and prosocial behavior variables. Models 5–8 also show estimations of transgender men, transgender women, gays, and lesbians, respectively, by including socioeconomic variables and positive emotion variables.

Our estimations show that the probability of males discriminating against LGBT people is about 1.6–2.5% more than it is for females. Males' probability of discriminating against transgender women was rated the highest, yet their probability to discriminate lesbians was rated the lowest.

With regard to level of education, highly educated people had a lower probability of discriminating against LGBTs than did those with less education. This implies that those who completed primary-secondary school had less probability of discriminating against LGBT people than did those who were uneducated. Compared to uneducated one, those who completed high school have a lower probability of discriminating against LGBT people by 3.4–5% and those with primary-secondary school educational also have lower probability to discriminate against LGBT people by 4.7–7.6%. Those who finished at least a college degree exhibited less discrimination against LGBTs with statistically significant scores of 4.9–8.8%.

Table 3. Estimated results of probability of discrimination against LGBT classified by LGBT type (The marginal effects).

Variables	(1) Transgender Women	(2) Transgender Wen	(3) Gays	(4) Lesbians	(5) Transgender Women	(6) Transgender Men	(7) Gays	(8) Lesbians
Gender (Reference: Female)								
Male	0.024***	0.021***	0.019***	0.016**	0.025***	0.022***	0.021***	0.018**
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Age (Reference: 13–21 years group, Generation Z)								
22–37 years: Millennial	0.049***	0.065***	0.056***	0.053**	0.049***	0.063***	0.051**	0.046***
	(0.018)	(0.018)	(0.022)	(0.021)	(0.017)	(0.017)	(0.021)	(0.020)
38–53 years: Generation X	0.125***	0.136***	0.143***	0.143***	0.130***	0.140***	0.140***	0.141***
	(0.018)	(0.018)	(0.022)	(0.021)	(0.017)	(0.017)	(0.021)	(0.020)
54–72 years: Baby Boomer	0.206***	0.217***	0.221***	0.226***	0.211***	0.221***	0.217***	0.224***
	(0.018)	(0.018)	(0.022)	(0.021)	(0.017)	(0.017)	(0.021)	(0.020)
73 years up: Silent Generation	0.292***	0.304***	0.302***	0.310***	0.296***	0.307***	0.302***	0.309***
	(0.021)	(0.021)	(0.024)	(0.023)	(0.020)	(0.020)	(0.023)	(0.022)
Education Level (Reference: Uneducated)								
Primary & Secondary school	−0.042***	−0.050***	−0.037***	−0.041***	−0.038***	−0.048***	−0.034***	−0.038***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.010)	(0.010)	(0.011)	(0.011)
High school	−0.068***	−0.076***	−0.048***	−0.052***	−0.063***	−0.073***	−0.047***	−0.050***
	(0.014)	(0.014)	(0.015)	(0.015)	(0.013)	(0.013)	(0.014)	(0.014)
At least college	−0.083***	−0.088***	−0.049***	−0.057***	−0.076***	−0.081***	−0.049***	−0.052***
	(0.016)	(0.016)	(0.017)	(0.017)	(0.015)	(0.015)	(0.016)	(0.016)
Marital Status (Reference: Single)								
Married	0.029***	0.026**	0.034***	0.029**	0.035***	0.031***	0.037***	0.033***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.010)	(0.010)	(0.011)	(0.011)
Divorced/separated/widowed	0.023*	0.023*	0.038***	0.031**	0.027**	0.026**	0.038***	0.034***
	(0.013)	(0.013)	(0.014)	(0.014)	(0.012)	(0.012)	(0.013)	(0.013)
Nationality (Reference: Other Nationalities)								
Thai	−0.019	−0.008	−0.011	−0.023	−0.022	−0.010	−0.008	−0.021
	(0.029)	(0.029)	(0.030)	(0.030)	(0.027)	(0.027)	(0.028)	(0.028)
Religion (Reference: Other Religions)								
Buddhism	−0.286***	−0.283***	−0.267***	−0.284***	−0.296***	−0.293***	−0.279***	−0.295***
	(0.015)	(0.015)	(0.014)	(0.014)	(0.014)	(0.014)	(0.013)	(0.013)
Occupation (Reference: Judge, Executive public servant, and Manager)								
Professionals	−0.017	−0.031	−0.007	−0.017	−0.018	−0.032	0.001	−0.009

(Continued)

Table 3. (Continued).

Variables	(1) Transgender Women	(2) Transgender Wen	(3) Gays	(4) Lesbians	(5) Transgender Women	(6) Transgender Men	(7) Gays	(8) Lesbians
Technicians	−0.035	−0.041	−0.035	−0.039	−0.030	−0.038	−0.026	−0.029
	(0.031)	(0.031)	(0.034)	(0.033)	(0.030)	(0.030)	(0.031)	(0.031)
Clerks	−0.033	−0.032	−0.048	−0.059*	−0.025	−0.024	−0.031	−0.047
	(0.033)	(0.033)	(0.035)	(0.034)	(0.031)	(0.031)	(0.033)	(0.032)
Sales Persons & Service Workers	0.002	−0.008	0.013	0.001	−0.003	−0.011	0.018	0.007
	(0.024)	(0.024)	(0.025)	(0.025)	(0.023)	(0.023)	(0.024)	(0.024)
Farmers	0.022	0.017	0.065***	0.053**	0.025	0.021	0.076***	0.064***
	(0.024)	(0.024)	(0.025)	(0.025)	(0.023)	(0.023)	(0.024)	(0.024)
Crafts	0.023	0.014	0.050*	0.043	0.015	0.008	0.052**	0.043*
	(0.026)	(0.026)	(0.028)	(0.027)	(0.025)	(0.025)	(0.026)	(0.026)
Factory Workers	0.008	0.003	0.029	0.012	0.003	−0.002	0.034	0.018
	(0.025)	(0.025)	(0.026)	(0.026)	(0.024)	(0.024)	(0.025)	(0.025)
Unemployed	0.034	0.027	0.050**	0.040	0.035	0.030	0.062***	0.051**
	(0.024)	(0.024)	(0.025)	(0.025)	(0.022)	(0.023)	(0.024)	(0.024)
Municipal area (Reference: Within municipal area)								
Outside municipal area	−0.005	−0.009	−0.000	−0.004	−0.006	−0.007	−0.001	−0.004
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Region (Reference: Southern)								
Bangkok	−0.003	−0.012	−0.046**	−0.051***	−0.023	−0.033*	−0.048***	−0.054***
	(0.019)	(0.019)	(0.020)	(0.019)	(0.017)	(0.017)	(0.018)	(0.018)
Central	−0.083***	−0.085***	−0.075***	−0.083***	−0.083***	−0.086***	−0.077***	−0.085***
	(0.011)	(0.011)	(0.012)	(0.012)	(0.011)	(0.011)	(0.011)	(0.011)
Northern	−0.034***	−0.036***	−0.021*	−0.029**	−0.030***	−0.033***	−0.016	−0.024**
	(0.011)	(0.011)	(0.012)	(0.012)	(0.011)	(0.011)	(0.011)	(0.011)
Northeast	−0.069***	−0.065***	−0.034***	−0.032***	−0.065***	−0.062***	−0.031***	−0.027**
	(0.011)	(0.011)	(0.012)	(0.012)	(0.011)	(0.011)	(0.011)	(0.011)
Frequency of helping others (Reference: Never)								
Sometimes	0.029**	0.026*	0.009	0.002	-	-	-	-
	(0.014)	(0.014)	(0.016)	(0.015)	-	-	-	-
Often	0.046***	0.047***	0.035**	0.030*	-	-	-	-
	(0.015)	(0.015)	(0.016)	(0.016)	-	-	-	-
Frequency of reciprocating benefactor (Reference: Never)								

(Continued)

Table 3. (Continued).

Variables	(1) Transgender Women	(2) Transgender Wen	(3) Gays	(4) Lesbians	(5) Transgender Women	(6) Transgender Men	(7) Gays	(8) Lesbians
Sometimes	0.004	−0.001	−0.013	−0.017	-	-	-	-
	(0.022)	(0.022)	(0.023)	(0.023)	-	-	-	-
Often	−0.041*	−0.050**	−0.045**	−0.058***	-	-	-	-
	(0.021)	(0.021)	(0.022)	(0.022)	-	-	-	-
Frequency of volunteering (Reference: Never)								
Sometimes	0.023***	0.024***	0.021***	0.024***	-	-	-	-
	(0.008)	(0.008)	(0.008)	(0.008)	-	-	-	-
Often	0.002	0.009	−0.008	−0.001	-	-	-	-
	(0.012)	(0.012)	(0.013)	(0.013)	-	-	-	-
Frequency of donating money and goods (Reference: Never)								
Sometimes	−0.024**	−0.021**	−0.022**	−0.013	-	-	-	-
	(0.010)	(0.010)	(0.011)	(0.011)	-	-	-	-
Often	−0.015	−0.019	−0.037***	−0.027*	-	-	-	-
	(0.014)	(0.014)	(0.014)	(0.014)	-	-	-	-
Frequency of helping others given the opportunity (Reference: Never)								
Sometimes	−0.008	−0.005	−0.001	0.001	-	-	-	-
	(0.009)	(0.009)	(0.009)	(0.009)	-	-	-	-
Often	−0.003	−0.005	−0.001	0.001	-	-	-	-
	(0.015)	(0.015)	(0.016)	(0.016)	-	-	-	-
Frequency of sincerely forgiving others (Reference: Never)								
Sometimes	-	-	-	-	−0.042***	−0.046***	−0.044***	−0.054***
	-	-	-	-	(0.016)	(0.016)	(0.017)	(0.016)
Often	-	-	-	-	−0.056***	−0.056***	−0.045***	−0.051***
	-	-	-	-	(0.015)	(0.015)	(0.016)	(0.016)
Frequency of empathy with others (Reference: Never)								
Sometimes	-	-	-	-	0.012	0.010	0.013	0.017
	-	-	-	-	(0.011)	(0.011)	(0.011)	(0.011)
Often	-	-	-	-	0.018	0.005	0.009	0.014
	-	-	-	-	(0.018)	(0.018)	(0.019)	(0.019)
Frequency of be happy when helping others (Reference: Never)								
Sometimes	-	-	-	-	−0.025**	−0.019	−0.018	−0.023*
	-	-	-	-	(0.012)	(0.012)	(0.013)	(0.013)
Often	-	-	-	-	−0.046***	−0.031*	−0.021	−0.031*

(*Continued*)

Table 3. (Continued).

Variables	(1) Transgender Women	(2) Transgender Wen	(3) Gays	(4) Lesbians	(5) Transgender Women	(6) Transgender Men	(7) Gays	(8) Lesbians
			-	-	(0.017)	(0.017)	(0.018)	(0.018)
Pseudo R squared	0.0391	0.0393	0.0365	0.0395	0.0406	0.0409	0.0385	0.0416
Observations	16,619	16,619	16,619	16,619	18,093	18,093	18,093	18,093

Author's Calculation
Data Source: Survey on Conditions of Society, Culture and Mental Health in Thailand corrected by Thailand's National Statistical Office.
Italic numbers in parenthesis are standard error *** $p < .01$, ** $p < .05$, * $p < .1$

As for marital status, married respondents had a greater probability of discriminating against LGBT people than did single persons by 2.6–3.7%. Meanwhile, divorced/separated/widowed respondents also had a greater probability of discriminating against LGBT people than did single respondents, with statistically significant scores of 2.3–3.8%.

In terms of occupations, when compared to judges or executive public servants or managers, farmers had a greater probability of discriminating against gays and lesbians, with statistically significant scores of 6.5–7.6% and 5.3–6.4%, respectively. Meanwhile, unemployed people also had a greater probability of discriminating against gays and lesbians, with statistically significant scores of 5.0–6.2% and 5.1%, respectively. These results indicate that worker groups who receive irregular wages are more likely to discriminate against LGBT people than are reference worker groups such as judges or executive public servants or managers, who get their wages through monthly allocations and have secure and stable incomes.

As noted, residents who lived in the central, northern, and northeast regions had a lower probability of discriminating against LGBTs less than did residents who lived in the southern region, with statistically significant scores of 7.5–8.6%, 2.1–3.6%, and 2.7–6.9%, respectively. Residents who lived in Bangkok also had a lower probability of discriminating against transgender men, gays, and lesbians than did southern residents, with statistically significant scores of 3.3%, 4.6–4.8%, and 5.1–5.4%, respectively.

Most importantly however, there are two important socioeconomic factors that influence discrimination against LGBT people, namely, age and religion. Age seems to be an important factor as results show that Silent Generation and discrimination have statistically significant positive relationships when compared with Generation Z, the youngest group. The probability of respondents who belong to the 22–37 year-olds (the Millennials) discriminating against LGBT people is greater than it is for those in the age group of 13–21 years (Generation Z), with their scores placed at only 4.6–6.5%. This trend is also seen for the other age groups, with Generation X, Baby Boomers, and the Silent Generation having a greater probability of discriminating than does Generation Z. Their scores are placed at 12.5–14.3%, 20.6–22.6, percent and 29.2–31%, respectively.

Furthermore, religion is a key factor that influences individuals' discrimination against LGBT people. The probability of persons who follow Buddhism discriminating against LGBT people is less than it is for other religions, such as Islam and Christianity, with statistically significant scores of 26.7 to 29.6%. This marginal effect supports the contention that Buddhists discriminate less against LGBT people than do Muslims and Christians (Adamczyk & Pitt, 2009; Jäckle & Wenzelburger, 2015).

Thus, since the southern region is predominantly Muslim, the probability of more discrimination against LGBT people there than in the other regions in Thailand comes as no surprise. Consistent with findings in previous studies,

while Buddhism may have an influence on lessening discrimination against LGBT people, it is also imperative to examine the prosocial behavior and positive emotions that relate to Buddhist teachings, such as compassion, in order to see whether or not such teachings help decrease discrimination against LGBT people.

Prosocial behavior includes helping others, reciprocating benefactors, volunteering, donating money and goods, and helping others when opportunities arise while positive emotions include sincerely forgiving others, having empathy with others, and being happy when helping others.

Results here reveal that some prosocial behaviors reflect less discrimination against LGBT groups. For example, the probability of respondents who often reciprocate benefactors discriminating against LGBT people is less than it is among those who never do so, with statistically significant scores of 4.1–5.8%. Meanwhile, the probability of respondents who often donate money and goods of discriminating against gays and lesbians is less than it is for those who never do so, with statistically significant scores of 2.7–3.7%, respectively. Conversely, some prosocial behaviors are found to show more discrimination against LGBT groups. For example, the probability of respondents who often help others and those who volunteer sometimes have positive relationships with discrimination against LGBT people. In other words, those people who often and sometimes do these activities have a greater probability of discriminating against LGBTs than do those who never offer such help or volunteer.

For positive emotions, the probability of those who sometimes and often sincerely forgive others to discriminate against LGBT people is less it is for those who never forgive, with statistically significant scores of 4.2–5.4% and 4.5–5.6%, respectively. Furthermore, the probability of those who are often happy when helping others to discriminate against transgender women, transgender men, and lesbians is less than it is for those who never fail to experience such happiness, with statistically significant scores of 4.6, 3.1 and 3.1%, respectively.

Thus, the results of this study confirm that socioeconomic factors of individuals, specifically religion as well as the prosocial behaviors of reciprocating benefactors and donating and the positive emotions of sincerely forgiving others and being happy when helping others have negative relationships with discrimination against LGBT people in Thai society.

Conclusion and policy recommendation

Using cross-country data, many studies have examined religion as a strong predictor of discrimination against LGBT people. Among religions, Buddhism tends to promote acceptance of LGBT people relative to other religions. This study is the first research project that uses an individual-level dataset as a national representative sample, here consisting of 27,855 Thai people aged 13 and over. Our study

aimed at examining the socioeconomic factors of individuals that influence discrimination against LGBT people in Thailand, which is a predominantly Buddhist country. We also examined the influences of prosocial behavior and positive emotions of individuals that relate to Buddhist teachings.

Our results from the ordered probit model suggested that age and religion are important factors that determine an individual's probability to discriminate against LGBT people. For example, the probability to discriminate against LGBTs among Buddhists is less than it is for adherents of other religions. In terms of age, older generations tend to discriminate against LGBT people more than do their younger counterparts. Prosocial behaviors such as reciprocating benefactors and donating money and goods, and positive emotions such as sincerely forgiving others and being happy when helping others are qualities that reduce people's discrimination against LGBTs in Thai society.

Given these facts, it is our intention here to promote understanding and awareness about diversity in society through programs or projects that educate not only school children and adolescents but, more importantly, adults and older people also. As shown in the results, the older generation tends to have difficulty accepting the preferences and actuations of LGBT individuals. Thus, a more massive and in-depth information drive should be implemented so as to help them widen their perspectives about the members of this community. We acknowledge that changing this perspective is not a one-time thing; it accordingly needs a thorough social reformation starting from smaller social units such as families and schools to wider scopes such as in workplaces, religious institutions, and media. Changing social attitudes takes time. Thus tackling this issue step by step will eventually lead to the aspired reformation, which is for the LGBT people to be less discriminated against in society.

Interestingly however, the promotion of prosocial behavior and positive emotions should also be encouraged as they are perceived to be the seeds of acceptance toward diversity in a society where people of all gender preferences, religious affiliations, and socioeconomic statuses live together in harmony.

However this study also has certain limitations from this analysis. First, since this survey data comes from self-reporting, which can often be unreliable as there are many factors that can distort a person's self-perception, such as their attitude toward life, their mind-set, or their life experiences that are not included in survey. In addition, econometrics analysis cannot control many important variables such as the "income variable." Thus, inability to include many factors may have created an "omitted-variable bias" that cause bias toward the results.[13] Second, it is also possible that cause an "endogeneity bias."[14] For example, those who discriminate more tend to conceptualize their behavior as "helping others" because they are so discriminatory that they do not think others deserve kindness to begin with. On the other hand, people who devote their lives to helping others often feel that, nevertheless, they have not done enough for others. Therefore, it is suggested that in order to improve

the econometrics estimation, controlling the independent variables as well as using the instrumental variable (IV) technique should be considered in future studies.

Notes

1. For example, Adamczyk and Pitt (2009), Andersen and Fetner (2008), Eisenberg (1982), Eisenberg and Fabes (1998), Flores (2019), Neff (2003), Nyanaponika (1999), Park et al. (2018).
2. For example, Neff (2003), Nyanaponika (1999), Park et al. (2018), Shackelford and Besser (2007), Slenders, Sieben, and Verbakel (2014), Štulhofer and Rimac (2009), and Gerhards (2007, 2010).
3. For example, Shackelford and Besser (2007), Slenders et al. (2014), Neff (2003), Nyanaponika (1999), Park et al. (2018), and Jäckle and Wenzelburger (2015).
4. For example, Shackelford and Besser (2007), Slenders et al. (2014), Neff (2003), Nyanaponika (1999), Park et al. (2018), Jäckle and Wenzelburger (2015), and Janssen and Scheepers (2018).
5. Shackelford and Besser (2007), Slenders et al. (2014), Gerson and Neilson (2014), Hadler and Symons (2018), Jäckle and Wenzelburger (2015), Neff (2003), Nyanaponika (1999), Park et al. (2018), and Janssen and Scheepers (2018).
6. For example, Shackelford and Besser (2007), Slenders et al. (2014), Neff (2003), Nyanaponika (1999), Park et al. (2018), La Roi and Mandemakers (2018), Gerson and Neilson (2014), Hadler and Symons (2018), and Janssen and Scheepers (2018).
7. For example, Shackelford and Besser (2007), Slenders et al. (2014), and Janssen and Scheepers (2018).
8. Homonegative is a negative attitude toward homosexuality or gays and lesbians, excluding transgender individuals and bisexuals. Previous researchers have studied public attitudes toward different sexual orientations and gender identities by using the term "homosexuality" over the past several years.
9. For example, Warneken and Tomasello (2006), Dunfield, Kuhlmeier, O'Connell, and Kelley (2011), Dunfield (2014), Svetlova, Nichols, and Brownell (2010), Chambré and Einolf (2008), and Meier and Stutzer (2008).
10. https://en.wikipedia.org/wiki/Buddhism_by_country
11. There are three main types of Buddhism:

- Theravada Buddhism: Prevalent in Thailand, Sri Lanka, Cambodia, Laos and Burma
- Mahayana Buddhism: Prevalent in China, Japan, Taiwan, Korea, Singapore, and Vietnam
- Tibetan Buddhism: Prevalent in Tibet, Nepal, Mongolia, Bhutan, and parts of Russia and northern India

   Each of these types reveres certain texts and has slightly different interpretations of Buddha's teachings. There are also several subsects of Buddhism, including Zen Buddhism and Nirvana Buddhism.

12. However, when speaking of discrimination against sexual orientation and gender identity, typically it includes all of the members of the LGBT community. Hence, the present study construes that examining discrimination toward transgender men, transgender women, gays, and lesbians is also examining discrimination against the whole of the LGBT community.

13. In statistics, omitted-variable bias (OVB) occurs when a statistical model leaves out one or more relevant variables. The bias results in the model attributing the effect of the missing variables to those that were included. More specifically, OVB is the bias that appears in the estimates of parameters in a regression analysis, when the assumed specification is incorrect in that it omits an independent variable that is a determinant of the dependent variable and correlated with one or more of the included independent variables.

14. In econometrics, endogeneity bias broadly refers to situations in which an explanatory variable is correlated with the error term.

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