

Attitudes Toward Lesbian, Gay, and Bisexual Individuals Among Heterosexual Japanese Young Adults¹⁾

Yosuke SATO* and Yoko SAWAMIYA**

This study examined Japanese heterosexual students' attitudes towards LGB (lesbian, gay, and bisexual) people from the perspective of their gender identity and sex role attitudes. Three hundred and twenty-four cisgender and heterosexual undergraduate students (160 male and 164 female) rated their attitudes toward LGBs on 101-point feeling thermometers and completed a questionnaire about their gender identity. The results of an analysis of variance indicated that heterosexual male respondents rated LGBs lower than heterosexual female respondents, and gay men were rated the worst among four sexualities (gay men, lesbian women, bisexual men, and bisexual women). Furthermore, correlation analysis showed that heterosexual males' attitudes toward LGBs were positively associated with their knowledge of lesbian women and gay men and sex role attitudes. These results suggest that heterosexual attitudes toward LGBs vary depending on their target sexuality and that among men, providing knowledge about sexuality and sex roles may be effective in reducing prejudice and discrimination against LGBs.

key words: sexual orientation, stereotype, stigma, sex role, gender identity

Introduction

Over the last few decades, there has been an increase in our understanding of and sensitization toward lesbian women, gay men, and bisexual persons (LGBs) in Japan. In 2015, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) sent a notification titled, "Careful Response to Students with Gender Identity Disorder," to all boards of education. This notification called for school-based responses to sexual minorities, including LGBs. Although same-sex marriage has not yet been legalized in Japan, local governments, such as those in Shibuya and Setagaya, are enacting ordinances equivalent to the partnership system to so-

cially recognize sexual diversity.

However, discrimination and prejudice against LGBs are not a thing of the past, despite the presence of a growing movement to support them. In a survey conducted by Hidaka and Operario (2006) on Japanese men who were gay, bisexual, or questioning their sexual orientation, 83% of the respondents reported experiencing bullying during their school years, and 60% of them had been verbally abused because of their sexual orientation. Thus, it is apparent that LGBs continue to face prejudice and discrimination. Of the respondents, 15% reported suicide attempts in the past, and 70% showed high levels of anxiety. This affirms the contention that social prejudice and discrimination against LGBs

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* Graduate School of Human Sciences, Ritsumeikan University, 2-150 Iwakura-cho, Ibaraki, Osaka, 567-8570, Japan. (yos-sato@fc.ritsumei.ac.jp)

** Department of Clinical Psychology, Tokyo Seitoku University, 1-7-13 Jujodai, Kita-ku, Tokyo, 114-0033, Japan.

pose significant risk to their mental health.

Various international and domestic studies have examined the attitudes of heterosexual individuals toward LGBs. Herek (1988) investigated the attitudes of heterosexual individuals toward lesbian women and gay men and identified the factors that influence them. First, when compared to heterosexual women, heterosexual men held more hostile attitudes toward gay men. Furthermore, these heterosexual attitudes toward lesbian women and gay men were associated with religious beliefs, adherence to traditional ideologies, and prior interactions with lesbian women and gay men. Based on these findings on attitudes toward lesbian women and gay men, Herek (2002) examined heterosexual attitudes toward bisexual individuals and reported similar results in relation to various psychological indicators. Thus, by examining the attitudes of heterosexual individuals toward LGBs in relation to various psychological indicators, we can identify the factors that will contribute to the elimination of prejudice and discrimination against LGBs.

In Japan, Wada (2008) investigated the attitudes of heterosexual men and women toward lesbian women and gay men. In this study, men rated lesbian women and gay men more negatively than women did, and men rated gay men more negatively than they rated lesbian women. Furthermore, it has been reported that men and women who conform to traditional gender types are less favorable toward lesbian women and gay men. The survey also revealed that knowledge about homosexuality is related to attitudes towards gay men and lesbians. Among men, there is a negative correlation with negative feelings towards gay men, and among women, there is a negative correlation with negative feelings and a positive correlation with tolerance, both towards gay men and lesbians. Suzuki and Ikegami (2015) examined the relationship between heterosexual individuals' views of gender and their attitudes toward lesbian women and gay men. Among men, pride in being male was associated with stronger prejudice against lesbian

women and gay men only when they were informed that there are no biological differences between LGBs and heterosexual individuals. However, among women, the higher their gender self-esteem was, the more favorable their attitudes toward lesbian women were. These results suggest that the attitudes of heterosexual individuals toward LGBs are influenced by their personal perceptions of gender.

There are two major issues in the research conducted on Japanese people. First, most scales developed or standardized in Japanese are for lesbian women or gay men; therefore, the available literature on attitudes toward bisexual individuals is much more limited than the evidence related to lesbian women and gay men. However, Bostwick (2012) has suggested that bisexual individuals may experience unique bisexual stigma, which differs from what lesbian women and gay men experience. Bisexual individuals have been found to have higher anxiety and depression levels than gay men and lesbian women (Jorm et al., 2002). Therefore, it would be meaningful to deepen our understanding of bisexual individuals from the perspective of heterosexual attitudes, hitherto unexamined in Japan. Second, many indices of gender in heterosexual individuals have been developed based on the level of conformity to traditional gender types. Sasaki and Ozaki (2007) reinterpreted gender identity as a way of thinking about one's own gender beyond social sex roles, but conventional gender identity assessments measure orientation toward stereotypical sex roles. At present, both men and women have a wider range of choices during their life course. Therefore, it would be helpful to examine the relationship between gender and attitudes toward LGBs in greater detail by questioning not only conformity to stereotypical sex roles but also the nature of one's own gender identity.

Therefore, this study aimed to investigate the attitudes of young heterosexual Japanese people towards LGBs, including not only lesbians and gays but also bisexuals. In doing so, to explore what vari-

ables are associated with attitudes towards LGBs, this study also investigates knowledge about lesbian or gay and the extent of interaction with LGBs, as reported by Herek (1988, 2002) and Wada (2008). Furthermore, the concept of gender identity, which has been examined in relation to attitudes towards LGBs, was analyzed by dividing it into gender roles and one's sense of gender identity. As a result, it is predicted that attitudes toward LGBs show an association with traditional gender roles, but they don't show the conventional correlation with one's sense of gender identity. Additionally, since measuring attitudes towards LGBs, particularly when employing explicit measurement methods, can be influenced by social desirability (Steffens & Preuß, 2020), this study also examines the relationship with social desirability.

Method

Participants

We conducted this study among 543 university students enrolled in universities in Japan. Of these, 356 responses (without missing values) were valid. The participants were categorized based on their gender and sexual orientation. The distribution was as follows: 171 males, 185 females, and 0 intersex (biological sex); 170 men, 183 women, 1 both man and woman, and 2 neither man nor women (gender identity); and 325 heterosexual individuals, 0 gay men or lesbian women, 14 bisexual individuals, and 17 individuals who chose the "none of the above" option (sexual orientation). Whereas 352 individuals were cisgender (i.e., their biological sex and gender identity matched), four were transgender (i.e., their biological sex and gender identity did not match). Since (a) the purpose of this study was to examine heterosexual individuals' attitudes and (b) the number of responses from transgender individuals was too small to make comparisons against cisgender individuals, 324 cisgender heterosexuals (160 males and 164 females; *Mean* age = 19.63, *SD* = 1.40) were included in subsequent analyses. The determination of the sample size was based on a 2-factor ANOVA

considering the respondents' gender (2 groups) and the target sexuality for evaluation (4 groups). The calculations were performed with a significance level of 0.05, a power of 80%, and an effect size of 0.2 for each factor. As a result, the required sample size was found to be 280, and the sample size for this study met this requirement.

Procedure

The survey was conducted between June and July 2017. Questionnaires were distributed, and responses were collected before and after university lecture hours. The cover page of the questionnaire stated clearly that the respondents agreed to participate in the survey by answering the questionnaire. This study was conducted with the approval of the Human Research Ethics Committee of the University of Tsukuba (Assignment Number: 29-80).

Measures

Demographic Variables We asked the respondents to indicate their demographic characteristics such as age, biological sex (male, female, or intersex), gender identity (male, female, transgender, or none of the above), and sexual orientation (heterosexual, lesbian or gay, bisexual, or none of the above).

Attitudes toward LGBs To determine heterosexual individuals' degree of "favorability" or "unfavorability" toward LGBs, we created an emotional thermometer, based on the procedures described by Herek and Capitano (1999) and Herek (2002). The thermometer was calibrated at 0 degrees Celsius. The thermometer was calibrated in 10-degree increments from 0 to 100 degrees, with 100 degrees representing "favorable/warm" feelings and 0 degrees representing "unfavorable/cold" feelings. The questionnaire instructions were as follows: "If you were to use a thermometer to describe your feelings toward LGBs, what temperature would you mark? Please circle the number that applies to you. On the thermometer, the larger the number is, the more favorable/warm your feelings are; the smaller the number is, the more unfavorable/cold your feelings are." To control for the effect of response order

based on gender, we prepared questionnaires with patterns that first asked about men (gay and bisexual men) and others that first asked about women (lesbian and bisexual women), and distributed them randomly.

Gender Identity To measure gender identity, we used the Gender Identity Scale developed by Sasaki and Ozaki (2007). The scale comprises three items on prospective gender identity (e.g., “I am clear about what I want as a woman [or man]”), four items on socio-realistic gender identity (e.g., “I think I can live my own life as a woman [or man] in the real world”), five items on a self-consistent gender identity (e.g., “In the past, I have lost confidence in my gender”), and three items on the consistency between gender identity and other perceptions (e.g., “I feel that my gender as seen by others is not consistent with my true gender”). Factor scores were averaged to compute the scale score. The *Cronbach's alphas* of these factors were as follows: .85 (prospective gender identity), .85 (socio-realistic gender identity), .83 (self-consistent gender identity), and .76 (other-consistent gender identity).

Attitudes Toward Sex Roles To measure attitudes toward equality in sex roles, we used the short form of the Scale of Egalitarian Sex Role Attitudes developed by Suzuki (1994). The scale comprises 15 items and one factor. The item scores were averaged to compute the total score. The *Cronbach's alpha* of the scale was .86.

Degree of Contact and Intimacy with LGBs To measure the frequency of contact and intimacy with LGB parties, the Inclusion of Other in the Self (IOS) Scale (Aron et al., 1992) was used. The IOS Scale has high reliability and validity. In their study, Wright et al. (1997) had used the IOS Scale to measure intimacy with other ethnic groups. Accordingly, we asked the respondents to indicate how many LGB friends they had, and then those who reported having at least one friend were asked to respond to the IOS scale and provide details about their relationship with this friend (this score was an indicator of direct intimacy). Participants were also asked to

indicate how many friends who had LGB friend they had. Those with at least one friend were asked to respond to the IOS Scale and provide details about the relationship with this friend and his/her LGB friends (this score was an indicator of indirect intimacy).

Knowledge about lesbian or gay We used the questionnaire developed by Wada (2008) to assess knowledge about lesbian or gay. The questionnaire comprised 15 items: seven true statements (e.g., “ ‘Homo’ is a discriminatory term”) and eight false statements (e.g., “Most gay men are feminine”). Higher scores indicate more knowledge about lesbian or gay. Each item could be answered as follows: 1 = true, 2 = false, and 3 = do not know. The *Cronbach's alpha* of the scale was .76.

Social Desirability Social desirability influences attitudes toward LGBs. Therefore, we measured social desirability using the Japanese version of the Balanced Social Desirability Response Scale developed by Tani (2008). This scale consists of 24 items: 12 items assess self-deception and another 12 items assess impression manipulation. Higher scores indicate greater responsiveness to social desirability. The *Cronbach's alphas* yielded by the self-deception and impression manipulation scales were .74 and .67, respectively.

Results

Descriptive Statistics

Table 1 presents means and standard deviations for each subscale by gender and the results of *t*-test with each subscale as the dependent variable and gender as the independent variable. Notably, attitudes towards LGBs were not included as a dependent variable in the *t*-tests, as differences based on the respondent's gender and the target sexuality will be examined in a later analysis of variance. The results of the *t*-test showed that males scored lower than females in sex role attitudes and impression operation in social desirability. On the other hand, males scored significantly higher than females in prospective gender identity, socio-realistic gender

Table 1 Descriptive Statistics for each scale

	Mean (SD)		<i>t</i>	Cohen's <i>d</i>
	Male	Female		
Age	19.78 (1.64)	19.49 (1.09)	1.88	
Attitudes toward LGBs				
Gay men	49.50 (20.65)	63.48 (20.74)		
Lesbian women	57.78 (20.12)	64.24 (20.85)		
Bisexual men	55.38 (20.35)	65.37 (19.29)		
Bisexual women	58.69 (21.41)	65.37 (20.56)		
Gender Identity				
Prospective Gender Identity	5.57 (1.20)	5.13 (1.24)	3.21 *	0.38
Socio-realistic Gender Identity	5.91 (1.07)	5.42 (1.08)	4.12 *	0.46
Self-consistent Gender Identity	6.70 (0.61)	6.49 (0.84)	2.47 *	0.27
Other-consistent Gender Identity	6.78 (0.50)	6.64 (0.67)	2.16 *	0.24
Egalitarian Sex Role Attitudes	56.27 (8.54)	60.15 (8.23)	4.16 *	0.46
Interaction and Intimacy with LGBs				
Number of LGB friends	0.45 (0.96)	0.48 (0.98)	0.29	
Direct Intimacy	2.15 (1.46)	2.38 (1.43)	0.74	
Number of friends who have LGB friends	1.42 (10.07)	0.51 (1.34)	1.14	
Indirect Intimacy	2.38 (1.80)	2.60 (1.47)	0.47	
Knowledge about Lesbian or Gay	6.11 (3.24)	6.71 (3.22)	1.67	
Social Desirability				
Self-deception	33.17 (6.54)	31.35 (6.59)	2.49 *	0.28
Impression Operation	33.19 (6.25)	35.05 (6.79)	2.57 *	0.29

* $p < .05$

identity, self-consistent gender identity, other-consistent gender identity, and self-deception in social desirability.

Heterosexual Individuals' Attitudes toward LGBs

To examine whether attitudes toward LGBs differ based on respondent gender and target sexuality, we conducted two-factor mixed analysis of variance with the emotional thermometer score as the dependent variable, respondent gender (male/female) as the between-subjects factor, and target sexuality (gay men/lesbian women/bisexual men/bisexual women) as the within-subjects factor. The main effects of respondent gender was significantly higher for females than for males ($F(1, 322) = 19.63, p < .001, \eta_p^2 = .06$). Regarding the main effects of target sexuality, attitudes toward gay men were significantly lower than attitudes toward lesbians, bisexual men, and bisexual women, and attitudes toward bisexual men were significantly lower than attitudes toward bisexual women ($F(3, 966) = 21.77, p < .001, \eta_p^2 = .06$). Furthermore, the interaction effect between gender and target sexuality was sig-

nificant ($F(3, 966) = 11.54, p < .001, \eta_p^2 = .03$). Since the interaction effect was significant, simple main effects analysis was conducted, and the results showed that the main effect of gender was significantly higher for women than for men across all sexualities (gay men: $F(1, 322) = 36.93, p < .001, \eta_p^2 = .10$; lesbian women: $F(1, 322) = 8.04, p < .01, \eta_p^2 = .02$; bisexual men: $F(1, 322) = 20.58, p < .001, \eta_p^2 = .06$; bisexual women: $F(1, 322) = 8.21, p < .01, \eta_p^2 = .02$). The main effect of target sexuality on males was significant, $F(3, 966) = 31.72, p < .001, \eta_p^2 = .09$, and multiple comparisons undertaken using the least significant difference method (5% significant level) revealed the following trend: gay men < bisexual men < lesbian women = bisexual women. The simple main effect of target sexuality on females, however, was not significant ($F(3, 966) = 1.59, p = \text{n.s.}$).

Relationship between Attitudes toward LGBs and Psychological Characteristics

With regard to the relationship between the attitudes of heterosexual individuals toward LGBs and

Table 2 Correlation of Psychological and Social Factors with heterosexual's attitudes toward LGBs

	Attitudes of heterosexual males				Attitudes of heterosexual females			
	Gay men	Lesbian women	Bisexual men	Bisexual women	Gay men	Lesbian women	Bisexual men	Bisexual women
Gender Identity								
Prospective Gender Identity	.12	.02	.01	-.02	-.02	-.06	-.02	-.03
Socio-realistic Gender Identity	.12	-.01	.02	-.02	.08	.01	.04	-.02
Self-consistent Gender Identity	.00	-.16 *	-.09	-.14	.05	-.07	-.01	-.05
Other-consistent Gender Identity	-.04	-.15	-.12	-.14	.06	-.05	.03	-.03
Egalitarian Sex Role Attitudes	.33 ***	.22 ***	.28 ***	.26 **	.14	.09	.10	.11
Interaction and Intimacy with LGBs								
Direct Intimacy	.26	-.10	.06	-.10	.12	.15	.22	.20
Indirect Intimacy	.28	.36	.04	.32	.02	-.02	.04	-.01
Knowledge about Lesbian or Gay	.30 ***	.27 ***	.36 ***	.33 ***	-.00	-.03	-.02	.04
Social Desirability								
Self-deception	.02	.07	-.00	.00	.09	.06	.09	.05
Impression Operation	.05	-.08	.03	.01	.06	.14	.09	.09

Note. The sample size for direct intimacy was 83, and the sample size for indirect intimacy was 63. * $p < .05$, ** $p < .01$, *** $p < .001$

their psychological traits, correlation coefficients were calculated for each gender in relation to gender identity, sex role attitudes, intimacy with LGBs, knowledge about lesbian or gay, and social desirability (Table 2). Among males, sex role attitudes and knowledge about lesbian or gay were moderately and positively correlated with attitudes toward any LGB sexuality. In addition, high self-consistent gender identity shared a weak negative correlation with attitudes toward lesbian. However, among women, none of the variables were significantly correlated with attitudes toward LGB.

Discussion

The purpose of this study was to measure heterosexual individuals' attitudes toward LGBs, compare differences based on gender and sexuality, and identify the characteristics that cause heterosexual individuals to hold favorable and unfavorable attitudes toward LGBs.

Heterosexual Individuals' Attitudes toward LGBs

On the emotional thermometer, 0 degrees represents unfavorable/cold feelings and 100 degrees represents favorable/warm feelings. Thus, the emergent means suggest that both the male and female participants held neutral attitudes that were

neither favorable nor unfavorable. To examine these attitudes in greater detail, we conducted analysis of variance with respondent gender and target sexuality as the independent variables. The results showed that men held more negative attitudes toward gay men, lesbian women, and bisexual men and women than women did. On the emotional thermometer, heterosexual men obtained the lowest scores for attitudes toward gay men, followed by bisexual men, but there was no significant difference in their scores for attitudes toward lesbian and bisexual women.

Many previous studies have reported that heterosexual men tend to hold stronger and more negative attitudes toward gay men than toward lesbian women, but there are no consistent findings about women's attitudes toward these groups (Herek, 1988; Wada, 1996, 2008). In this study, attitudes toward bisexual individuals, which have not been sufficiently examined in Japan, were included, and we presented new findings on prejudice and stigma among different sexual orientations. With regard to the differences in attitudes toward gay men, lesbian women, and bisexual individuals, Herek (2002) has observed that men tend to rate gay and bisexual men lower on the feeling ther-

rometer and that women tend to rate gay men and lesbian women lower. This suggests that men focus their evaluations on gender, whereas women focus their evaluations on sexual orientation. In this study, there were no differences based on target sexuality among women. However, men rated gay men and bisexual men more negatively than female targets. This observation is supported by Wada's (2008) finding that men rate gay men more negatively than they rate lesbian women. A novel finding of this study is the emergent difference in attitudes toward gay and bisexual men. The findings underscore the need to focus on the experiences of each LGB person to understand the prejudice and discrimination that they experience. This is because bisexual individuals have not only a homosexual aspect but also heterosexual aspect. Heterosexual men may have evaluated bisexual men more positively than gay men because they may have perceived bisexual men as individuals with whom they more closely identify.

Relationship between Heterosexual Individuals' Attitudes toward LGBs And Psychological and Social Factors

We examined the characteristics of heterosexual individuals in relation to gender identity, sex role attitudes, knowledge about lesbian or gay, and social desirability to determine whether they hold favorable or unfavorable attitudes toward LGBs. We found that men with egalitarian values about sex role attitudes and greater knowledge about lesbian or gay held more favorable attitudes toward LGBs. In addition, those with a high level of self-consistent gender identity (i.e., those who perceived consistency in their own gender across time) evaluated lesbian women negatively.

Wada (2008) has pointed out that the stronger the male role norms are, the more negative one's attitudes toward lesbian or gay will be. In other words, the more traditional one's sex role attitudes are, the more negative his or her attitudes toward lesbian or gay will be. On the measure of egalitarian sex-role attitudes used in this study, higher scores indi-

cate more egalitarian sex roles, and lower scores indicate more traditional sex roles. The relationship between sex roles orientation and attitudes toward lesbian or gay was found to hold true for bisexual individuals. Previous studies have shown that knowledge about lesbian or gay is associated with attitudes toward lesbian or gay (Wada, 2008), and a high level of knowledge about lesbian or gay indicates a high level of interest in LGBs and sexual minorities. Therefore, such individuals hold favorable attitudes toward them.

Regarding the association between gender identity and attitudes, men with high self-consistent gender identity showed negative attitudes towards lesbian women. This indicates that men who feel fluctuation and ambiguity about their own gender show more favorable attitudes towards lesbians. Although the men who participated in this study were heterosexual, they may have wondered, "I don't feel like a man," even though they were attracted to women, and this may have led them to empathize with lesbian women.

Among women, however, attitudes toward LGB were not related to any psychological characteristic. In other words, irrespective of their view of sex role and interest in LGBs, women held more favorable attitudes toward LGBs than men did. This suggests that, in men and women, attitudes toward LGBs are shaped by different motivations. Therefore, to enhance societal attitudes toward LGBs, it is necessary to pay attention to the kind of information provided to men and women. In this regard, future studies should use qualitative methodologies to examine the formation of attitudes toward LGBs in women.

Finally, interactions with friends who are LGB or have LGB friends were not significantly correlated with attitudes toward LGB. This indicates that having LGB friends or friends with LGB friends does not influence overall attitudes toward them. The reason for this result may be that the sample sizes for direct and indirect intimacy were smaller than other variables because we asked participants to re-

spond only if they had LGB friends or friends who had LGB friends. Despite not reaching significance, some associations with absolute correlation coefficients exceeding .30 were identified, which suggests that future studies should concentrate on the relationship with the LGB population and ensure a sufficient sample size for further investigation. In this study, we asked the respondents to answer questions about their LGB friends, irrespective of their sexuality. In reality, however, the effect on attitudes toward LGBs may differ depending on the sexuality of the friend. In addition, we used a single scale to examine their relationships with LGB friends. Future studies should undertake a more detailed analysis of many relationships with LGBs (e.g., family members, colleagues, and especially close friends).

Conclusion

This study examined heterosexual individuals' attitudes toward LGBs and the relationship between psychological and social characteristics and attitudes toward LGBs. The results of correlation analysis and LGB attitude scores suggest that diversity education, including sex role education, will lead to the elimination of stigma and prejudice. Most of the examined psychological and social factors were not related to LGB attitudes among women. This may have been the case because the factors that shape the formation of attitudes toward LGBs differ between men and women. In addition, Suzuki and Ikegami (2015) have noted that, in heterosexual women, self-esteem includes empathy. Thus, there is an association between their self-esteem and attitudes toward lesbian women, and personality may be more strongly associated with attitudes toward LGBs than sex role attitudes or knowledge.

In this study, we measured attitudes toward LGBs using an emotional thermometer. Although this scale has been used in studies targeting LGBs (Herek, 1988, 2002), it is a single-item measure, and its reliability and validity may be poorer than those

of multi-item scales. In Japan, a scale that is relevant to bisexual individuals has not been sufficiently developed and validated. Therefore, future research should develop a scale that measures attitudes toward different sexualities (not only LGB) and clarify how heterosexual individuals' attitudes toward sexual minorities reflect the influence of the times and factors that operate in the background. Additionally, the results obtained in this study represent only correlational relationships, and we were not able to examine the causal relationship of each factor affecting the attitudes of LGBs. Therefore, future research should also examine how attitudes towards LGBs change as a result of interventions related to gender roles and knowledge, such as comprehensive sex education.

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