Sexuality Stratification in Contemporary Japan: A Study in Sociology

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Abstract

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This dissertation used the Osaka City Residents' Survey, one of the few population-based surveys that ask about sexual orientation in Japan, to explore the association between sexual orientation and educational attainment, occupational segregation, and earnings disparities in Japan. The analysis of educational attainment showed that among those assigned female at birth, sexual minorities (i.e., gay/lesbian, bisexual, and asexual people) tended to have a higher probability of college completion than heterosexual people. Among those assigned male at birth, gay/lesbian people's probability of college completion was similar to that of heterosexual people. Bisexual people's probability of college completion was lower than that of heterosexual people, and asexual people's probability of college completion was higher than that of heterosexual people. The analysis of occupational segregation indicated that while the level of segregation by sexual orientation seen in the three labor market outcomes (occupation, employment status, and

firm size) was low among those assigned female at birth, a non-negligible level of segregation by sexual orientation in occupation and employment status was found for those assigned male at birth. The analysis of earnings disparities revealed that among those assigned female at birth, sexual minorities earned as much as heterosexual people, suggesting that the lesbian premium found in Western societies was not applicable to Japan. When other factors that might confound or mediate the relationship between sexual orientation and earnings were accounted for, bisexual people earned less than heterosexual people. Among those assigned male at birth, sexual minorities earned less than heterosexual people. When other factors were accounted for, bisexual people earned more than heterosexual people, which is a pattern not observed in Western societies. Taken together, this dissertation calls attention to the social–institutional structures of a society—such as the family system, educational system, and labor market system—when examining what I refer to as "sexuality stratification," or stratification by sexual orientations that are recognized as normative or non-normative. Without incorporating the social–institutional perspective in sociology, individual-level explanations, such as human capital theory in economics, would not sufficiently identify why some societies experience a greater degree of socioeconomic inequality based on sexual orientation than others.

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Chapter 1. INTRODUCTION

1.1 Overview of the Project

The study of social stratification and inequality has been central to sociological research since the era of Marx ([1849] 1978), Weber ([1922] 2013), and Durkheim ([1893] 2018). One of the dominant themes in modern stratification research is that of stratification and inequality based on ascribed categories such as gender and race/ethnicity (Acker 1973; Bonacich 1972). Sexual orientation, however, was not considered as an axis of analysis until the mid-1990s, before which time there prevailed "discrimination against sexual minorities, lack of interest or knowledge, the absence of support for the work, and scarcity of appropriate models and data" (Klawitter 1998:55–6). In recent years, a growing number of studies have explored the association between sexual orientation and various indicators of socioeconomic inequality such as education (Mollborn and Everett 2015), occupation (Baumle, Compton, and Poston 2009), and earnings (Badgett 1995). Research has particularly intensified on the relationship between sexual orientation and earnings. Between 1995—when the first such economic analysis appeared (Badgett 1995)—and 2012, only 32 papers were published on this topic (Klawitter 2015). From 2020 to 2020, however, as many as 24 such papers were published in less than half of the time (Drydakis 2021).

Despite these advances, three observations can be made about the limitations of current research on socioeconomic inequality by sexual orientation. First, the number of studies examining the relationship between sexual orientation and education (Mollborn and Everett 2015), as well as between sexual orientation and occupation (Baumle et al. 2009), remains sparse. Second, nearly all extant studies on sexual orientation and earnings have been published

by labor economists (Denier and Waite 2019). Third, nearly all such studies have used data from North American, Europe, or Australia (hereinafter "Western countries"), such as the United States (Badgett 1995), Canada (Carpenter 2008), the United Kingdom (Arabsheibani, Marin, and Wadsworth 2005), France (Laurent and Mihoubi 2012), Germany (Humpert 2016), the Netherlands (Plug and Berkhout 2004), Sweden (Ahmed and Hammarstedt 2010), Spain (González and Sönmez 2022), Greece (Drydakis 2012), and Australia (La Nauze 2015).

First, I discuss the shortage of research on the relationship between sexual orientation and educational attainment as well as between sexual orientation and occupation. For other ascribed characteristics, such as gender and race/ethnicity, there is a firm consensus in the U.S. literature that White[1] people tend to report more years of education and that women are now more likely to hold a college degree; until recently, men had the advantage in educational attainment (Everett et al. 2011). However, as pointed out in a study that examined several population-based surveys that measure sexual orientation or lesbian, gay, bisexual, and transgender (LGBT) identity in the United States, "[f]indings regarding educational attainment did not show a completely consistent pattern across surveys with regard to the association between LGB/T identity and educational attainment"(Gates 2014:7). This indicates that there is currently no solid consensus among scholars on such a basic social fact as the nature of the relationship between sexual orientation and educational attainment.

Similarly, research on sexual orientation and occupation is very scarce, compared to research on the distribution of occupation by gender and race/ethnicity. Regarding gender and

[1] Although the use of adjectives to describe aspects of identity is complex and ever-evolving, I use terms such as "Black" and "White" in the uppercase format when used to refer to race. Following the sixth edition of the American Sociological Association Style Guide (2019:36–7), I also use the uppercase format when indicating the "names of racial and ethnic groups that represent geographic locations or linguistic populations (*Hispanic, Asian, African American, Appalachian*)."

racial/ethnic differences in occupation, previous studies have found that women and men and racial/ethnic groups tend to work in different occupations. The literature on gender segregation has shown that occupational segregation between women and men declined substantially during the 1970s and 1980s, remained relatively stable during the 1990s, and stalled during the 2000s (Blau, Brummund, and Liu 2013). Past research on racial/ethnic segregation indicates that racial segregation as measured by comparing Black workers with non-Black workers decreased slightly decreased from 1983—when occupational data from the Current Population Survey became available to disaggregate by Black and Hispanic statuses—through 2002, whereas ethnic segregation as measured by comparing Hispanic workers and non-Hispanic workers increased significantly over the same period (Queneau 2005). However, as pointed out in one of the few studies on sexual orientation and occupational segregation, "the literature lacks population-representative estimates of occupational segregation by sexual orientation that can be compared with other common forms of occupational segregation (i.e., by gender or race/ethnicity)" (Finnigan 2020:1–2). Although scholars have identified a few social facts, such as that sexual minority workers are more likely than heterosexual workers to hold gender-atypical occupations (i.e., gay men workers avoid male-dominated occupations and lesbian workers avoid female-dominated occupations) (Baumle et al. 2009), much more research is needed to outline the basic structure of occupational segregation by sexual orientation and understand what drives such patterns of segregation.

The scarcity of research on the relationship between sexual orientation and educational attainment constitutes a significant research gap—which this investigation seeks to bridge—given that prior studies on sexual orientation and earnings indicate that education is a major driver of earnings disparities(Antecol, Jong, and Steinberger 2008). Furthermore, education plays

an important role, more generally, in status attainment, being strongly associated with occupation, income, marriage, and other dimensions of people's lives (Blau and Duncan 1967; Featherman and Hauser 1978). Similarly, it is important to study sexual orientation and occupation as well because, although there are some indications that occupation plays but a minimal role in explaining earnings difference by sexual orientation (Antecol et al. 2008), other studies suggest uneven representations by sexual orientation across major occupational categories, which may explain part of the relationship between sexual orientation and earnings (Badgett and King 1997; Blandford 2003). In addition to the fact that occupation may play an important role in understanding earnings disparities based on sexual orientation, a focus on occupation is traditionally considered important in the field of sociology, and particularly in social stratification research (Blau and Duncan 1967). An individual's occupation, which is an indicator of their position within the labor market, has an impact not only on their economic circumstances but also on various non-economic dimensions of their social life in the modern industrial society (Nagamatsu 2018), such as voting intension (Weakliem 1991), attitudes toward sexual and gender minorities (Kamano et al. 2020), and leisure-time physical activities (Burton and Turrell 2000).

Second, I discuss what may be overlooked by the fact that most studies examining sexual orientation and earnings have been conducted by labor economists. Extant research on sexual orientation and earnings disparities conducted by labor economists has tended to rely on economist Gary Becker's human capital theory ([1964] 1993a) and specialization model ([1981] 1993b) to understand earnings disparities by sexual orientation. Becker's human capital theory ([1964] 1993a) posits that workers' earnings are determined by their productivity and that productivity is increased by the accumulation of human capital, which is, in turn, most often

measured in terms of education and work experience (Mincer 1974). Becker ([1981] 1993b) applies this human capital theory to discuss the division of household labor. By assuming the family to be an efficient unit that maximizes the total household production, Becker's specialization model predicts that women will sort themselves into household labor and that men will specialize in paid market labor because of biological differences in combination with the gender wage gap. Thus, these two models center on individual and household behavior to understand earnings disparities.

However, it is important to study sexual orientation and economic outcomes, such as earnings, from a sociological perspective because neoclassical economics and contemporary stratification research in sociology differ in their respective understandings of labor market inequality. Sociologist Mary Brinton's work provides an example of how stratification research in sociology departs from conventional neoclassical economics in its approach to the analysis of economic outcomes.

Brinton (1993) points out that the Marxist–feminist and human capital theories are two of the dominant theories within the field of gender stratification. According to Brinton (1993), Marxist–feminist theory is useful in explaining the structures of patriarchy and capitalism as the core source of gender stratification, but it is possible that this model's strong focus on social structures renders it overly deterministic. Because Marxist–feminists regard patriarchy and capitalism as monolithic, such a model cannot fully explain why some societies under certain forms of capitalist systems experience greater gender inequality than others. At the same time, Brinton (1993) points out that human capital theory tends to focus on micro-level processes of how individuals accumulate human capital based on their voluntary actions. Thus, human capital

theory is overly individualistic in its theoretical orientation, rendering it inadequate to explain the differing levels of gender inequality among capitalist societies.

Seeking to explain differences in the level of gender inequality among modern capitalist societies, Brinton (1993) combined micro-level theories of human capital developed in neoclassical economics together with macro-level theories of stratification, including Marxist–feminist theory, to propose an institutional elaboration of human capital theory. Brinton (1988:302) uses the term "human capital development system" to capture "(1) the social-institutional context of human capital development and evaluation, reflected by the structure of the educational system and the labor market and (2) the structure of exchanges and investments, especially intergenerational ones, within the family as the supplier of labor" (Brinton 1988:305). This understanding of human capital accumulation as institutionally structured is more sociologically than economically oriented in that Brinton (1993) locates individual decision-making within the context of the social–institutional structures that vary across societies, whereas the human capital theory tends to view individuals as autonomous decision-makers who can take control of the process of their human capital accumulation. By introducing sociological perspectives such as Brinton's (1993) to the study of socioeconomic inequality based on sexual orientation, it becomes possible to systemically examine whether and why—if any—differences exist in the level of socioeconomic inequality by sexual orientation within modern capitalist societies as well as what external influences constrain workers' choices about their educational and career trajectories.

Third, the lack of sociological perspectives in extant studies on sexual orientation and earnings is related to the absence of a comparative perspective, which is a traditional theme in stratification research within sociology (Ganzeboom, Treiman, and Ultee 1991; Kerckhoff 1995;

Treiman and Ganzeboom 2000). In the book *Sexual Orientation Discrimination: An International Perspective*, the editor acknowledges the limitation that in response to the call for submissions for the book, "the vast majority of proposals came from the United States" and points out that "the resulting focus on North American and Western European countries […] is not ideal" (Badgett 2007:3). This geographically limited data sampling (i.e., from Western countries) severely undermines any attempt to generalize the existing theories and previous studies' empirical results on sexual orientation and socioeconomic inequality to other societies.

Thus, in order to bridge the above gaps in current scholarship, this dissertation examines the relationship between sexual orientation and three indicators of socioeconomic inequality (i.e., education, occupation, and earnings) in contemporary Japan, a non-Western country, from a sociological perspective. In doing so, this study aims to contribute to a theory of comparative sexuality stratification. In this dissertation, I use the term "sexuality stratification" to refer to "the state of social structure where social resources and the opportunities for acquisition of social resources are distributed unequally among people in the society as a whole" (Tominaga 1979:3) based on sexual orientations that are recognized normative or non-normative.[2] Studying sexuality stratification is important as well as timely in light of increasing acceptance of same-sex sexuality across societies[3] and various policy efforts aimed at alleviating difficulties experienced by sexual minority populations;[4] and yet, few studies describe or analyze the socioeconomic conditions of such populations.

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[2] I do not use the term "sexual stratification" to refer to what I call "sexuality stratification," because sociologists have traditionally used "sexual stratification" to refer to stratification along the line of gender (Collins 1971). One exception to such usage is when the term "sexual stratification" is used to refer to "a stratification of sexual desirability" (Martin and George 2006:112); however, stratification based on sexual orientation is not mentioned in their article.

[3] https://www.pewresearch.org/global/2020/06/25/global-divide-on-homosexuality-persists/

[4] https://ilga.org/downloads/03_ILGA_WorldMap_ENGLISH_Overview_May2016.pdf

Furthermore, studying sexuality stratification is sociologically significant, because sexual orientation may be concealed, whereas gender and race—which have been the main focus of previous stratification research—are visible in many social situations. A recent survey in the United States reported that 46% of lesbian, gay, bisexual, transgender, and queer (LGBTQ) people hide their minority status at work (Human Rights Campaign Fouancation 2018). This distinctiveness of sexual orientation as an invisible trait (Tilcsik, Anteby, and Knight 2015) highlights the usefulness of sexual orientation as a potentially unique analytic case to advance theories of stratification based on ascribed status. The focus on sexual orientation will facilitate exploration of potential mechanisms driving socioeconomic inequality associated with sexual orientation when sexual minorities' status as such is not known to people around them.

To illustrate, a study of occupational segregation by sexual orientation concluded that "occupational segregation is shaped by gay and lesbian workers' adaptation to potential discrimination and the dilemmas of disclosure that they face both in the workplace and beyond" (Tilcsik et al. 2015:470). This tendency to adapt to adverse circumstances, as well as the invisibility of sexual orientation, suggests that even the seemingly voluntary actions or preferences of sexual minorities may derive from structural constraints. The current gender stratification literature within sociology has repeatedly emphasized that scholars should not view women's economic behavior and career preferences as a pure reflection of free choice, but rather as an outcome of the choices available to women under the gendered structural constraints and macro-level belief systems that prevail (Correll 2004; England 1992). In the field of sexuality stratification, this structuralist perspective may be all the more salient due to sexual minority employees' relative invisibility in the eyes of their employers.

1.2 THE JAPANESE CONTEXT[5]

For this dissertation, I employ Japan as an illustrative case of how important it is to incorporate a social–institutional perspective in the development of theory on sexuality stratification. By looking beyond Western countries, I also report new empirical findings that may raise questions regarding what have been considered to be robust findings in Western countries. Even though, like in Western countries, Japan industrialized during the 19th century (Brinton 1993), many legal, religious, and cultural contexts constitutive of LGBTQ issues have remained distinctive from those present in the West. First, Japan has never adopted a sodomy law prohibiting same-sex sexual behavior between men, except between 1872 and 1882 (Pflugfelder 2007). Second, same-sex sexual relations between men were common and prevalent among priests of pre-modern Japanese Buddhism (Faure 1998). Along the same lines, ritual cross-gender dressing by men has a historical precedent in Shinto, Japan's indigenous religion (Mitsuhashi 2008). Third, scholars of sexuality in Japan argue that less-explicit legal and religious discrimination against sexual minorities in Japan may have made it difficult for them to engage in the type of collective mobilization seen in countries such as the United States (Itakura 2021; McLelland and Suganuma 2009).

These variations suggest that the concept of a stable, rights/lifestyle-based "sexual identity," such as has developed in the particular socio-cultural contexts of Western societies, cannot be used uncritically when considering sexuality in Japanese society. At the same time, however, it should be noted that this emphasis on the tolerance of non-normative gender and sexuality practices in Japan often found in the English-language literature has been sharply criticized by many scholars as "a version of Orientalism [where] Japan seems to be constructed

[5] Some of the material in this section also appears in Hiramori and Kamano (2020a).

as the (male) (homo)sexual paradise, […] a land free from legal constraints and religious condemnation, all of which could be attributed to the very 'culture' of Japan" (Khor 2010:53).[6]

By comparing empirical findings in Western countries against the findings of the current study, it becomes possible to test whether existing theories about the relationship between sexual orientation and socioeconomic status found in previous studies can be extended to the countries that do not share the socio-cultural contexts of Western societies.

Furthermore, the use of Japan is helpful because the abovementioned distinct features of Japanese society make it difficult to focus on issues such as direct discrimination at work (e.g., being fired because of one's sexual orientation) and other kinds of unfair differential treatment based on the social category of sexual orientation. Unlike countries such as the United States, where the federal government prohibited the employment of (openly) gay workers in the civil service until 1975 and where state sodomy laws provided a justification for public and private employers to discriminate against such employees (Lewis 1997), Japanese laws have generally avoided mentioning same-sex sexual relationships at all—whether positively, negatively, or neutrally. Except for the ten years when sodomy was explicitly outlawed in Japan, there has never been any discriminatory law directly targeted against sexual minorities in Japan, but neither has there been any nationwide anti-discrimination law based on sexual orientation in Japan.

In some parts of the country, however, the legal landscape is now shifting. As of 2021, 44 local governments have enacted anti-discrimination ordinances based on sexual orientation and

[6] As will be discussed in Chapter 2, part of the reason why this study relies heavily on Brinton's gender stratification theory to take a social–institutional perspective is to avoid the overreliance on cultural explanations with regard to the findings in Japan that differ from those observed in Western countries. Cultural explanations, such as that Japan has a unique culture and tradition regarding sexuality, do not offer meaningful contributions to the theory of comparative sexuality stratification.

gender identity (SOGI). Five of Japan's 47 prefectures have established such ordinances[7]; the remaining 39 ordinances have been enacted at the municipal level.[8]

At the same time, it should be noted that municipal and prefectural anti-discrimination ordinances based on SOGI do not impose any penalties, which reduces the impact of these laws. This phenomenon is similar to the weak sanctions associated with Japan's Equal Employment Opportunity Law of Men and Women enacted in 1986 (Brinton 1988). For example, the preamble of the "Osaka Prefectural Ordinance on the Promotion of Public Understanding of Sexual Orientation and Gender Identity Diversity" states, "It is one of the basic principles of the Constitution of Japan that all people should be respected as individuals and be equal before the law. […] [D]iscrimination on the basis of sexual orientation or gender identity is never acceptable." However, Article 6 ("Entrepreneurs' Responsibilities") reads, "In accordance with the basic principles, entrepreneurs shall deepen their understanding of diversity in sexual orientation and gender identity, and in conducting their business activities, they shall endeavor to promote efforts to understand diversity in sexual orientation and gender identity and to cooperate with the policies set forth in Article 4, paragraph 1, implemented by the Prefecture."[9] Therefore, penalties for violating such ordinances are virtually nonexistent.

Overall, the lack of explicit naming of same-sex sexual relationships in the Japanese legal system requires me to focus on sexual minority workers' decisions and social customs, or on the norms of Japanese employment structures that may disadvantage such workers, rather than on

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[7] These prefectures are Tokyo, Ibaraki, Osaka, Mie, and Tottori (listed in the order of when the ordinance was established; the ordinances were enacted on the same date in Mie and Tottori). Tokyo is the largest prefecture with a population of 13.5 million. Ibaraki ranks 11th in terms of population with a population of 2.9 million. Osaka ranks third with a population of 8.8 million. Mie ranks 22nd with a population of 1.8 million. Tottori is the smallest prefecture in Japan with a population of 0.6 million.

[8] http://www.rilg.or.jp/htdocs/img/reiki/002_LGBT.htm

[9] https://www.pref.osaka.lg.jp/houbun/reiki/reiki_honbun/k201RG00002079.html

how employers and other actors explicitly discriminate against sexual minority workers based on any formal policy targeting them. As sociologist Saori Kamano (1995:294) writes, "The naming of same-sex sexual/intimate relationships, thus conceptualized, is manifested in how same-sex sexual/intimate relationships are addressed or ignored in individuals' consciousness and attitudes, everyday conversation, social interactions, public opinions, the mass media as well as in the policies or directives generated in various social institutions such as education, religion, the law and medicine." Thus, this general lack of explicit naming of same-sex sexuality in Japanese laws, despite the rapidly changing situation, should not be seen merely as an issue about Japanese laws regarding same-sex sexuality, but rather as a reflection of how Japanese society fundamentally understands same-sex sexuality.

Such a focus on social customs or norms—rather than explicit naming and evaluation—which may govern Japanese employment of sexual minorities, recommends some consideration of public polling. Regarding attitudes toward same-sex sexuality in contemporary Japan, the 2017–2020 World Value Survey shows that Japan is the most tolerant society in East Asia; in fact, it has been posited that Japan is slightly more tolerant of same-sex sexuality than the United States in this respect[10] (Haerpfer et al. 2020). However, only 7% of lesbian, gay, and bisexual people disclose their minority status at work in Japan (Mitsubishi UFJ Research and Consulting 2020), whereas 54% of sexual and gender minorities in the United States disclose their minority status in the workplace (Human Rights Campaign Fouccation 2018). Thus, sexual minorities in Japan are less likely to disclose their minority status than those in the United States. This may be

[10] The average degree of tolerance is 6.71 out of 10 in Japan, whereas it is 2.28 in China, 3.23 in South Korea, 3.74 in Mongolia, 4.40 in Taiwan, 4.92 in Hong Kong, 5.26 in Macau, and 6.19 in the United States. The wording of the question is: "Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between, using this card. Homosexuality."

due to the history of sexuality in Japan, in which the mainstream Japanese society does not obsessively police sexuality "as far as they are kept outside the sphere of daily normality and do not start questioning the line of demarcation or threatening the normal, existing system of society and family" (Shimizu 2007:507). Therefore, the focus on Japan may be regarded as eminently suitable for the development of a theory of sexuality stratification whose characteristics include the focus on sexual orientation as an invisible trait.

1.3 Organization of the Study

The organization of the study is as follows. In Chapter 2, I review the theoretical framework that encompasses this study. Chapter 3 describes the data and methods used in Chapters 4, 5, and 6. This study comprises three major areas of empirical analysis: Chapter 4 examines the relationship between sexual orientation and educational attainment. Although various qualitative and survey studies focusing on minority populations have made clear the difficulties at school experienced by sexual minorities, little is known about the patterns or disparities in educational attainment based on sexual orientation. Chapter 5 examines the relationship between sexual orientation and occupation. Understanding this relationship in the Japanese context is significant because previous studies conducted in the United States assume a certain type of labor market structure that may not be generalizable to other countries, such as Japan. In Chapter 6, I examine earnings disparities based on sexual orientation. Past research in Japan suggests that lesbians in Japan may not enjoy the lesbians wage premium seen in Western countries; however, all previous studies have been either qualitative (Kamano 2009) or else were quantitative but used a non-representative sample (Hiramori 2016). Finally, Chapter 7 summarizes the main findings and the limitations of this study. Implications for future research are also discussed.

Chapter 2. SEXUALITY STRATIFICATION IN THE COMPARATIVE PERSPECTIVE

2.1 INTRODUCTION

The purpose of this chapter is to provide the theoretical framework for the analysis of socioeconomic inequality based on sexual orientation conducted in this study. This dissertation builds on Mary Brinton's social–institutional perspective of gender stratification as well as the empirical literature examining differences in socioeconomic conditions such as education, occupation, and earnings by sexual orientation. In this chapter, I focus on examining Brinton's social–institutional perspective and describing Japan's social–institutional structures that warrant attention for the purpose of this study. The empirical literature for each outcome (i.e., education, employment, and earnings) will be reviewed in each corresponding empirical chapter.

2.2 THE SOCIAL–INSTITUTIONAL CONTEXTS

This study applies the social–institutional perspective in the field of gender stratification developed by Brinton (1993) to the field of sexuality stratification, which serves as the overarching theoretical framework for understanding the relationship between sexual orientation and socioeconomic inequality. In her work on gender stratification in Japan, Brinton (1993) rejects simplistic views of Japan by neither focusing on its cultural uniqueness to see Japan as "exceptional" and "unique" nor regarding Japan as just a "follower" of Western countries. Instead, she points out that "the emphasis on highly quantitative studies of the U.S. population [in the sociological and economic work on gender stratification] embodies strong, often unstated, assumptions about the social-institutional and normative environment" (Brinton 1993:18) and argue that "stepping outside American society to view how the same basic social institutions

operate in a different industrial society (Japan) is necessary for the development of a general theory of gender stratification in industrial societies" (Brinton 1993:18).

As I reviewed in Chapter 1, Brinton (1993) argues that theories of gender stratification that existed when her book was published, such as Marxist–feminist theory and human capital theory, cannot adequately explain the variability of the pervasiveness of gender stratification among capitalist societies. Combining these two theories, Brinton (1993) puts forth a social–institutional elaboration of human capital theory and argues that "the key to a comparative theory of gender stratification lies in finding a way to link macro- and micro-level theories by locating individual action in the context of social structure. A comprehensive theory must analyze how the *structure of labor markets*, the *structure of education*, and the *structure of the family* reproduce different economic roles for men and women" (Brinton 1993:72).[11]

Although recently there has developed a comparative perspective in the field of gender stratification (e.g., Charles and Grusky 2004), the field of sexuality stratification does not currently include such a perspective. Because many of the studies on sexual orientation and earnings are conducted by labor economists, there is an emphasis on the individual-level processes of human capital accumulations without fully taking into consideration the social–institutional contexts that may regulate individual decision-making processes. However, I argue that those social contexts that surround the individual are central to understanding how the degree and patterns of sexuality stratification vary across different economies. Therefore, by applying Brinton's theory of gender stratification to the area of sexuality stratification, I aim to develop a theory of sexuality stratification that, to use Brinton's (1993:17) words, "combines

[11] A somewhat distinct, but similar line of argument can be found in the literature of gender and the varieties of capitalism (VoC) (Estévez-Abe 2005). I would like to thank Fumiya Uchikoshi of Princeton University for his suggestion to explore the VoC literature.

principles of voluntaristic social action (how individuals make choices) and a structuralist perspective (how those choices are constrained by the environment)."

A focus on the social–institutional structures is also seen in the latest generation of stratification research. The study of social stratification in sociology is often divided into four generations (Treiman and Ganzeboom 2000). The first generation refers to the studies of intergenerational mobility using relatively simple statistical techniques, such as mobility tables (Lipset and Bendix 1959). The second generation is characterized by the use of path models to study occupational status attainment (Blau and Duncan 1967). The third generation replaces those path models and uses log-linear models to return to the analysis of intergenerational mobility with more sophisticated statistical techniques (Erikson and Goldthorpe 1992). The fourth generation is distinct from the previous generations in that stratification research under the fourth generation addresses the issue of how status attainment or intergenerational mobility processes are affected by institutional arrangements (Treiman and Ganzeboom 2000).

In particular, scholars of fourth-generation stratification research argue that the extant status attainment models cannot adequately capture the influence of structural forces because the second-generation models include only individual characteristics, or human capital variables. Likewise, the causal order of the status attainment models assumes that an individual moves from their origin, through education, and arrives at their destination (current occupation); however, this three-step model oversimplifies the life course of status attainment by ignoring the ways in which these "stages" may be linked in a different order than the models assume (Kerckoff 1995). This dissertation follows the tradition of the fourth generation of stratification research, which focuses on the institutional arrangements of a society to study social stratification from a comparative perspective.

Although the constraints of scarce available data and the lack of accumulated research in this field mean that it may be difficult to directly test all of the theoretical propositions made in this dissertation, this theoretical perspective serves as the core of my research questions and analysis. Below, I discuss two specific domains of the social–institutional structures in Japan (i.e., the educational system and labor market structures) to provide more contexts that are necessary to better understand the operation of sexuality stratification in Japan.

2.3 The Educational System in Japan

In human capital theory, education is considered one of the important institutions through which individuals accumulate human capital. However, because human capital theory was originally developed in the United States, it assumes that individuals can voluntarily accumulate human capital by attending schools. Under this assumption, lack of human capital is attributed to individual voluntary actions. However, the assumption that individuals can freely accumulate human capital whenever they want may not hold in other societies. As an example, I draw from the case of gender stratification in Japan. Brinton (1988) analyzes the education system in Japan and shows that one cannot assume that individuals can autonomously invest in education during variety of life-course stages in Japan, whereas such a restriction is comparatively less prevalent in U.S. society. Recent data still show that 95% of newly enrolled students in Japan are aged 19 or younger, indicating that progress through the educational system in Japan is embedded in strict age norms (Ministry of Education, Culture, Sports, Science and Technology, Japan 2015).

Given the paucity of opportunities in Japan to resume the human capital accumulation process once people complete school, Brinton (1988) suggests that parents' early educational investment in children plays a crucial role in determining how much human capital they can acquire. However, Japanese parents' educational aspirations are higher for their sons than for

their daughters, reflecting strong gender inequality in the labor market (Brinton 1988; Fujihara 2009). Combined with educational systems where parents play a decisive role in how much human capital children can accumulate as well as family systems where parents desire higher educational attainment for sons than for daughters, Brinton's (1988) analysis demonstrates that the social–institutional contexts in Japan function to support strong gender inequality, even before students enter into the labor force.

Although the explanations of gender stratification offer a general framework to understand how differences in educational attainment by sexual orientation are generated, I argue that there is an important difference between potential mechanisms of gender stratification and sexuality stratification. An online survey in Japan's Kanto region (Greater Tokyo Area) indicates that only 6% of non-heterosexual women and 9% of non-heterosexual men disclosed their sexual minority status to their mothers at some point between elementary school and high school. (Inochi Respect. White Ribbon Campaign 2014).

These results imply that, if different levels of human capital accumulation among people of different sexual orientation were observed in Japan, they are less likely to be related to different patterns of parents' investment in education based on whether their children are heterosexual or non-heterosexual, because they are unlikely to know their children's sexual minority status, whereas their children's gender is clearly visible. Therefore, if any differences of educational attainment by sexual orientation are found in this study, it would be appropriate to interpret the results as being based on individuals' own decisions (with structural constraints), rather than their parents' decisions, which is not the case for gender stratification. In addition, given that children have much less autonomy in terms of their educational plans than their

parents, it is expected that the degree of the difference in educational attainment by sexual orientation would be smaller than that by gender.

2.4 Labor Market Structures in Japan

In addition to the educational system, labor market structures constitute an important dimension of the social–institutional structures pertinent to the current study. One of the indicators of socioeconomic inequality utilized in this dissertation is occupation. However, a review of the concept of occupation in sociology in Western countries, as well as how the concept of occupation is utilized by sociologists in Japan—who must take the peculiar Japanese labor market structures into account in the discussion of social stratification—would be helpful to better understand the background of the analysis undertaken in the chapter examining sexual orientation and occupation.

There are currently two broad understandings of occupations in sociology developed in Western countries. The first, developed by Blau and Duncan (1967), conceptualizes occupational structure as unidimensional and continuous, like income and wealth. This kind of understanding was traditionally developed by U.S. sociologists, whose understanding, at its core, can be best understood by the use of the term "social *stratification*" to refer to unequal distribution of social resources (Takenoshita 2013). In stratification research, occupations were operationalized though occupational prestige scores and socioeconomic indexes (Hauser and Warren 1997; Nakao and Treas 1994). These indicators were used to operationalize one's social position within a status hierarchy.

On the other hand, the second approach focuses on the idea of "social *class*" as the central concept to understand social inequality and was traditionally developed by sociologists in Europe. Unlike social stratification scholars in the United States, sociologists engaging in class

analysis in Europe assume that there are large class cleavages among classes that are hard to overcome (Erikson and Goldthorpe 1992). For example, Erikson and Goldthorpe (1992) developed a social class schema consisting of seven large categories using the employment status (employer or employee) and the employment relations of employees (labor contract or service relationship) as the most important class distinction criteria from the Weberian tradition.

In postwar Japan, stratification research was originally strongly influenced by the U.S. model, and stratification scholars in Japan collected data on occupational prestige (Tominaga 1979; Tsuzuki 1998). Although socioeconomic status indicators were never developed in Japan due to the lack of data including occupational income and education, there are a few recent exceptions, such as the Japanese Socio-Economic Index (JSEI) and Japanese Social Status Index (JSSI) (Fujihara 2020). At the same time, there are scholars of Japanese society who utilize social class schemas from Weberian (Ishida 1993) and Marxist (Hashimoto 2003) traditions. In contemporary Japan, both quantitative and qualitative understandings of occupations are employed in stratification research.

However, stratification scholars in Japan recognized the need to modify theory and methods to understand the concept of occupation brought from Western societies due to Japan's peculiar labor market structures. For example, a new occupational prestige scale that incorporates information on industry and firm size, in addition to occupation, was proposed (Nakao 2003). Findings show that, particularly among men, this multidimensional occupational prestige has a stronger association with educational attainment than a more traditional unidimensional occupational prestige, suggesting that multidimensional occupational prestige is a better indicator of one's status in Japan (Nakao 2003). Similarly, there is an occupation

classification in Japan called the "SSM[12] Synthetic Occupational Classification," in addition to "SSM Occupational Categories," that consists of the following occupational categories: professional, managerial, clerical, sales (including services), skilled, semi-skilled, unskilled, and agriculture (Hara and Seiyama 2005). The SSM Synthetic Occupational Classification was proposed because "it is well known that income and prestige differ according to employment status and company size" (Hara and Seiyama 2005:172) and "the SSM Occupational Categories has a danger of not being able to fully express the reality of the stratification of Japanese society well" (Seiyama et al. 1988:38). Based on the fact that Japan does not have a tradition of classifying manual workers into skilled, semi-skilled, or unskilled workers, and because the difference between clerical workers and managerial workers solely represents differences in age under the Japanese seniority-based occupational hierarchy (Arita 2016:36-7), this classification is composed of professional, white-collar in large companies, white-collar in small- and medium-sized enterprises (SMEs), self-employed white-collar, blue-collar in large companies, blue-collar in SMEs, self-employed blue-collar, and agriculture (Hara and Seiyama 2005). It should be noted that agriculture is the only category that uses the criterion of industry, which is not considered to play an important role in this classification (Arita 2016:36).

Accordingly, social surveys conducted by sociologists in Japan typically include the four labor market indicators mentioned above (industry, firm size, occupation, and employment status) to understand "occupation" in a broad sense. In Japanese, "occupation" as used in English is often referred to as "occupation in a strict sense" or the type of work. Occupation (in a strict sense) plays a less important role as a labor market indicator in Japan than in the United States

[12] The social stratification and social mobility surveys (the SSM surveys) are the most important surveys of social stratification and inequality in Japan, first conducted in 1955 and conducted every ten years since then.

because companies in Japan avoid preparing detailed job descriptions and developing rigid occupational classifications based on specific tasks within a firm (Arita 2016). Because workers in Japan are expected to perform a wide range of tasks as generalists, the Japanese employment system has promoted the custom of periodic blanket recruitment of new graduates wherein "hiring occurs on a ritualized, fixed schedule: there is a designated season for job hunting (autumn) and a designated season for job starting (April, after graduation from school in March)" (Brinton 1988:324). Under this hiring custom, it is not so important for students to show skills and qualifications for performing highly specialized tasks; thus, occupation in the Japanese labor market is considered to be less salient than in the U.S. labor market.

Moreover, unions are not centralized or organized around industrial sectors in Japan because "militant industrial union activists were dismissed, and employers pressed for a more cooperative, enterprise-based union structure" under U.S.-led occupation of Japan (Benson 2008:2). As a consequence, each (large) company has its own enterprise union and there is less connection among the firm-based unions (Tachibanaki and Noda 1996). In addition to occupation (in a strict sense), I argue that firm size and employment status captures the nature of workers' position within the labor market in Japan.

The dual structure of Japan's labor markets is one of its most important defining characteristics. Although the dual labor market structure is also discussed in the United States (Doeringer and Piore 1971), the dual structure of labor markets in Japan was built in since the beginning of Japan's industrialization. Because Japan was late to industrialize, compared to Western countries, the Japanese government selectively promoted the rapid development of modern industries through the slogans "rich country and strong army" (*fukoku kyohei*) and "increase production and promote industry" (*shokusan kogyo*) to prevent Japan's colonization by

Western countries. Under these circumstances, large-scale manufacturing companies received preferential treatments from the government whereas small-scale traditional sectors did not (Francks 2015). In postwar Japan, large firms maintained their dominance over small/medium-sized firms in the market, and large firms continued to earn greater profits than small/medium-sized firms. Furthermore, within manufacturing, large companies had more negotiating power than the small/medium-sized companies that provided parts for the larger companies' products (Ujihara 1966). Moreover, the influence of what is often referred to as the "Japanese employment customs" is limited to employees of large firms.

In addition to firm size, employment status has been an important aspect of occupation (in a broad sense) in Japan more recently. One important reason to focus on employment status is because Japan is a country with (previously) high rates of self-employed workers. For example, the self-employment rate in Japan in 1980 was 28.1% whereas it was 9.4% in the United States.[13] However, whereas in other countries self-employment rates have both increased and decreased from the 1980s to the early 2010s, the Japanese trend shows a clear downward pattern (Kambayashi 2017). The self-employment rate in Japan in 2020 is 10.0% whereas it is 6.3% in the United States.[14] Thus, a sustained decline of self-employment in Japan has turned scholars' attention to other areas, such as the recent increase of non-standard workers in Japan. In 1985, when the Act for Securing the Proper Operation of Worker Dispatching Undertakings and Improved Working Conditions for Dispatched Workers was promulgated, the proportion of non-regular employees among all employees was 16.4%, but that proportion had risen to 37.2% by 2020.[15]

[13] https://data.oecd.org/emp/self-employment-rate.htm
[14] https://data.oecd.org/emp/self-employment-rate.htm
[15] https://www.stat.go.jp/data/roudou/longtime/03roudou.html

Thus, a new distinction of employment status (i.e., standard employment or non-standard employment) is now commonly seen as the most important distinction in understanding social inequality in Japan. Those who are under standard employment (regular employees) currently enjoy the so-called "Japanese employment system," which consists of long-term employment, seniority-based wages, and enterprise union benefits (Abegglen 1958), whereas those who do not fit the definition of "regular employees" are designated as "irregular employees." Irregular employees include a range of workers, such as part-time temporary employee, dispatched workers from temporary personnel agencies, and contract employees. Although the increase of non-standard employment is often associated with the decline of the so-called "Japanese employment system" in media press, economists have shown that lifetime employment and seniority-based earnings structures remain surprisingly persistent in Japan (Kambayashi 2017). Likewise, although it is sometimes pointed out that "non-standard workers account for more than 30%" (Kambayashi 2017:168) in Japan, this is because the proportion is calculated out of those who are employed, and not all workers in the labor force. However, an econometric analysis shows that the number of employees in the labor force has increased in Japan whereas the number of self-employed workers has declined, which is a more accurate understanding than an interpretation that the number of regular employees has declined (and, therefore, that the Japanese employment system has collapsed) (Kambayashi 2017). Based on the discussions above, I use the term "employment status" as an umbrella term that describes both the employer/employee distinction *(jugyojo no chii*) and the distinction of standard/nonstandard employment (*koyo keitai*). This follows Japan's social custom as seen in the survey used in this study, in which a question about employment status lists options such as *standard employee, part-time temporary employee, dispatched worker from temporary personnel agency, contract*

employee, executive of a company of a corporation, self-employed, family worker, and doing piece work at home.

In addition, it is important to note that the categories of employment status in the Japanese context refer to distinct employment designations as a status, rather than the number of work hours or the presence/absence of the contract period. Houseman and Osawa (2003) report that about 20–30% of "part-time" workers in Japan work as many hours as "full-time" workers. Recent research in labor economics also demonstrates that "whether or not to be referred to as a standard worker in the workplace" (Kambayashi 2017:165) determines one's employment status in Japan, rather than the number of work hours or the length of one's labor contract.

The impact of employment status in Japan is even stronger than in other East Asian societies. For example, occupation has a stronger impact on earnings than firm size and employment status among Taiwanese men, whereas firm size is as important as occupation among South Korean men; firm size and employment status, albeit to a lesser extent, have an independent impact on earnings among Japanese men[16] (Arita 2016). Likewise, the comparative gender stratification literature shows that gender segregation in employment status in Japan is more pronounced than in other East Asian societies, such as Taiwan and South Korea (Kim and Shirahase 2014), whereas occupations that elsewhere often contribute to gender occupational segregation, such as clerical and manufacturing occupations, are relatively integrated in Japan. This means that focusing solely on gender occupational segregation obscures the reality of the stark gender inequality that exists in Japan (Shirahase and Ishida 1994). Accordingly, in societies where firm size and employment status have independent impacts on labor market outcomes such as earnings, and where gender segregation in the labor market is manifested in terms of

[16] Among Japanese women, the impact of firm size, as well as age, is smaller, which suggests that earnings premium among large companies and seniority-based benefits are reserved largely for men only.

segregation in employment status, it is important to consider labor market measures—such as firm size and employment status—as important independent variables of labor market outcomes, in addition to occupation.

Chapter 3. DATA AND METHODS[17]

3.1 INTRODUCTION

This chapter describes the data and methods used in the subsequent empirical chapters. All of the survey data in this dissertation are collected by the research team of the project "Demography of Sexual Orientation and Gender Identity: Building a Foundation for Research in Japan," funded by the Japan Society for the Promotion of Science (JSPS KAKENHI Grant Number JP16H03709, Principal Investigator: Saori Kamano, Senior Researcher at the National Institute of Population and Social Security Research, Ministry of Health, Labour and Welfare, Japan). The title of the survey is the "Survey on Diversity of Work and Life, and Coexistence among the Residents of Osaka City" (Osaka City Residents' Survey, OCRS),[18] which is one of the few population-based surveys that ask about sexual orientation in Japan.

The purpose of the survey is three-fold, seeking to: (1) conduct statistical comparisons of socioeconomic and health situations by SOGI; (2) understand public opinions of sexual and gender minorities and SOGI-related public policies by the national and local governments, and examine how they are related to various demographics; and (3) describe SOGI distributions of the Osaka City and explore how to better estimate the proportion of sexual and gender minorities. There are three reasons for selecting Osaka City as the focus of the survey: First, this survey had to be conducted in a municipality with a large population size; if the population size is too small, there is a greater possibility that the survey respondents may know each other, which could affect the responses. Therefore, as one of the three largest cities in Japan, Osaka

[17] Some of the material in this section also appears in Hiramori and Kamano (2020a).
[18] This survey was approved by the Ethics Review Board of the National Institute of Population and Social Security, Japan (Approval Number: IPSS-IBRA #18003).

City was suitable for this study. Second, although there are several large municipalities that exist in Japan, Osaka City has a long history of accommodating ethnic minority populations, such as Korean and Chinese residents. In 2019, the proportion of non-Japanese residents in Osaka City was 5.3%,[19] whereas the proportion for all of Japan was 2.3%.[20] These cultural and historical backgrounds suggest that Osaka City has a relatively high awareness of those ethnic minorities, unlike other areas in Japan. Third, partly due to its liberal background, Osaka City has introduced LGBTQ policies and is more proactive than other Japanese cities in dealing with issues related to gender and sexuality. In July 2018, Osaka City became the eighth Japanese municipality to start issuing same-sex partnership certificates.[21] In fact, Osaka City's cooperation in this survey is a part of its effort to gain an understanding of citizens' attitudes toward LGBTQ policies and to use the findings as a reference for future policies.

Although Japan is often said to be "fact-rich, data-poor" (Brinton 2003:195) due to the virtual unavailability of public individual-level data to conduct statistical analyses, I have participated as a research collaborator on this project since its beginning in April 2016, and the data were collected in part to accommodate my research questions in this study. In Japan, asking about sexual orientation on population-based surveys is extremely uncommon, and most previous survey studies on LGBTQ issues have relied on non-representative community-based surveys and marketing surveys. Because of my past research experience of designing and conducting a series of web surveys on LGBTQ issues and the workplace environment—one of the few surveys on LGBTQ issues at work in Japan, which was conducted almost annually from 2014 through 2020 by the nonprofit organization Nijiiro Diversity with the cooperation of the

[19] https://www.city.osaka.lg.jp/shimin/cmsfiles/contents/0000431/431477/hiritu2019.pdf
[20] https://www.soumu.go.jp/main_content/000701325.pdf
[21] https://nijibridge.jp/data/1847/

Center for Gender Studies at the International Christian University (Muraki et al. 2021)—I was involved in a study to develop a method to measure sexual orientation on population-based surveys while remaining attentive to the socio-cultural differences of sexuality in Japan as compared to Western countries, where most previous studies on the measurement of sexual orientation using surveys were conducted (Hiramori and Kamano 2020a).

In developing our version of SOGI questions that take into account the Japanese context, we first conducted a comprehensive literature review of methodological studies and the guidelines of SOGI questions conducted in Western countries as well as existing survey practices employed in community-based surveys in Japan. During the course of the review, we realized that existing best practices for asking about SOGI on surveys cannot be directly applied to Japan and that it would be necessary to develop a set of SOGI questions that does not assume the same legal, religious, and cultural contexts that exist around sexual and gender minority issues in Western societies. Next, we conducted preparatory studies, including focus groups and a pilot survey, to create a model questionnaire between October and December 2017. We recruited focus group discussants at a bisexual group meeting and the Osaka "Kansai Rainbow Festa!" pride parade for sexual and gender minorities, as well as through a recruiting organization for non-LGBTQ discussants. We asked those discussants to review several different versions of SOGI questions and share their thoughts. In the focus groups, we asked nine questions on the SOGI questions. We also asked eight questions about the survey mode, the placement of SOGI questions in the survey, and other questions relating to survey administration. We facilitated a total of nine focus groups, each comprising about four to five participants. In addition to the focus groups, we sent 20 pilot surveys to non-LGBTQ people via email using a snowball sampling method. Using the model SOGI questionnaire developed out of these qualitative data,

we conducted the Osaka City Residents' Survey, which is one of the first population-based surveys to ask about SOGI in Japan (Hiramori and Kamano 2020a).

For the purpose of this dissertation, participants' responses to the Osaka City Residents' Survey are the best data available. Most survey studies of sexual and gender minorities in Japan currently rely on community-based surveys and web surveys that are not representative (e.g., Hiramori 2016). The first nationally representative survey to asks about respondents' SOGI in Japan was conducted in 2015 (Kamano et al. 2016). Although this is a rare nationally representative survey that has information on individuals' SOGI, this survey was conducted to understand attitudes toward various sexual and gender minorities. Therefore, the survey did not ask about important socioeconomic information such as individual earnings. Also, the number of respondents was 1,259 (response rate: 48.4%), and the sample size was too small for the analysis by sexual orientation. Among the respondents, 62 people answered "no" to the question "do you think you are heterosexual?" Among those who selected "no," 4 people selected "homosexual, gay, lesbian" or "bisexual;" 10 people selected "don't want to decide, haven't decided;" 30 people selected "don't know;" 4 people selected "other;" and 14 people did not select any options (Kamano et al. 2016:205).

The second wave of the survey conducted in 2015 was conducted in 2019 by the research project "Research on the Transformation of Attitudes and Policy toward Sexual Minorities" (JSPS KAKENHI Grant Number 18H03652, Principal Investigator: Kazuya Kawaguchi, Professor at Hiroshima Shudo University) in which I participate as a research collaborator. Although the number of respondents for this second-wave survey was 2,632 (response rate: 47.9%), only 3 people selected "gay, lesbian, homosexual;" 14 people selected "bisexual;" 8 people selected "asexual;" 96 people selected "don't want to decide, haven't decided;" 436

people selected “I do not understand the question;” and 126 did not select any options. Unlike those who selected “I do not understand the question,” which is most likely selected by heterosexual respondents who did not understand the terms related to SOGI, those who selected “don’t want to decide, haven’t decided” may include sexual minority respondents. However, an experimental web survey indicates that 22–54% of those who select “don’t want to decide, haven’t decide” may in fact be exclusively heterosexual (Hiramori, Kamano, and Iwamoto 2021). Therefore, if I were to exclude those who select “don’t want to decide, haven’t decided,” the number of sexual minority respondents in this survey would also be too small to conduct analysis by sexual orientation.

The Osaka City Residents’ Survey, on the other hand, was developed specifically as a survey that facilitates analysis by sexual orientation. Although there are plans to conduct a nationally representative survey large enough to make statistical comparisons by SOGI under the new 2021–24 research project “Construction of the Demography of Sexual Orientation and Gender Identity: Carrying out a Nationally Representative Survey” (JSPS KAKENHI Grant Number 21H04407, Principal Investigator: Saori Kamano, Senior Researcher at the National Institute of Population and Social Security Research, Ministry of Health, Labour and Welfare, Japan), that survey is planned to be conducted in early 2023. Currently, the research team for that new project is conducting nationwide cognitive interviews about SOGI questions targeting older respondents aged 60–79 to understand how accurately elderly people in Japan can answer the SOGI questions used in the Osaka City Residents’ Survey, which targets those aged 18–59. Based on the observations above, I use the Osaka City Residents’ Survey throughout this dissertation.

3.2 DATA: OSAKA CITY RESIDENTS' SURVEY

In this section, I describe the Osaka City Residents' Survey, drawing from the report *"Survey on Diversity of Work and Life, and Coexistence among the Residents of Osaka City": Report Based on Percent Frequency Tables* (Kamano et al. 2019). The survey was conducted by the research project "Demography of Sexual Orientation and Gender Identity: Building a Foundation for Research in Japan." General Incorporated Association Shin Joho Center was in charge of printing and sealing the survey materials, building and operating the web response screen, and collecting and opening the returned surveys, as well as data entry and data preparation for analysis. Osaka City cooperated with our survey by randomly selecting 15,000 respondents aged 18–59 years from the Basic Resident Register, which lists all residents in Osaka City, and by affixing the address labels to each of the printed and sealed questionnaires sent from Shin Joho Center, thereby ensuring that the research team would not have access to respondents' private information.

We set the population of interest as 1,521,452 individuals aged 18–59 years who were on the Basic Resident Register of Osaka City as of October 1, 2018. With the cooperation of Osaka City, surveys were sent to 15,000 randomly selected residents; thus, 1.0% of those on the Basic Resident Register of Osaka City were selected as respondents. The questionnaire was sent to the respondents on January 16, 2019. On January 25, 2019, a reminder postcard that also served as a thank-you card was sent to all respondents. The respondents could return the survey by mail or answer the survey online.

Because this was primarily a mail survey involving no interaction with the interviewer, survey documents sent to the respondents were the only message we could convey to them. As such, we carefully designed the survey documents to maximize engagement. For the envelope

containing the documents sent to the respondents, in contrast to the pastel-colored envelope typically used for government surveys in Japan, we used a yellow-colored envelope to reduce the likelihood that potential respondents would discard the survey without opening the envelope. Also, because this survey was conducted in Osaka City, we selected a ball-point pen that was produced by an Osaka-based company as a reward. We also conducted focus groups prior to the execution of the survey to seek feedback on the design of our survey material and the website for respondents, which describes basic information about the survey and, more broadly, the research project. In a similar vein, we staggered the pages of the questionnaire so that respondents would be less likely to skip entire pages without answering any of the questions on them. In addition to the questionnaire itself, we also included: a letter of explanation from Osaka City; a letter of request from the research team and information about the translated survey questions in Korean, Chinese (Simplified and Traditional), Vietnamese, English, and Portuguese, which the respondents could view online for reference; a sheet explaining how to answer the survey online (a login ID and a password); a Q&A sheet; and a pre-paid envelope in which to mail the completed questionnaire. The survey material used in the Osaka City Residents' Survey is included in Appendix B. In addition to the material in Japanese, Appendix B contains an English translation of the full survey questionnaire.

The questionnaire was mailed to 15,000 people; and 4,294 questionnaires were returned by mail or responded to online by March 7, 2019. The number of valid responses was 4,285; the valid response rate was 28.6%.[22] Among the valid responses, 77.0% were returned by mail and

[22] The response rate of 28.6% is higher than the 24.5% response rate of the City of Osaka Survey on the Reasons for Mobility, which was also conducted in 2019 by the City (City Planning Bureau of Osaka 2020). This is remarkable because response rates are generally higher for surveys undertaken by the local government than for those administered by research groups (e.g., Osaka City Residents' Survey). Furthermore, it has been established that the response rates for mail surveys tend to be lower compared to surveys delivered and collected in person or face-to-face interviews (see, for example, Hagihara, Ota and

23.0% were responded to online.[23]. Among the respondents, 58.7% were assigned females at birth, 40.9% were assigned males at birth, and 0.3% did not indicate their sex at birth. A total of 15.8% of the respondents were in their 20s or younger, 23.8% were in their 30s, 28.7% were in their 40s, 29.7% were in their 50s, and 1.9% did not indicate their age. Note that those who were in their 50s include respondents who were 60 years old at the time of survey but 59 years old when the sample was drawn from the Basic Resident Register on October 1, 2018. In addition to SOGI, the survey also asked questions about work, health, family, education, nationality, gender and sexuality attitudes, and attitudes toward public policies on SOGI.

3.3 METHODS

In this dissertation, I examine three indicators of socioeconomic inequality: education (Chapter 4), occupation (Chapter 5), and earnings (Chapter 6). I aim to understand how each indicator is stratified by sexual orientation by (1) examining the unconditional relationship between sexual orientation and each empirical chapter's respective outcome of focus and (2) introducing other theoretically relevant factors that may confound or mediate the relationship between sexual orientation and each outcome of focus to understand the relationship between sexual orientation and the outcome after accounting those factors (this is done only for education and earnings).

Fujii 2006). The survey report compares percentage distributions of the respondents and the population of Osaka City calculated from the Basic Resident Register as of October 1, 2018, by assigned sex at birth and age group. Assigned females at birth and people aged 55–59 were the most overrepresented categories, being overrepresented by 8.7 and 5.1 percentage points, respectively (Kamano et al. 2019).

[23] For more information about the analysis of survey modes, refer to the following two articles: "A Comparison of Response Rate, Respondent Profile, and Item Nonresponse between Survey Modes: An Assessment from SOGI Survey based on a Random Selection from Basic Resident Registration" (Chitose 2020) and "A Comparison of Response Pattern between Survey Modes: An Assessment from SOGI Survey based on a Random Selection from Basic Resident Registration" (Chitose 2021).

Although I indicate *p*-values in the tables, the focus will be patterns of point estimates because the number of respondents who fall into the category of sexual minority is small, and the lack of statistical significance may be due to low statistical power, rather than the lack of substantive differences. Given the small number of sexual minority respondents, the results of this study should be considered exploratory.

Furthermore, all of the analyses are separated by sex assigned at birth, reflecting the fact that education and the labor market in Japan are highly gendered. Although the Osaka City Residents' Survey measures gender identity, in addition to sex assigned at birth, the distribution of the outcome of focus among those whose gender identity is neither a woman or a man is extremely difficult to interpret given the small number of the respondents who identify as neither a woman nor a man. Among the 4,285 respondents, only 22 people (16 people assigned female at birth and 6 people assigned male at birth) selected "other" for their gender identity. To avoid excluding non-binary respondents from the analysis, this study uses sex assigned at birth. Moreover, prior community-based surveys in Japan show that only 51% of male-to-female transgender workers work as women, 33% of female-to-male transgender workers work as men, 16% of non-binary workers assigned male at birth work as non-binary, and 7% of non-binary workers assigned female at birth work as non-binary (Nijiiro Diversity and the Center for Gender Studies, International Christian University 2014). These results suggest that sex assigned at birth may be more salient in the analysis of socioeconomic inequality than gender identity, which may not be fully respected by people surrounding the respondent. In other words, even if one identifies as non-binary, if the employer treats them as a man, their job performance will be evaluated based on the assumption that they are a man.

3.3.1 *Positionality*

In this section I describe my positionality, which impacts the motivation and methodology of this study. As a non-disabled cisgender non-heterosexual Japanese man born to a middle-class family in Tokyo, Japan, I bring certain perspectives and assumptions to my research activities. As such, I acknowledge that my research is always incomplete and partial. Some of my social characteristics grant me privilege, while others marginalize me. Furthermore, this may vary based on the social–institutional contexts of where I am located, such as living in Japan as a Japanese citizen who speaks Japanese as their first language and living in the United States as someone classified as Asian who speaks English as their second language. In *Decolonizing Methodologies: Research and Indigenous Peoples*, Indigenous education scholar Linda Tuhiwai Smith ([1999] 2012:5) writes, "research is not an innocent or distant academic exercise but an activity that has something at stake and that occurs in a set of political and social conditions." Using my positionality, I aim to decenter and provincialize universalized knowledge produced in the studies undertaken in the particular contexts of Western societies and offer an alternative understanding based on a non-Western perspective. I am committed to using my privilege (which includes being a cisgender man), my experience of marginalization (which includes being non-heterosexual), and my socially constructed status (i.e., as the majority in one setting and a minority in another) to describe, explain, and disrupt systems of oppression across societies.

3.3.2 *Main dependent variables (education, occupation, and earnings)*

3.3.2.1 Education

In this study, which uses the Osaka City Residents' Survey, education is measured by one prompt consisting of two sub-questions: one about the last school attended and another about student status (graduated, dropped out, currently enrolled). The prompt is as follows:

Please answer (1) the last school you attended (or are attending) and (2) one of the following: graduated, dropped out, or currently enrolled in school. (Circle one for each); (1) The last school you attended (or currently attending) 1. Elementary school/Junior high school, 2. High school, 3. Professional training college/Specialized training college (after high school), 4. Junior college/College of technology, 5. University, 6. Graduate school, 7. Other (please specify:); (2) Graduated or currently enrolled in school 1. Graduated, 2. Dropped out, 3. Currently enrolled in school (please specify grade:).

Given that most people in Japan complete their lifetime education by the age of 25 and do not return to school to continue their education after graduating from the last school attended (Ministry of Education, Culture, Sports, Science and Technology, Japan 2015), major social surveys in Japan, such as the Japanese General Social Surveys, employ these two questions to measure educational attainment, rather than asking about the highest degree earned. Below, I show the distribution of the last school attended to see whether the patterns of educational disparity by sex assigned at birth are similar to the pattern seen in other national educational statistics in Japan.

Table 3.1 displays the distribution of the last school respondents attended by sex assigned at birth. The sample is limited to those aged 25 and older. The table indicates that assigned females at birth are more likely than assigned males at birth to have last attended professional/specialized training college (after high school) and junior college/upper secondary specialized training school. In particular, 20.4% of assigned females at birth indicate junior college/upper secondary specialized training school as their last school attended, whereas only 2.5% of assigned males at birth indicate junior college/upper secondary specialized training school as their last school attended. This result is not surprising, because junior colleges in Japan

are typically considered as the "women's track," (Fujimura-Fanselow 1985:480) where women study home economics, education, and humanities (Brinton 1993).[24]

On the other hand, assigned males at birth are more likely than assigned females at birth to have last attended university or graduate school. Among assigned females at birth, only 29.1% indicate that their last school attended was university, whereas 43.7% of assigned males at birth indicate that their last school attended was university. Similarly, 2.5% of assigned females at birth and 6.7% of assigned males at birth indicate their last school attended was graduate school. Overall, the results show that in Japan, the educational gap based on sex assigned at birth is wide. As one moves up the educational hierarchy in Japan, assigned males at birth are more likely than assigned females at birth to have last attended university or graduate school. This is different from many OECD countries where women are more likely than men to hold a bachelor's degree.[25]

[24] It should be noted that because 24.9% of newly graduated female high school students attended junior colleges in 1994, this attendance rate has been on the decline; only 7.9% of those students attended junior colleges in 2019. During this same period, the four-year university attendance rate among female students increased from 21.0% to 50.7%. Note that 38.9% and 56.6% of newly graduated male high school students attended four-year university in 1994 and 2019, respectively (https://www.gender.go.jp/about_danjo/whitepaper/r02/zentai/html/honpen/csv/zuhyo01-04-01.csv).
[25] https://doi.org/10.1787/eag-2016-en

Table 3.1. Distribution of the Last School Attended by Sex Assigned at Birth, OCRS 2019

(%)	Assigned Females at Birth	Assigned Males at Birth	Total
Elementary/Junior high school	1.7	1.7	1.7
High school	27.4	29.3	28.2
Professional/Specialized training college (after high school)	18.5	15.6	17.3
Junior college/Upper secondary specialized training school	20.4	2.5	13.0
University	29.1	43.7	35.1
Graduate school	2.5	6.7	4.3
N/A	0.3	0.5	0.4
n	2,275	1,613	3,895

χ^2: 376.460 ($p < .001$), Cramer's V: 0.220 ($p < .001$)
Note: The results for those who did not indicate their assigned sex at birth (n = 7) are not reported but are included in the "Total" column.

Because of how educational attainment is measured in Japan, it is worth observing the relationship between the last school attended and student status. Table 3.2 displays the distribution of respondents' last school respondents attended by the status of *graduated, dropped out, or currently enrolled in school*. Similar to Table 3.1, the sample is limited to those aged 25 and older. Although educational statistics in Japan are typically reported in terms of the proportions entering each educational level due to the low dropout rate,[26] it may be worth confirming whether the pattern found in this dataset is similar to the national trend. Due to the design of the questionnaire, many respondents skipped the question about whether they graduated from, dropped out of, or are currently enrolled in the school that they chose. Because dropout rates are generally low in Japan, in the analysis I assume those who did not indicate their

[26] For example, the upper secondary graduation rate in Japan is 98%; in the United States it is 85%. Also, 93% of those who enter a bachelor's or equivalent program in Japan graduate, whereas 69% of those who entered a bachelor's or equivalent program in the United States graduate in 7 years (https://doi.org/10.1787/f8d7880d-en).

status to have graduated from the school they indicated. The table indicates that the dropout rates are generally low for all educational levels; respondents whose last school attended was high school or professional/specialized training college (after high school) were more likely than those attending other types of school to report having dropped out. Overall, the results suggest that student status, such as drop-out, plays a minimal role in understanding educational attainment in Japan.

Table 3.2. Distribution of Educational Attainment, OCRS 2019

(%)	Elementary/ Junior high school	High school	Professional/ Specialized training college (after high school)	Junior college/ Upper secondary specialized training school	University	Graduate school	Total
Graduated	57.4	74.2	70.4	78.5	82.4	79.5	76.7
Dropped out	2.9	10.2	10.0	4.5	6.3	5.4	7.7
Currently enrolled in school	2.9	0.4	0.7	0.2	0.5	4.8	0.7
N/A	36.8	15.2	18.9	16.8	10.8	10.2	14.9
n	68	1,098	672	507	1,368	166	3,895

χ^2: 184.101 ($p < .001$), Cramer's V: 0.126 ($p < .001$)
Note: The results for those who did not indicate their last school attended (n = 16) are not reported but are included in the "Total" column.

Given that this is the first study to explore the relationship between sexual orientation and educational attainment in Japan using a population-based survey, and because the number of sexual minority respondents is small, I construct a simple binary variable indicating whether the respondent earned a university degree or higher (college completion) for Chapter 4. Table 3.3 displays the distribution of college completion by sex assigned at birth. Like Table 3.1, Table 3.3

shows that assigned males at birth are more likely to earn a university degree or higher than assigned females at birth.

Table 3.3. Distribution of College Completion by Sex Assigned at Birth, OCRS 2019

(%)	Assigned Females at Birth	Assigned Males at Birth	Total
Less than Bachelor's	69.5	52.7	62.6
Bachelor's or higher	27.3	41.7	33.2
N/A	3.2	5.5	4.2
n	2,275	1,613	3,895

χ^2: 119.52 ($p < .001$), Cramer's V: 0.124 ($p < .001$)
Note: The results for those who did not indicate their assigned sex at birth (n = 7) are not reported but are included in the "Total" column.

3.3.2.2 Occupation

As discussed in Chapter 2, this dissertation uses (1) occupation, (2) employment status, and (3) firm size to capture the relationship between sexual orientation and occupation (in a broad sense). In the Osaka City Residents' Survey, occupation is measured by the following question:

> *What kind of job do you usually do at your workplace? Circle the number that is closest to you. (Circle one) 1. Administrative and managerial workers (recoded as managerial workers), 2. Professional and engineering workers (recoded as professional workers), 3. Clerical workers (recoded as clerical workers), 4. Sales workers (recoded as sales workers), 5. Service workers (including care workers, hairdressers and beauticians, and office building management personnel) (recoded as service workers), 6. Security workers (such as self-defense officials, judicial police staff, firefighters, and security staff) (recoded as blue-collar workers), 7. Agriculture, forestry, and fishery workers (recoded as blue-collar workers), 8. Manufacturing process workers (recoded as blue-collar workers), 9. Transport and machine operation workers (recoded as blue-collar workers), 10. Construction and*

mining workers (recoded as blue-collar workers), 11. Carrying, cleaning, packaging, and related workers (recoded as blue-collar workers), 12.Other (please specify:) (recoded as other workers).

Table 3.4 displays the distribution of occupation by sex assigned at birth. The sample is limited to those aged 25 and older who are currently working. Reflecting Japan's gendered internal labor market, only 4.3% of assigned females at birth work in managerial positions, compared to 22.0% of assigned males at birth. The table also shows that assigned females at birth are more likely to be in occupations that are traditionally associated with femininity. For example, 32.4% of assigned females at birth are clerical workers, compared to only 8.6% of assigned males at birth. Similarly, 18.5% of assigned females at birth are sales workers, compared to only 7.2% of assigned males at birth. On the other hand, only 9.0% of assigned females at birth are blue-collar workers, compared to 19.8% of assigned males at birth. Overall, the results indicate the existence of strong occupational sex segregation.

Table 3.4. Distribution of Occupation by Sex Assigned at Birth, OCRS 2019

(%)	Assigned Females at Birth	Assigned Males at Birth	Total
Managerial	4.3	22.0	12.4
Professional	23.7	28.4	25.8
Clerical	32.4	8.6	21.6
Sales	11.4	13.4	12.3
Service	18.5	7.2	13.3
Blue-collar	9.0	19.8	14.0
Other	0.4	0.2	0.3
N/A	0.3	0.3	0.3
n	1,739	1,467	3,211

χ^2: 632.421 ($p < .001$), Cramer's V: 0.314 ($p < .001$)
Note: The results for those who did not indicate their assigned sex at birth (n = 5) are not reported but are included in the "Total" column.

Employment status is measured by the following question:

Which one of the following categories best describes your job? (Circle one) 1. Standard employee (recoded as standard employee), 2. Part-time temporary employee (recoded as non-standard employee), 3. Dispatched worker from temporary personnel agency (recoded as non-standard employee), 4. Contract employee (recoded as non-standard employee), 5. Executive of a company or a corporation (recoded as employer), 6. Self-employed (recoded as self-employed), 7. Family worker (recoded as family worker), 8. Doing piece work at home (recoded as non-standard employee).

Table 3.5 displays the distribution of employment status by sex assigned at birth. The sample is limited to those aged 25 and older who are currently working. Similar to the result seen in Table 3.4, only 1.9% of assigned females at birth work are employers, compared to 6.3% of assigned males at birth. The table also shows that assigned females at birth are more likely to be in non-standard employment. Whereas only 11.2% of assigned males at birth are non-standard employees, 45.6% of assigned females at birth are non-standard employees. More than 70% of assigned males at birth are standard employees, who enjoy long-term employment under the Japanese employment system. Taken together, the table shows severe sex segregation in employment status, corroborating prior research (Shirahase and Ishida 1994).

Table 3.5. Distribution of Employment Status by Sex Assigned at Birth, OCRS 2019

(%)	Assigned Females at Birth	Assigned Males at Birth	Total
Employer	1.9	6.3	3.9
Standard employee	44.0	72.0	56.8
Non-standard employee	45.6	11.2	29.9
Self-employed	4.9	9.9	7.2
Family worker	3.3	0.5	2.0
N/A	0.3	0.1	0.2
n	1,739	1,467	3,211

χ^2: 4857.262 ($p < .001$), Cramer's V: 0.550 ($p < .001$)
Note: The results for those who did not indicate their assigned sex at birth (n = 5) are not reported but are included in the "Total" column.

Firm size is measured by the following question:

*How many people work in the entire corporation or organization where you work? Please answer the entire number of people in the corporation or organization. Please include all the working people such as yourself, family workers, and part-time workers. (Circle one) 1. 1 (only yourself) (recoded as small firm), 2. 2-4 (recoded as small firm), 3. 5-9 (recoded as small firm), 4. 10-29 (recoded as small firm), 5. 30-99 (recoded as medium-sized firm), 6. 100-299 (recoded as medium-sized firm), 7. 300-499 (recoded as large firm), 8. 500-999(recoded as large firm), 9. 1000-1999 (recoded as large firm), 10. 2000-9999 (recoded as large firm), 11. 10000 or over (recoded as large firm), 12. Government agency (recoded as government agency), 13. Don't know (recoded as unknown). *Choose government agency if receiving wages from the central government or local governments (public school teacher, firefighter, etc.). Public corporations do not apply to government agency.*

Table 3.6 displays the distribution of occupation by sex assigned at birth. The sample is limited to those aged 25 and older who are currently working. The table shows that 36.9% of assigned females at birth work in a large firm or for the government, compared to 42.1% of assigned males at birth. Although there does appear to exist some level of sex segregation by firm size, the degree of sex segregation by firm size is much lower than in the other two indicators (occupation and employment status).

Table 3.6. Distribution of Firm Size by Sex Assigned at Birth, OCRS 2019

(%)	Assigned Females at Birth	Assigned Males at Birth	Total
Small	29.4	30.1	29.7
Medium	25.3	25.0	25.2
Large	33.9	37.9	35.7
Government	3.0	4.2	3.6
Unknown	8.0	2.6	5.6
N/A	0.4	0.3	0.3
n	1,739	1,467	3,211

χ^2: 59.990 ($p < .001$), Cramer's V: 0.097 ($p < .001$)
Note: The results for those who did not indicate their assigned sex at birth (n = 5) are not reported but are included in the "Total" column.

3.3.2.3 Earnings

This study uses the natural logarithm of respondents' hourly wages in U.S. dollars ($1 = 100 Japanese yen). In the Osaka City Residents' Survey, annual earnings are measured by the following question:

> *Which one of the following best describes your annual earnings from your job (before tax) last year? Please include allowances and bonus. Income other than your main job, pension, rental income, stock dividend, and family supply are not included. (Circle one). There are 18 ordinal earnings categories from less than 1 million yen, 1 million yen – 2 million yen to 17 million yen – 18 million yen, in addition to "I had no earnings from my job," "18 million yen and over (please specify:)," and "don't know."*

Unlike major social surveys conducted in Japan—such as the Japanese General Social Survey and the Social Stratification and Mobility Survey, which measure income from all sources—the question about earnings used in the Osaka City Residents' Survey is unique in that it does not include non-work earnings. In this dissertation, respondents' answers are assigned the midpoint of the earnings range; for the midpoint of the open-ended top category ("18 million yen

and over (please specify:)"), I use a quantile method (Ligon [1989] 1994) to estimate the mean earnings ($249,688.4), based on the assumption that earnings follow a Pareto distribution. After assigning the midpoints, I divide annual earnings by 50 weeks and weekly working hours to construct a measure of hourly wage. Finally, I take the natural log of this hourly wage to normalize the wage distribution and minimize the influence of outliers.

The mean hourly wage for assigned females at birth is $19.99 and the mean hourly wage for assigned males at birth is $29.80. These wage calculations include those who currently hold a job, who are aged 25–60, whose earnings are non-zero/not unknown, and whose work hours are non-zero. Because national income statistics in Japan are typically shown in terms of annual income, I also show annual income by sex assigned at birth. The mean annual earnings for assigned females at birth is $28,561.56; the mean annual earnings for assigned males at birth is $56,691.37. Although appropriate data on annual earnings in Osaka City or Osaka Prefecture are not readily available, the 2019 Statistical Survey of Actual Status for Salary in the Private Sector shows that national mean personal yearly earnings are $29,550 for women and $53,970 for men.[27] This suggests that the respondents in the Osaka City Residents' Survey do not substantially deviate from the national trend in terms of yearly earnings.

3.3.3 *The main independent variable and its related variables (sexual orientation identity, romantic attraction, sexual attraction, and sexual behavior)*

3.3.3.1 Overview of the four indicators of sexual orientation

Although the term "sexuality" covers a wider domain than sexual orientation—encompassing the quality or state of being sexual as a whole—for the purposes of this dissertation, I conceptualize sexuality stratification as stratification by sexual orientations that are

[27] https://www.nta.go.jp/publication/statistics/kokuzeicho/minkan2019/pdf/001.pdf

recognized as normative or non-normative.[28] My conceptualization of sexuality stratification may be considered as a specific domain of what anthropologist Gayle Rubin (2011:158) calls "sexual stratification," where "as sexual behaviors or occupations fall lower in the scale, the individuals who practice them are subjected to a presumption of mental illness, disreputability, criminality, restricted social and physical mobility, loss of institutional support, economic sanctions, and criminal prosecution" (Rubin 2011:149). In other words, Rubin (2011) did not focus solely on sexual orientation; rather, her conceptualization of sexuality was much more comprehensive, following the tradition of sexuality and queer studies. The figure of "the sex hierarchy" composed of an inner "charmed circle" and the "outer limits" in her article indicates that "good, normal, natural, blessed sexuality" includes "heterosexual, married, monogamous, procreative, non-commercial, in pair, in a relationship, same generation, in private, no pornography, bodies only, vanilla" (Rubin 2011:152).

In order to measure sexual orientation, the Osaka City Residents' Survey used the questions presented below (Hiramori and Kamano 2020a:455–6). These questions were developed based on our nine recommendations on SOGI questions for population-based surveys in Japan, which were derived from the preparatory studies (Hiramori and Kamano 2020a). In subsequent chapters, sexual orientation identity serves as the main independent variable. It should be noted that there is a need for future research that uses romantic attraction, sexual attraction, and sexual behavior as alternative independent variables to account for the multi-dimensional aspect of sexual orientation, which may be considered to consist of "three basic dimensions: behavior, desire,[29] and identity" (Laumann et al. 1994:292–93). Although romantic

[28] See the article "Thinking about/with the Concept of 'Sexuality'" (Omura 2019) for more detailed discussion on the use of the sexuality concept in academic research.
[29] To measure the dimension of "desire," two sub-questions are posed to the respondent. One measures "appeal" by asking whether the respondent finds having sex with someone of the same sex appealing; the

attraction is not typically used as an indicator of sexual orientation in the economic and sociological studies employing population-based surveys conducted in Western societies, romantic attraction is currently the most commonly used measurement of sexual orientation in Japan, particularly among community-based surveys and marketing surveys, which tend to avoid asking directly sexual questions (e.g., about sexual attraction) or questions that are based on a stable, rights/lifestyle-based "sexual identity" model developed in the particular socio-cultural contexts of Western societies (Hiramori and Kamano 2020a).

It should also be noted that these indicators of sexual orientation are preferable to using same-sex couple status as a proxy for being gay/lesbian, which is a measure commonly used for studies using census data (Klawitter 2015). Although the findings from such census studies can confidently describe the status of those with a same-sex partner compared to those with an opposite-sex partner without worrying about the sample size, they cannot show the situation of gay/lesbian people when compared to heterosexual people as a whole. Furthermore, the sexual orientation indicator based on partnership status cannot capture other non-heterosexual orientations, such as bisexual and asexual.

- Question for sexual orientation identity

Q46 Please circle the number that you think is closest to you. (Circle one)

1. Heterosexual [those who have sexual/romantic feelings only for different-sex people], that is, **not** gay, lesbian, etc.
2. Gay, lesbian, homosexual [those who have sexual/romantic feelings only for same-sex people]
3. Bisexual [those who have sexual/romantic feelings for both men and women]
4. Asexual [those who do not have sexual/romantic feelings for anyone]
5. Don't want to decide, haven't decided
6. I do not understand the question

other, which concerns "attraction," asks about the gender of those to whom the respondent is sexually attracted (Laumann et al. 1994). In the demography of sexuality literature, the dimension of "desire" is typically conceptualized as the dimension of "attraction" (Mishel 2019).

- Questions for romantic attraction, sexual attraction, and sexual behavior

Q47 For each of the following from (1) to (3), please circle the numbers closest to you from 1 to 6, concerning your experience (A) up until now and (B) in the last five years. (Circle one for each)	
(1) People you have romantic feelings for	
(A) Up until now (Circle one) 1. I have never had romantic feelings for either men or women 2. Exclusively men 3. Mostly men 4. Men and women, equally 5. Mostly women 6. Exclusively women	(B) In the last five years (Circle one) 1. I have never had romantic feelings for either men or women 2. Exclusively men 3. Mostly men 4. Men and women, equally 5. Mostly women 6. Exclusively women
(2) People you are sexually attracted to	
(A) Up until now (Circle one) 1. I have never been sexually attracted to either men or women 2. Exclusively men 3. Mostly men 4. Men and women, equally 5. Mostly women 6. Exclusively women	(B) In the last five years (Circle one) 1. I have never been sexually attracted to either men or women 2. Exclusively men 3. Mostly men 4. Men and women, equally 5. Mostly women 6. Exclusively women
(3) People you have sex with	
(A) Up until now (Circle one) 1. I have never had sex 2. Exclusively men 3. Mostly men 4. Men and women, equally 5. Mostly women 6. Exclusively women	(B) In the last five years (Circle one) 1. I have never had sex 2. Exclusively men 3. Mostly men 4. Men and women, equally 5. Mostly women 6. Exclusively women

3.3.3.2 Sexual orientation identity

Because all the analyses in subsequent chapters will be separated by sex assigned at birth—due to the fact that education, occupation, and earnings are sharply stratified by gender—I draw from Hiramori and Kamano (2020a) to show the distribution of sexual orientation identity by sex assigned at birth, which is presented in Table 3.7. Among the survey respondents, 1.4% identified as bisexual. The proportion of those who identified as gay/lesbian and that of those who identified as asexual were similar: 0.7% indicated “gay/lesbian” and 0.8% indicated

"asexual." Also, 5.2% of the respondents chose "don't want to decide, haven't decided." Regarding item non-response rates, 1.1% of the respondents did not indicate their sexual orientation identity. Because the non-response rate for their annual individual earnings was 5.6% (Kamano et al. 2019), one can infer that the respondents may consider sexual orientation identity to be a less sensitive topic than earnings. This result poses a challenge to scholars who claim that SOGI questions are extremely sensitive in nature and therefore oppose their inclusion in social surveys.

Table 3.7 also shows that, compared to assigned females at birth, assigned males at birth are more likely to identify as heterosexual or gay/lesbian, or to indicate that they do not understand the question. In particular, only 0.3% of assigned females at birth selected "gay/lesbian" whereas 1.3% of assigned males at birth selected this category. In contrast, assigned females at birth are more likely to identify as bisexual, asexual, or "don't want to decide, haven't decided" than assigned males at birth. In particular, only 0.3% of assigned males at birth chose "asexual," whereas 1.1% of assigned females at birth chose this category.

Table 3.7. Distribution of Sexual Orientation Identity by Sex Assigned at Birth, OCRS 2019

(%)	Assigned Females at Birth	Assigned Males at Birth	Total
Heterosexual	82.7	84.5	83.2
Gay/lesbian	0.3	1.3	0.7
Bisexual	1.7	1.1	1.4
Asexual	1.1	0.3	0.8
Don't want to decide, haven't decided	6.5	3.2	5.2
I do not understand the question	6.8	8.6	7.5
N/A	1.0	0.9	1.1
n	2,517	1,754	4,285

χ^2: 560.799 ($p < .001$), Cramer's V: 0.256 ($p < .001$)
Note: The results for those who did not indicate their assigned sex at birth (n = 14) are not reported but are included in the "Total" column.

Because the distribution of sexual orientation identity is expected to differ by age, I also draw from Hiramori and Kamano (2020a) to show the distribution of sexual orientation identity by age group, shown in Table 3.8. This indicates that the proportion of those who identify as heterosexual increases with each age group, from 18–29 (78.2%) through 30–39 (85.7%) and 40–49 (87.0%); it drops in the 50–60 age group (80.9%). However, the proportion of those who choose "I do not understand the question" is higher among the 50–60 age group (10.8%) than in the other age groups (5.3–6.8%), suggesting that the noted decline in heterosexual identification may have resulted from difficulty in understanding this question among supposedly heterosexual respondents in this age group. On the other hand, younger people are more likely to identify as bisexual, asexual, or to choose "don't want to decide, haven't decided." In particular, there is a large gap between the age groups of 18–29 and 30-–39 for all of these identities.

Table 3.8. Distribution of Sexual Orientation Identity by Age Group, OCRS 2019

(%)	18–29	30–39	40–49	50–60	Total
Heterosexual	78.2	85.7	87.0	80.9	83.2
Gay/lesbian	1.0	1.6	0.2	0.4	0.7
Bisexual	3.8	1.6	0.7	0.9	1.4
Asexual	1.6	0.6	0.6	0.7	0.8
Don't want to decide, haven't decided	8.7	4.8	4.3	4.2	5.2
I do not understand the question	5.9	5.3	6.8	10.8	7.5
N/A	0.7	0.5	0.5	2.1	1.1
n	678	1,021	1,229	1,274	4,285

χ^2: 158.080 ($p < .001$), Cramer's V: 0.096 ($p < .001$)
Note: The results for those who did not indicate their age (n = 83) are not reported but are included in the "Total" column.

In Chapter 5, I use an additional, simplified classification of sexual orientation identity, because all of the analyses in Chapter 5 involve cross-classifications of sexual orientation identity and the labor market indicators mentioned above (i.e., occupation, employment status, and firm size), which have many categories. This simplified sexual orientation classification

comprises three categories: majority, minority, and “don’t want to decide, haven’t decided.” Heterosexual respondents as well as those who selected “I do not understand the question” are included in the majority category, because sexual minority respondents are expected to understand the intent of this question (i.e., about sexual orientation). Gay/lesbian, bisexual, and asexual respondents are included in the minority category. Those who selected “don’t want to decide, haven’t decided” are not included in either of these categories. Although this option was originally developed to capture queer/questioning respondents who refuse identity labels or are undecided about their sexual orientation identity, an analysis of the interrelations among sexual orientation measures using the Osaka City Residents’ Survey indicates the possibility that some of those who selected “don’t want to decide, haven’t decided” may be heterosexual respondents who have never thought about their own sexual orientation (Hiramori and Kamano 2020b). In addition, an experimental web survey, conducted after the Osaka City Residents’ Survey to improve the SOGI questions used in the Survey, indicates that 22–54% of those who select “don’t want to decide, haven’t decide” may, in fact, be exclusively heterosexual (Hiramori, Kamano, and Iwamoto 2021). Therefore, I preserve the “don’t want to decide, haven’t decided” category in the simplified sexual orientation classification.

3.3.3.3 Romantic attraction, sexual attraction, and sexual behavior

In addition to sexual orientation identity, questions about romantic attraction, sexual attraction, and sexual behavior were asked in the Osaka City Residents’ Survey. Table 3.9 displays the distribution of romantic attraction, sexual attraction, and sexual behavior among assigned females at birth. It indicates that most respondents assigned female at birth select “exclusively men” for romantic attraction, sexual attraction, and sexual behavior, both up until now and in the last five years. It is worth noting that a substantial number of respondents selected

the first option of each question, indicating that they are not romantically or sexually attracted to either men or women, or do not have sex with anyone. Compared to the fact that 1.1% of assigned females at birth identified as asexual, these percentages appear higher, suggesting that sexual orientation identity and other dimensions of sexual orientation, such as attraction and behavior, shape different axes of sexuality, if they are not completely independent. In particular, 13.4% selected "I have never had romantic feelings for either men or women," 12.2% selected "I have never been sexually attracted to either men or women," and 17.5% selected "I have never had sex" in the last five years.

Additionally, the distributions for romantic attraction and sexual attraction appear similar, whereas the distribution for sexual behavior appears different from the above two distributions. For example, 5.6% of assigned females at birth are romantically attracted to men mostly up until now, and 5.4% of assigned females at birth are sexually attracted to men mostly up until now, whereas only 1.6% of assigned females at birth have sex with men mostly up until now. A similar pattern is seen for the results regarding the last five years. This suggests that, although romantic attraction and sexual attraction overlap considerably, a conceptual distinction between attraction and behavior is seen among assigned females at birth. Similarly, there is a large difference between the distribution for "up until now" and "in the last five years" for each indicator of sexual orientation. As reviewed below, this difference between lifetime experience and recent experience is less pronounced among assigned males at birth.

Table 3.9. Distribution of Romantic Attraction, Sexual Attraction, and Sexual Behavior among Assigned Females at Birth, OCRS 2019

People you have romantic feelings for	Up until now (%)	In the last five years (%)
I have never had romantic feelings for either men or women	2.9	13.4
Exclusively men	88.2	80.7
Mostly men	5.6	2.4
Men and women, equally	1.0	0.7
Mostly women	0.4	0.2
Exclusively women	0.3	0.5
N/A	1.5	2.1
People you are sexually attracted to	**Up until now (%)**	**In the last five years (%)**
I have never been sexually attracted to either men or women	4.0	12.2
Exclusively men	86.8	80.2
Mostly men	5.4	3.5
Men and women, equally	1.3	1.3
Mostly women	0.4	0.4
Exclusively women	0.3	0.4
N/A	1.7	2.2
People you have sex with	**Up until now (%)**	**In the last five years (%)**
I have never had sex	6.8	17.5
Exclusively men	88.0	78.0
Mostly men	1.6	0.6
Men and women, equally	0.3	0.3
Mostly women	0.5	0.2
Exclusively women	0.3	0.5
N/A	2.5	2.9
n	2,517	2,517

Table 3.10 displays the distribution of romantic attraction, sexual attraction, and sexual behavior among assigned males at birth. It indicates that most respondents assigned male at birth select “exclusively women” for romantic attraction, sexual attraction and sexual behavior, both up until now and in the last five years. Similar to the results for assigned females at birth, a larger number of respondents selected the first option of each question, indicating that they are not romantically or sexually attracted to either men or women, or do not have sex with anyone, when only 0.3% of assigned male at birth identified as asexual. In particular, 5.6% selected “I have

never had romantic feelings for either men or women," 3.1% selected "I have never been sexually attracted to either men or women," and 11.2% selected "I have never had sex" in the last five years. The percentages are lower than those found among assigned females at birth, but the overall pattern, wherein the percentage of those who selected "I have never had sex" is the largest among the three, is the same for assigned males at birth.

Furthermore, the distributions for romantic attraction, sexual attraction, and sexual behavior appear similar, except for the percentage of those who have never had sex, which is much higher than the percentages of those who have never had romantic feelings for, or been sexually attracted to, either men or women (both up until now and in the last five years); the percentage of those who have sex with women mostly is lower than the percentages of those who are romantically or sexually attracted to women mostly. For all three indicators of sexual orientation, around 2–3% of assigned males at birth selected one of the "exclusively men," "mostly men," or "men and women, equally" options. This suggests that, compared to assigned females at birth, assigned males at birth may not distinguish between romantic attraction, sexual attraction, and sexual behavior. Also, compared to assigned females at birth, the distributions for "up until now" and "in the last year" for each indicator of sexual orientation appear similar.

Table 3.10. Distribution of Romantic Attraction, Sexual Attraction, and Sexual Behavior among Assigned Males at Birth, OCRS 2019

People you have romantic feelings for	Up until now (%)	In the last five years (%)
I have never had romantic feelings for either men or women	2.0	5.6
Exclusively men	0.9	1.4
Mostly men	0.8	0.4
Men and women, equally	0.7	0.6
Mostly women	2.6	1.5
Exclusively women	91.8	89.2
N/A	1.1	1.3
People you are sexually attracted to	Up until now (%)	In the last five years (%)
I have never been sexually attracted to either men or women	1.5	3.1
Exclusively men	1.4	1.7
Mostly men	0.3	0.4
Men and women, equally	0.7	0.6
Mostly women	2.6	1.9
Exclusively women	92.1	90.8
N/A	1.3	1.5
People you have sex with	Up until now (%)	In the last five years (%)
I have never had sex	6.4	11.2
Exclusively men	1.4	1.5
Mostly men	0.3	0.2
Men and women, equally	0.4	0.2
Mostly women	0.9	0.4
Exclusively women	89.6	85.5
N/A	1.1	1.1
n	1,754	1,754

Given the above observations, I argue that lifetime romantic attraction, sexual attraction, and sexual behavior should be used to construct alternative sexual orientation measures based on each of these three indicators of sexual orientation. One important reason to employ lifetime indicators is that a substantial number of respondents reported a lack of sexual behavior in the last five years; it appears likely that many of these respondents may be heterosexual people who have recently been sexually inactive. Although there is a risk of using lifetime indicators—because those who have had some form of same-sex sexual experience in the past may currently

be currently living as heterosexuals—using sexual orientation indicators based on the experience in the last five years is considered to generate larger errors, given that, for example, 12.2% of assigned females at birth reported having no sexual attraction in the last five years, whereas 1.1% of assigned females at birth identified as asexual.

For the purpose of conducting future research, I propose a classification of sexual orientation using the criteria shown in Table 3.11. It should be noted that asexuality is generally understood to mean that one has no (or little) sexual attraction to others; thus, romantic attraction and sexual behavior should not be used to define the asexual population. Also, there are some people in Japan's asexual community who regard someone as asexual only when they do not have both romantic attraction and sexual attraction to others; that is, by some definitions, the absence of sexual attraction alone is not sufficient for the condition of asexuality. Some of those who have romantic attraction but no sexual attraction in Japan identify as "nonsexual," an identity category unique to Japan (Miyake and Hiramori 2021). Likewise, it should be noted that not all respondents assigned female at birth identify as women and not all respondents assigned male at birth identify as men. For example, for those assigned female at birth who identify as men, an exclusive sexual attraction to men means that they should be classified as gay based on their sexual attraction, even though these people would be designated as heterosexual under this classification if the sample were not restricted to cisgender people, whose gender identity is the same as their sex assigned at birth. Moreover, it should be noted that romantic attraction, sexual attraction, and sexual behavior constitute dimensions of sexual orientation that are distinct from sexual orientation identity.[30]

[30] See Hiramori and Kamano (2020b), which discusses romantic attraction, sexual attraction, and sexual behavior (lifetime) by sexual orientation identity among cisgender women and men, as well as Venn diagrams illustrating the relationship among romantic/sexual attraction, sexual behavior, and identity.

Table 3.11. Classification of Sexual Orientation Based on Romantic Attraction, Sexual Attraction, and Sexual Behavior, OCRS 2019

Romantic attraction	Assigned females at birth	Assigned males at birth
I have never had romantic feelings for either men or women	Asexual	Asexual
Exclusively men	Heterosexual	Gay/lesbian
Mostly men	Bisexual	Bisexual
Men and women, equally	Bisexual	Bisexual
Mostly women	Bisexual	Bisexual
Exclusively women	Gay/lesbian	Heterosexual
Sexual attraction	**Assigned females at birth**	**Assigned males at birth**
I have never been sexually attracted to either men or women	Asexual	Asexual
Exclusively men	Heterosexual	Gay/lesbian
Mostly men	Bisexual	Bisexual
Men and women, equally	Bisexual	Bisexual
Mostly women	Bisexual	Bisexual
Exclusively women	Gay/lesbian	Heterosexual
Sexual Behavior	**Assigned females at birth**	**Assigned males at birth**
I have never had sex	Asexual	Asexual
Exclusively men	Heterosexual	Gay/lesbian
Mostly men	Bisexual	Bisexual
Men and women, equally	Bisexual	Bisexual
Mostly women	Bisexual	Bisexual
Exclusively women	Gay/lesbian	Heterosexual

3.3.4 *Other independent variables*

Table 3.12 displays the coding of other independent variables used in the empirical chapters. The frequency distributions of these variables by sexual orientation identity, separated by sex assigned at birth, will be discussed as part of descriptive analyses in each of the empirical chapters.

Table 3.12. Coding of Other Independent Variables, OCRS 2019

Variable	Coding
Transgender status	Transgender status is measured by cross-classification of the answers to the following two consecutive questions: (1) "Do you consider that your current gender is the same as your sex at birth (the one you circled above)? If you circle 2 and/or 3, please answer your current recognition. (Circle all that apply)." The choices for the first part of the question are: "1. same as sex at birth, 2. different gender, 3. have a sense of discomfort." (2) "The gender that is closest to your current recognition: (Circle one)" The choices for the second part of the question are: "1. man, 2. woman, 3. other (please specify:)." Those who selected "different gender" or "have a sense of discomfort" for the first part of the question, and who also selected an option that is different from their sex assigned at birth for the second part of the question, are classified as transgender. See Hiramori and Kamano (2020a:453–5) for more information about the measurement of transgender status in the Japanese context (a three-step method).
Non-Japanese status	Non-Japanese status is measured by the following question: "What is your current nationality? Circle the corresponding number. If none of them applies, please fill in the country (or region) name. (Circle all that apply)." The choices are: "Japan, (South) Korea, China, Vietnam, Taiwan, The Philippines, the United States of America, Nepal, Indonesia, Thailand, and other (country name:)." Those who selected categories other than Japan are classified as non-Japanese.
Mother's/Father's education (Bachelor's or higher)	For mother's education and father's education, the following question is used: "Which of the following is the last school your father and mother attended (or are attending)? Consider 'dropped out' and 'currently enrolled in school' as 'graduated.' *Please answer as far as you know, even if they are deceased. (1) Father (Circle one), (2) Mother (Circle one)." The choices are: "junior high school [elementary school before the WWII (ordinary elementary school, higher elementary school, national elementary school, and boys' school), high school [junior high school, commerce school, and normal school before WWII], professional training college (after high school), junior college/college of technology [higher school, professional training college, and higher normal school before WWII], university, graduate school, other (please specify:), and don't know." I created a dummy variable for whether the respondent's mother has a bachelor's or higher (university, graduate school) and another variable for whether the respondent's father has a bachelor's or higher (university, graduate school).

Grades	Self-reported grades are measured by the following question: "When you were in the third year of junior high school, what was your class rank? (Circle one)" The choices are: "high (5), relatively high (4), about the middle (3), relatively low (2), and low (1)." I converted this variable into a numeric variable.
Bullying (verbal/physical)	The experience of being verbally/physically bullied based on sexual orientation and/or gender identity is measured by the following question: "From when you went to an elementary school through high school, have you ever experienced any of the following from your friends or classmates? For each item A and B, please circle either 'Yes' or 'No.' A: I have experienced it myself, B: I have seen or heard of it." The choices are: "offensive jokes and teasing, violent acts, offensive jokes and teasing involving terms such as 'homo,' 'fag,' 'dyke,' and 'tranny,' violent acts involving terms such as 'homo,' 'fag,' 'dyke,' and 'tranny,' offensive jokes and teasing involving ethnicity, race, or nationality, violent acts involving ethnicity, race, or nationality." Those who selected "offensive jokes and teasing involving terms such as 'homo,' 'fag,' 'dyke,' and 'tranny'" for A are classified as having experience of being verbally bullied based on sexual orientation and/or gender identity. Those who selected "violent acts involving terms such as 'homo,' 'fag,' 'dyke,' and 'tranny'" for A are classified as having experience of being physically bullied based on sexual orientation and/or gender identity.
Partnership status	Partnership status is measured by the following two questions: (1) "Are you currently married? (Circle one) *The 'marriage' in this question indicates marriages between a man and a woman. It includes unregistered common-law marriages." The choices for the first question are: "married, never married, divorced, widowed, and other (please specify:)." Those who selected "married" are classified as partnered. (2) "Have you ever been in a relationship with a same-sex partner (lover) or lived together with them? Experience of being in a relationship with a same-sex partner (Circle one)." The choices for the second question are: "no, currently, I have a same-sex partner, and not currently, but I used to have one." For those who selected the latter two options, there is an additional question that asks about the experience of cohabitation (the choices for this question are: "no, currently, we live together, and not currently, but we used to live together"). Those who selected "currently, I have a same-sex partner" and selected "currently, we live together" are classified as partnered.
Parental status	Parental status is measured by the following question: "How many children under the age of 18 do you have? Please include children who do not live together with you." The number of children is recoded into the

	following four categories: no child, one child, two children, and more than two children. "No child" is set as the reference category in the analysis.
Education (in Chapter 6)	Education, as used in Chapter 6, is derived from cross-classification of the last school attended and the student status described in this chapter. The variable consists of the following five categories: high school or less, vocational school (professional training college/specialized training college (after high school)), junior college, university, and graduate school. "High school or less" is set as the reference category in the analysis.
Potential work experience	Potential work experience is calculated as *age minus five minus years of education*. This calculation is based on an assumption that first grade starts at age six and that respondents began working toward completion of schooling without any gap years. When calculating years of education, those with high school diplomas are considered to have 12 years of education; those who graduated from junior college or vocational school are considered to have 14 years of education; those with university degrees are considered to have 16 years of education; and those with more advanced degrees are considered to have 18 years of education.
Actual work experience	Actual work experience is calculated using the following questions: (1) "At what age did you start working for the first time after leaving school? At the age of __, " (2) "Have you ever experienced any of the following? (Circle all that apply) Taking leave due to mental and physical illness or injury, taking a childcare leave, taking a caregiver leave, being non-employed after losing or retiring from a job, leave or non-employment due to other reasons (please specify:), I have never experienced any of the above." (3) "Now, if you sum the period of your leave or non-employment for reasons such as 1-5 in the previous question, how many years and months is the total period? The total period of leave or non-employment: __ year(s) __ month(s)." Based on the answers to these questions, I calculated actual work experience by the *current age minus the age at which the respondent started working minus the total years of leave or non-employment*. For those who filled in the month part (1–11 months), I added one year of leave or non-employment. For those who never experienced leave or non-employment, I assigned zero as the total years of leave or non-employment.
Length of service	Length of service is measured by the following question: "How many years have you been working for the corporation or organization you currently work at? If you are self-employed, give the number of years self-employed.

__ year(s) (Please enter 0 (zero) in the column if you have worked for less than a year).”

Chapter 4. SEXUAL ORIENTATION AND EDUCATION

4.1 INTRODUCTION

In this chapter, I focus on the relationship between sexual orientation and educational attainment. Regarding racial and gender differences in educational attainment, previous studies in the United States have shown that White people tend to report more years of education and that women are now more likely to hold a college degree; until recently, men had the educational attainment advantage (Everett et al. 2011). However, the number of studies examining sexual orientation and educational attainment is extremely small, even though research on sexual orientation and earnings points to education as a major driver of earnings disparities by sexual orientation (Antecol et al. 2008). In the overall field of educational attainment research, studies are more likely to focus on macro-level trends of educational attainment by social attributes than on how such disparities emerge within school contexts. Conversely, however, previous studies on sexual orientation and educational attainment have focused mainly on documenting bullying against sexual minorities and hostile school environments (Rankin 2005); the number of studies on macro-level educational attainment by sexual orientation is extremely limited (Mollborn and Everett 2015).

Moreover, these few existing studies on educational attainment do not show a consistent pattern with regard to the association between sexual orientation and educational attainment. Surveys targeting for the general population tend to show that women and men with same-sex sexual relationships are more likely to be highly educated than those without such a relationship (Laumann et al. 1994; Turner et al. 2005). One recent study using multiple nationally representative surveys in the United States indicated that lesbians and gay men are more likely to have higher educational attainment than their heterosexual counterparts, whereas the results

comparing bisexual people and heterosexual people are less consistent (Mittleman 2022). Studies using the U.S. Census data, wherein sexual orientation is measured by same-sex cohabiting couple status, report a similar pattern (Baumle et al. 2009; Black et al. 2000; Black, Sanders, and Taylor 2007). On the other hand, studies using data from the National Longitudinal Study of Adolescent to Adult Health (Add Health), targeting younger populations that were in 7th–12th grade in 1994–1995, are less likely to find robust differences by sexual orientation. These studies suggest that the relationship between sexual orientation and educational attainment may be more complex, varying by the definition of sexual orientation and timing of same-sex contact (Mollborn and Everett 2015; Ueno, Roach, and Peña-Talamantes 2013). In Japan, almost no studies have been conducted to quantitatively explore the relationship between sexual orientation and educational attainment; however, a community-based non-representative web survey shows that gay/lesbian people tend to have similar educational attainment to their heterosexual counterparts, whereas bisexual people have lower educational attainment than heterosexual counterparts (Hiramori 2016).

4.2 Background

There are two main possible explanations for how sexual orientation may be associated with educational attainment. The first is selection into sexual minority self-identification. If people from more liberal family backgrounds experience greater tolerance of sexual minorities (Waldner-Haugrud and Magruder 1996), they may be more likely to self-identify as sexual minorities (Mollborn and Everett 2015). Given that parents' educational attainment is strongly associated with their children's educational attainment (Blau and Duncan 1967), it can be argued that higher parental education may be associated with a higher probability of sexual minority self-identification by their children (Black et al. 2000). If this is true, the observed education

advantage experienced by lesbians and gay men may be an artifact of sexual minority self-identification and may not represent the whole picture of this minority group. Therefore, the key to understanding the relationship between sexual orientation and educational attainment is to examine whether lesbians and gay men have higher educational attainment because highly educated people are more likely to identify as a sexual minority.

The second explanation is based on the minority stress hypothesis (Meyer 1995, 2003). According to this hypothesis, minority groups are subject to discrimination, and a school environment that is hostile to sexual minorities leads to worse mental health and heightened risk behavior, which, in turn, may negatively affect academic achievement (Mollborn and Everett 2015). The school environment surrounding sexual minorities in Japan is similar to that in countries such as the United States. A survey in Japan showed that about 60% of sexual and gender minorities experienced bullying, around 70% never learned about same-sex sexuality in school, and only 14% report that teachers were helpful in stopping the bullying behavior.[31] Therefore, it is possible that the fact that sexual minority students—particularly gay men—have lower academic performance in the United States[32] (Pearson, Muller, and Wilkinson 2007; Russell, Seif, and Truong 2001) may be associated with lower educational attainment via hostile school contexts, although this expectation differs from the observed findings for the general population in the United States. However, the existing studies that focus on this hypothesis rely on Add Health data, which lack indicators of the experience of being bullied based on sexual orientation in school. Nevertheless, sexual minority students who did not experience

[31] https://health-issue.jp/reach_online2016_report.pdf
[32] It should be noted that in more recent studies, gay men have higher academic performance than heterosexual men; bisexual men have slightly lower academic performance than heterosexual men, and lesbian and bisexual women have lower academic performance than their heterosexual counterparts (Mittleman 2022).

homophobic victimization had fewer negative outcomes than those in less supportive environments (Birkett, Espelage, and Koenig 2009). Therefore, although general difficulties in school may function as an indirect indicator of victimization and homophobia in school, it is desirable to assess how much of the low academic performance seen among sexual minorities is due to offensive homophobic jokes, teasing, and violent acts.

In addition to these two main explanations, there are some other possible explanations for the relationship between sexual orientation and educational attainment. Previous studies in the United States, as well as other findings by community-based organizations in Japan, indicate that sexual minorities tend to aim for more years of education than heterosexual people, because they anticipate a negative impact of homophobia in the workplace that may affect their earnings prospect, which they seek to counterbalance by investing more in higher education compared to heterosexual people (Barrett et al. 2002; Seiishiki Chosa Group 1998). This interpretation is based on an understanding that education would attenuate labor market discrimination that sexual minorities are expected to experience once they enter the labor market. Also, because education is positively associated with tolerance of sexual minorities (Ohlander, Batalova, and Treas 2005), and because colleges tend to be less hostile to sexual minorities than high schools (Rivers 2001), sexual minorities may seek higher education to escape homophobic high school environments. Similarly, sexual minorities may pursue higher educational attainment to avoid traditionally intolerant occupations or industries, namely “low skill” blue-collar jobs, which tend to be less gay-friendly (Blandford 2003; Kamano et al. 2020).

Building on these prior studies cited above, this dissertation advances current knowledge about sexual orientation and educational attainment in the following two ways. First, by using data from Japan, I can test whether the findings in the United States can be extended to Japanese

society. Although most studies on this topic do not recognize this limitation, one study does acknowledge the role of what I call the "social–institutional structures" in understanding the relationship between sexual orientation and educational attainment, pointing out that "the present study based on US data needs to be extended in future research to other countries that have different educational systems and social climates regarding sexuality" (Ueno, Roach, et al. 2013:137). There are some differences between U.S. and Japanese education systems, such as the strong institutional linkage between school and workforce in Japan (Rosenbaum and Kariya 1989). In addition to describing the patterns of educational attainment by sexual orientation in Japan, this dissertation aims to understand how differences in the contexts surrounding educational systems may alter the relationship between sexual orientation and educational attainment in Japan.

Second, this dissertation makes a novel contribution by using data that include important questions related to educational attainment such as parental education, academic performances, and the experience of being bullied. In particular, the questionnaire design of the Osaka City Residents' Survey makes it possible to test the mechanisms proposed by previous studies in the United States and contribute to the literature by introducing more granular variables such as the experience of being verbally and physically bullied due to sexual orientation and gender identity.

4.3 Research Questions

This study seeks to answer the following two research questions using unique population-based survey data in Osaka, Japan. Given the limited data availability discussed in Chapter 3, I will use a survey conducted in Osaka City to infer Japan's national-level patterns for the research questions below.

1. Do sexual minorities in Japan have higher educational attainment than heterosexual people?

2. What may explain the differences found in educational attainment by sexual minority status?

4.4 Data and Methods

As described in Chapter 3, the data used in this chapter come from the Osaka City Residents' Survey. In this chapter, those aged 25–60 are included in the sample. In Japan, most people complete their lifetime education by the age of 25 (Ministry of Education, Culture, Sports, Science and Technology, Japan 2015). The average age of new entrants to junior colleges and four-year universities in Japan is 18, which is the lowest in the OECD countries. On the other hand, Japan lags behind in terms of lifelong learning, compared to other countries such as the United States.[33] These statistics suggest that respondents in the sample have most likely attained their highest educational attainment by the age of 25 with little chance of returning to school for further education.

The dependent variable is college completion, classified from one question about the last school attended and another about student status (graduated, dropped out, currently enrolled). The main independent variable is sexual orientation identity. In addition, a series of independent variables described in the next section are included to account for confounding factors and to understand possible pathways to educational disparity based on sexual orientation.

4.4.1 *Analytic strategy*

Reflecting the fact that Japan's education system is highly gendered, the sample of this analysis is divided between assigned females at birth and assigned males at birth. I begin the analysis by describing the variables used in the subsequent multivariable analysis. Moving onto the multivariable analysis stage, I describe the unconditional educational disparity by sexual

[33] https://doi.org/10.1787/1a143b02-en

orientation, using an ordinary least squares (OLS) regression analysis to determine whether sexual minorities in Japan have an educational advantage (Model 1). Next, transgender status, nationality, and age are introduced to the analysis as sociodemographic control variables, because they may confound the relationship between sexual orientation and educational attainment (Model 2). Then, mother's education and father's education are introduced to examine the relationship between sexual orientation and educational attainment after accounting for the possibility that children of highly educated parents are more likely to identify as sexual minorities (Model 3). After that, I shift the focus of the analysis to academic performance and enter self-reported grades as a variable to be accounted for (Model 4). In the final model (Model 5), I enter verbal bullying and physical bullying related to sexuality to examine any remaining direct associations between sexual orientation and educational attainment, which may indicate the presence of strategic investment in education after accounting for sociodemographic factors (Model 2), self-selection into sexual minority (Model 3), academic performance (Model 4), and school experience (Model 5). For the multivariable analysis, the linear probability model is used for ease of interpretation and to avoid the problematic aspects of nonlinear probability models, such as logit and probit models (Breen, Karlson, and Holm 2018).

4.5 RESULTS

4.5.1 *Descriptive analysis*

Table 4.1 displays descriptive statistics of the variables used in the analysis stratified by sexual orientation identity among assigned females at birth. The coding of the variables is described in Chapter 3. Because only eight respondents identified as gay/lesbian, the results for gay/lesbian people must be interpreted with caution. The table indicates that sexual minority respondents—defined as those who are gay/lesbian, bisexual, or asexual—are more likely than

heterosexual respondents to graduate from college. Among heterosexual respondents, 30% graduated from college, whereas 50% of gay/lesbian respondents, 42% of bisexual respondents, and 37% of asexual respondents graduated from college. On the other hand, those who selected "don't want to decide, haven't decided" and "I do not understand the question" are less likely than heterosexual respondents to have graduated from college. A total of 24% of those who selected "don't want to decide, haven't decided" and 12% of those who selected "I do not understand the question" graduated from college. Regarding transgender status, the table shows that sexual minority respondents are more likely than heterosexual respondents to be classified as transgender. Similarly, those who selected "don't want to decide, haven't decided" are also more likely than heterosexual respondents to be classified as transgender. It should be noted that among assigned females at birth, there is a large overlap between being gay/lesbian and being transgender. Among gay/lesbian respondents, as many as 38% are classified as transgender, whereas the proportion of transgender people within the whole sample is 1%. This suggests that the results for gay/lesbian respondents must be carefully interpreted with caution when examining bivariate relationships, because some of the findings may be attributable to their transgender status, rather than their sexual orientation per se. For nationality (i.e., Japanese citizenship), sexual minority respondents are less likely than heterosexual respondents to be non-Japanese. On the other hand, those who selected "I do not understand the question" are more likely than heterosexual respondents to be non-Japanese. Although this is merely a preliminary result, it is possible that non-Japanese people are less likely to understand questions about sexual orientation. With regard to age, gay/lesbian and bisexual respondents tend to be younger than heterosexual respondents, whereas the average age difference was negligible between heterosexual respondents and those who selected "asexual" or "don't want to decide, haven't

decided." On the other hand, those who selected "I do not understand the question" tend to be older than heterosexual respondents.

Regarding mother's education, gay/lesbian respondents are more likely than heterosexual respondents to have a mother who graduated from college. A total of 29% of gay/lesbian respondents have a college-graduate mother, compared to only 8% of heterosexual respondents. The proportion of having a college-graduate mother is similar among heterosexual, bisexual and asexual respondents, as well as among those who selected "don't want to decide, haven't decided." On the other hand, those who selected "I do not understand the question" are less likely than heterosexual respondents to have a mother who graduated from college (2% vs. 8%).

Regarding father's education, gay/lesbian and asexual respondents, as well as those who selected "don't want to decide, haven't decided" are as likely as heterosexual respondents to have a father who graduated from college. Bisexual respondents and those who selected "I do not understand the question" are less likely than heterosexual respondents to have a college-graduate father (12% and 18% vs. 27%).

For self-reported grades on a scale of 1 to 5, gay/lesbian and bisexual respondents tend to have lower grades than heterosexual respondents (2.75 and 2.91 vs. 3.28). This is similar to the pattern observed in the United States (Mittleman 2022). On the other hand, asexual respondents tend to have slightly higher grades than heterosexual respondents. Those who selected "don't want to decide, haven't decided" tend to have similar grades to heterosexual respondents, and those who selected "I do not understand the question" tend to have lower grades than heterosexual respondents (2.61 vs. 3.28), suggesting that low academic performance may be associated with the difficulty in selecting the heterosexual category.

With regard to verbal bullying related to sexual orientation and gender identity, sexual minority respondents and those who selected "don't want to decide, haven't decided" are far more likely than heterosexual respondents to report experiences of being verbally bullied in school. Those who selected "I do not understand the question" are as likely as heterosexual respondents to report experiences of being verbally bullied in school. Regarding physical bullying related to sexual orientation and gender identity, bisexual respondents and those who selected "don't want to decide, haven't decided" report experiences of being physically bullied in school. Overall, this table highlights the existence of differences between heterosexual and non-heterosexual respondents as well as the differences among non-heterosexual respondents.

Table 4.1. Descriptive Statistics of Variables Used in the Analysis of College Completion on Sexual Orientation Identity among Assigned Females at Birth, OCRS 2019

Variable	Heterosexual (n=1,898)	Gay/lesbian (n=8)	Bisexual (n=33)	Asexual (n=22)	Don't want to decide, haven't decided (n=131)	I do not understand the question (n=162)	Total (n=2,275)
Bachelor's or higher (self)	0.30	0.50	0.42	0.37	0.24	0.12	0.28
Transgender	0.00	0.38	0.09	0.09	0.05	0.00	0.01
Non-Japanese	0.02	0.00	0.00	0.00	0.02	0.06	0.02
Age in years	42.95 (9.61)	33.12 (5.33)	35.88 (8.86)	41.64 (10.82)	41.64 (10.81)	46.35 (9.71)	43.05 (9.79)
Bachelor's or higher (mother)	0.08	0.29	0.12	0.10	0.10	0.02	0.08
Bachelor's or higher (father)	0.27	0.29	0.12	0.25	0.29	0.18	0.26
Grades	3.28 (1.22)	2.75 (1.28)	2.91 (1.26)	3.43 (1.25)	3.18 (1.30)	2.61 (1.16)	3.22 (1.23)
Bullying (verbal)	0.05	0.63	0.24	0.18	0.18	0.04	0.06
Bullying (physical)	0.00	0.00	0.06	0.00	0.05	0.00	0.01

Note: For categorical variables, proportions are reported. For continuous variables, standard deviations are reported in parentheses, in addition to means. The results for those who did not indicate their sexual orientation identity (n = 21) are not reported but are included in the "Total" column.

Table 4.2 displays descriptive statistics of the variables used in the analysis, which have been stratified by sexual orientation identity among assigned males at birth. The coding of the variables is described in Chapter 3. Because only five respondents identified as asexual, the results for asexual people must be interpreted with caution. The table indicates that asexual respondents are more likely than heterosexual respondents to graduate from college (60% vs. 46%). On the other hand, bisexual respondents and those who selected "don't want to decide, haven't decided" and "I do not understand the question" are less likely than heterosexual respondents to graduate from college (33%, 38%, and 26% vs. 46%). Gay/lesbian respondents are as likely as heterosexual respondents to graduate from college (50% vs. 46%). Regarding transgender status, the table shows that sexual minority respondents are more likely than heterosexual respondents to be classified as transgender. Similarly, those who selected "don't want to decide, haven't decided" are also more likely than heterosexual respondents to be classified as transgender. It should be noted that among assigned males at birth, there is a large overlap between being asexual and being transgender. Among asexual respondents, as many as 40% are classified as transgender, whereas the proportion of transgender people in the whole sample is 1%. This suggests that, although the number of asexual respondents is very small in the first place, the results for asexual people should be interpreted with particular care when examining bivariate relationships, because some of the findings may be attributable to their transgender status, and not their sexual orientation per se. For nationality (i.e., Japanese citizenship), sexual minority respondents are more likely than heterosexual respondents to be non-Japanese. This deviates from the pattern observed among assigned females at birth. On the other hand, those who selected "I do not understand the question" are more likely than

heterosexual respondents to be non-Japanese, which corroborates the pattern observed among assigned females at birth. Those who selected “don’t want to decide, haven’t decided” are as likely as heterosexual respondents to be non-Japanese. With regard to age, gay/lesbian and asexual respondents tend to be younger than heterosexual respondents, whereas the average age difference was negligible between heterosexual respondents and those who selected “bisexual,” “don’t want to decide, haven’t decided,” or “I do not understand the question.”

Regarding mother’s education, gay/lesbian respondents are more likely than heterosexual respondents to have a mother who graduated from college. A total of 15% of gay/lesbian respondents have a college-graduate mother, compared to only 9% of heterosexual respondents. The proportion of respondents with a college-graduate mother is similar among heterosexual respondents and those who selected “don’t want to decide, haven’t decided.” On the other hand, bisexual and asexual respondents, as well as those who selected “I do not understand the question,” are less likely than heterosexual respondents to have a mother who graduated from college. In fact, none of the bisexual or asexual respondents reported having a college-graduate mother.

Regarding father’s education, asexual respondents are more likely than heterosexual respondents to have a father who graduated from college (40% vs. 27%). Bisexual respondents and those who selected “I do not understand the question” are less likely than heterosexual respondents to have a college-graduate father (22% and 13% vs. 27%). On the other hand, gay/lesbian respondents and those who selected “don’t want to decide, haven’t decided” are as likely as heterosexual respondents to have a college-graduate father.

For self-reported grades on a scale of 1 to 5, gay/lesbian and bisexual respondents tend to have comparable grades to those of heterosexual respondents (3.27 and 3.17 vs. 3.26). Unlike

gay men, whose academic performance is better than heterosexual men in the United States (Mittleman 2022), this result suggests that gay/lesbian people assigned male at birth do not have higher academic achievement than their heterosexual counterparts. On the other hand, asexual respondents tend to have higher grades than heterosexual respondents (3.80 vs. 3.26). Those who selected “don’t want to decide, haven’t decided” or “I do not understand the question” tend to have lower grades than heterosexual respondents (2.74 and 2.87 vs. 3.26). Although the grades of those who selected “I do not understand the question” were lower than those of heterosexual people among assigned females at birth as well, the grades of those who selected “don’t want to decide, haven’t decided” were lower than those of heterosexual people only among assigned males at birth.

With regard to verbal bullying related to sexual orientation and gender identity, sexual minority respondents and those who selected “don’t want to decide, haven’t decided” are far more likely than heterosexual respondents to report experiences of being verbally bullied in school. Those who selected “I do not understand the question” are also more likely than heterosexual respondents to report experiences of being verbally bullied in school. Regarding physical bullying related to sexual orientation and gender identity, sexual minority respondents and those who selected “I do not understand the question” are more likely than heterosexual respondents to report experiences of being physically bullied in school. Overall, this table highlights the existence of the differences between heterosexual and non-heterosexual respondents as well as the differences among non-heterosexual respondents.

Table 4.2. Descriptive Statistics of Variables Used in the Analysis of College Completion on Sexual Orientation Identity among Assigned Males at Birth, OCRS 2019

Variable	Heterosexual (n=1,369)	Gay/lesbian (n=22)	Bisexual (n=18)	Asexual (n=5)	Don't want to decide, haven't decided (n=50)	I do not understand the question (n=136)	Total (n=1,613)
Bachelor's or higher (self)	0.46	0.50	0.33	0.60	0.38	0.26	0.44
Transgender	0.00	0.05	0.17	0.40	0.02	0.01	0.01
Non-Japanese	0.03	0.14	0.06	0.20	0.04	0.06	0.03
Age in years	44.56 (9.49)	39.05 (10.45)	45.11 (13.57)	41.20 (13.61)	44.54 (9.49)	46.17 (10.21)	44.64 (9.66)
Bachelor's or higher (mother)	0.09	0.15	0.00	0.00	0.08	0.03	0.09
Bachelor's or higher (father)	0.27	0.30	0.22	0.40	0.24	0.13	0.26
Grades	3.26 (1.30)	3.27 (1.42)	3.17 (1.62)	3.80 (1.30)	2.74 (1.54)	2.87 (1.38)	3.22 (1.32)
Bullying (verbal)	0.07	0.64	0.56	0.40	0.15	0.11	0.09
Bullying (physical)	0.01	0.09	0.06	0.20	0.02	0.05	0.02

Note: For categorical variables, proportions are reported. For continuous variables, standard deviations are reported in parentheses, in addition to means. The results for those who did not indicate their sexual orientation identity (n = 13) are not reported but are included in the "Total" column.

4.5.2 *Multivariable analysis*

4.5.2.1 The results for assigned females at birth

Table 4.3 displays the association between sexual orientation identity and college completion among assigned females at birth. Overall, the analysis suggests that sexual minorities are more likely to graduate from college than heterosexual people among assigned females at birth. Model 1 shows that, compared to heterosexual people, gay/lesbian people are 20.4% more likely to graduate from college; bisexual and asexual people are 12.8% and 7.2% more likely to do so, respectively. On the other hand, compared to heterosexual people, those who selected

"don't want to decide, haven't decided" are 6.0% less likely to graduate from college, and those who selected "I do not understand the question" are 18.0% less likely to do so.

When sociodemographic factors that may confound the relationship between sexual orientation and college completion—such as transgender status, nationality, and age—are introduced in Model 2, the magnitude of the relationship tends to be reduced for sexual minority categories, although the degree of reduction varies by each sexual orientation identity. For respondents who selected "don't want to decide, haven't decided" and "I do not understand the question," the introduction of these sociodemographic factors did not greatly impact the estimate. Given the extremely scarcity of research on the relationship between transgender status and educational attainment, I should note that transgender people assigned female at birth are 14.6% less likely than cisgender people assigned female at birth to graduate from college.

In Model 3, parents' education levels are introduced because it is possible that children of highly educated parents are more likely to identify as sexual minorities, which may be associated with the high educational attainment of lesbians and gay men reported in prior research. For gay/lesbian people, the coefficient is further reduced; they become 5.3% more likely than heterosexual people to graduate from college once self-selection into sexual minority is accounted for. On the other hand, for bisexual people, the coefficient in Model 3 (coef. = 0.115) appears similar to that in Model 1 (coef. = 0.128). From Model 2 (coef. = 0.054) to Model 3, the coefficient grows larger because parents' educational attainment is higher for heterosexual people than bisexual people. For other sexual orientation categories, the introduction of parents' education does not greatly alter the relationship between college completion and sexual orientation.

To account for academic performance, self-reported grades were introduced in Model 4. Except for gay/lesbian people, this addition does not substantially change the relationship between sexual orientation and college completion. After accounting for academic performance, gay/lesbian people assigned female at birth are even more likely to graduate from college, compared to Model 3. However, for those who selected "I do not understand the question," the magnitude is reduced considerably from Model 3 (coef. = -0.114) to Model 4 (coef. = -0.030). It should be noted that grades among those who selected "I do not understand the question" are lower than heterosexual people (see Table 4.1); this factor may partially explain the lower probability of college completion for those who selected "I do not understand the question."

In the final model (Model 5), school experience is added to Model 4 in order to observe the relationship between sexual orientation and college completion after accounting for school experience and other factors that may be associated with this relationship included in Model 4. Overall, the introduction of verbal and physical bullying related to sexual orientation and gender identity does not change the relationship between sexual orientation identity and college completion. For the sexual orientation groups that are considered part of sexual minorities, the probability of college completion is higher than that for heterosexual people from Model 1 through Model 5.

Based on the final model (Model 5), gay/lesbian people assigned female at birth are 9.5% more likely than heterosexual people assigned female at birth to graduate from college. Bisexual people assigned female at birth are 13.1% more likely than heterosexual people assigned female at birth to graduate from college. Asexual people assigned female at birth are 7.2% more likely than heterosexual people assigned female at birth to graduate from college. On the other hand, the remaining sexual orientation groups showed a lower probability of graduating from college

compared to heterosexual people. Those who “don’t want to decide, haven’t decided” their sexual orientation and were assigned female at birth are 6.4% less likely than heterosexual people assigned female at birth to graduate from college. Similarly, those who “do not understand the question” and were assigned female at birth are 3.0% less likely than heterosexual people assigned female at birth to graduate from college. Figure 4.1 below visualizes the results of Model 5. Transgender people assigned female at birth are 18.4% less likely than cisgender people assigned female at birth to graduate from college, based on Model 5.

Table 4.3. OLS Regression Analysis of College Completion on Sexual Orientation Identity among Assigned Females at Birth, OCRS 2019

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
Heterosexual (Ref.)	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----
Gay/lesbian	0.204 (0.159)	.199	0.138 (0.160)	.388	0.053 (0.161)	.742	0.104 (0.150)	.489	0.095 (0.151)	.531
Bisexual	0.128 (0.079)	.104	0.054 (0.077)	.482	0.115 (0.075)	.126	0.134 (0.070)	.057	0.131 (0.071)	.064
Asexual	0.072 (0.103)	.485	0.062 (0.101)	.539	0.097 (0.099)	.329	0.075 (0.093)	.416	0.072 (0.093)	.440
Don't want to decide, haven't decided	-0.060 (0.041)	.145	-0.070 (0.040)	.079	-0.072 (0.039)	.064	-0.065 (0.036)	.072	-0.064 (0.037)	.087
I do not understand the question	-0.180 (0.037)	< .001	-0.138 (0.036)	< .001	-0.114 (0.036)	.001	-0.030 (0.034)	.383	-0.030 (0.034)	.379
Cisgender (Ref.)			----- (-----)	-----	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----
Transgender			-0.146 (0.119)	.223	-0.240 (0.117)	.040	-0.176 (0.109)	.107	-0.184 (0.111)	.097
Japanese (Ref.)			----- (-----)	-----	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----
Non-Japanese			0.040 (0.067)	.550	0.119 (0.066)	.070	0.091 (0.062)	.140	0.128 (0.064)	.046
Age			-0.012 (0.001)	< .001	-0.009 (0.001)	< .001	-0.010 (0.001)	< .001	-0.010 (0.001)	< .001
Mother's education (Bachelor's or higher)					0.211 (0.036)	< .001	0.173 (0.034)	< .001	0.179 (0.035)	< .001
Father's education (Bachelor's or higher)					0.237 (0.022)	< .001	0.182 (0.021)	< .001	0.182 (0.021)	< .001
Grades							0.124 (0.007)	< .001	0.125 (0.007)	< .001
Verbal bullying									0.018 (0.039)	.655
Physical bullying									-0.043 (0.111)	.699
Constant	0.296 (0.010)	< .001	0.818 (0.043)	< .001	0.610 (0.044)	< .001	0.254 (0.046)	< .001	0.249 (0.046)	< .001

n =	2,182	2,180	2,146	2,140	2,103
Adjusted R^2	0.011	0.079	0.162	0.267	0.268

Notes: Standard errors are in parentheses.

4.5.2.2 The results for assigned males at birth

Table 4.4 displays the association between sexual orientation identity and college completion among assigned males at birth. Overall, the analysis suggests that the relationship between identifying as a sexual minority group and college completion differs by sexual orientation identity. Model 1 shows that, compared to heterosexual people, gay/lesbian people are 3.7% more likely to graduate from college; and asexual people are 13.7% more likely to do so. On the other hand, compared to heterosexual people, bisexual people are 13.0% less likely to graduate from college, those who selected "don't want to decide, haven't decided" are 8.8% less likely to graduate from college, and those who selected "I do not understand the question" are 20.5% less likely to graduate from college.

When sociodemographic factors that may confound the relationship between sexual orientation and college completion—such as transgender status, nationality, and age—are introduced in Model 2, some of the categories show a decline in magnitude while other categories show an increase in magnitude. The coefficient for the gay/lesbian category in Model 2 (coef. = 0.000) indicates that the magnitude of the difference is not substantially changed compared to that seen in Model 1 (coef. = 0.037), and there is now no difference between the probability of college completion among heterosexual people and gay/lesbian people in terms of the point estimate in Model 2. A similar pattern is observed for bisexual people, although unlike gay/lesbian people, bisexual people are consistently less likely to graduate from college in both Models 1 (coef. = -0.130) and 2 (coef. = -0.083). On the other hand, the coefficient for asexual

people becomes larger in Model 2 (coef. = 0.207) than in Model 1 (coef. = 0.137). However, because there are only five asexual individuals in the sample of those assigned male at birth, this result may not be robust. For the categories “don’t want to decide, haven’t decided” and “I do not understand the question,” there is little change when accounting for the sociodemographic factors mentioned above. Given the extremely scarcity of research on the relationship between transgender status and educational attainment, I should note that transgender people assigned male at birth are 27.0% less likely than cisgender people assigned male at birth to graduate from college.

In Model 3, parents’ education levels are introduced because it is possible that children of highly educated parents are more likely to identify as sexual minorities, which may be associated with the high educational attainment of lesbians and gay men reported in prior research. For gay/lesbian people, there is little change in the coefficient; they become 3.5% more likely than heterosexual people to graduate from college, once self-selection into sexual minority is accounted for. A similar pattern is found for bisexual people and those who selected “don’t want to decide, haven’t decided.” For both of these groups, the introduction of parental educational attainment did not alter the relationship between sexual orientation identity and college completion. On the other hand, the magnitude of the coefficients for asexual people and “I do not understand the question” becomes smaller. Because parents’ educational attainment among those who selected “I do not understand the question” is lower than that of heterosexual people (see Table 4.2), this may be associated with the low probability of college completion among those who selected “I do not understand the question.” Likewise, father’s educational attainment among asexual people is higher than heterosexual people (see Table 4.2), and this may be

associated with the decline of the coefficient. However, there are only five asexual respondents in the sample, so it is difficult to assess how robust this finding is.

To account for academic performance, self-reported grades were introduced in Model 4. For gay/lesbian and bisexual people, this addition does not substantially change the relationship between sexual orientation identity and college completion. However, for asexual people and those who selected "Don't want to decide, haven't decided," the magnitude is reduced considerably from Model 3 to Model 4. It should be noted that grades among asexual people are higher than heterosexual people, and that grades of those who selected "Don't want to decide, haven't decided" are lower than those of heterosexual people (see Table 4.2); this factor may partially explain the higher probability of college completion among asexual people and the lower probability of college completion among those who selected "Don't want to decide, haven't decided." For the category "I do not understand the question," there is little change when accounting for academic performance.

In the final model (Model 5), school experience is added to Model 4 to observe the relationship between sexual orientation and college completion after accounting for school experience and other factors that may be associated with this relationship included in Model 4. Overall, the introduction of verbal and physical bullying related to sexual orientation and gender identity does not change the relationship between sexual orientation and college completion. Within the sexual orientation groups that are considered part of sexual minorities, the probability of college completion is higher among asexual people than heterosexual people, lower among bisexual people than heterosexual people and similar among gay/lesbian people compared to heterosexual people. For those who selected "don't want to decide, haven't decided," the probability of college completion is similar to that among heterosexual people, although in

Model 1, the probability was lower than that of heterosexual people. For those who selected "I do not understand the question," the probability of college completion is lower than that among heterosexual people. This result is consistent with Model 1, in which those who selected "I do not understand the question" are less likely to graduate from college than heterosexual people.

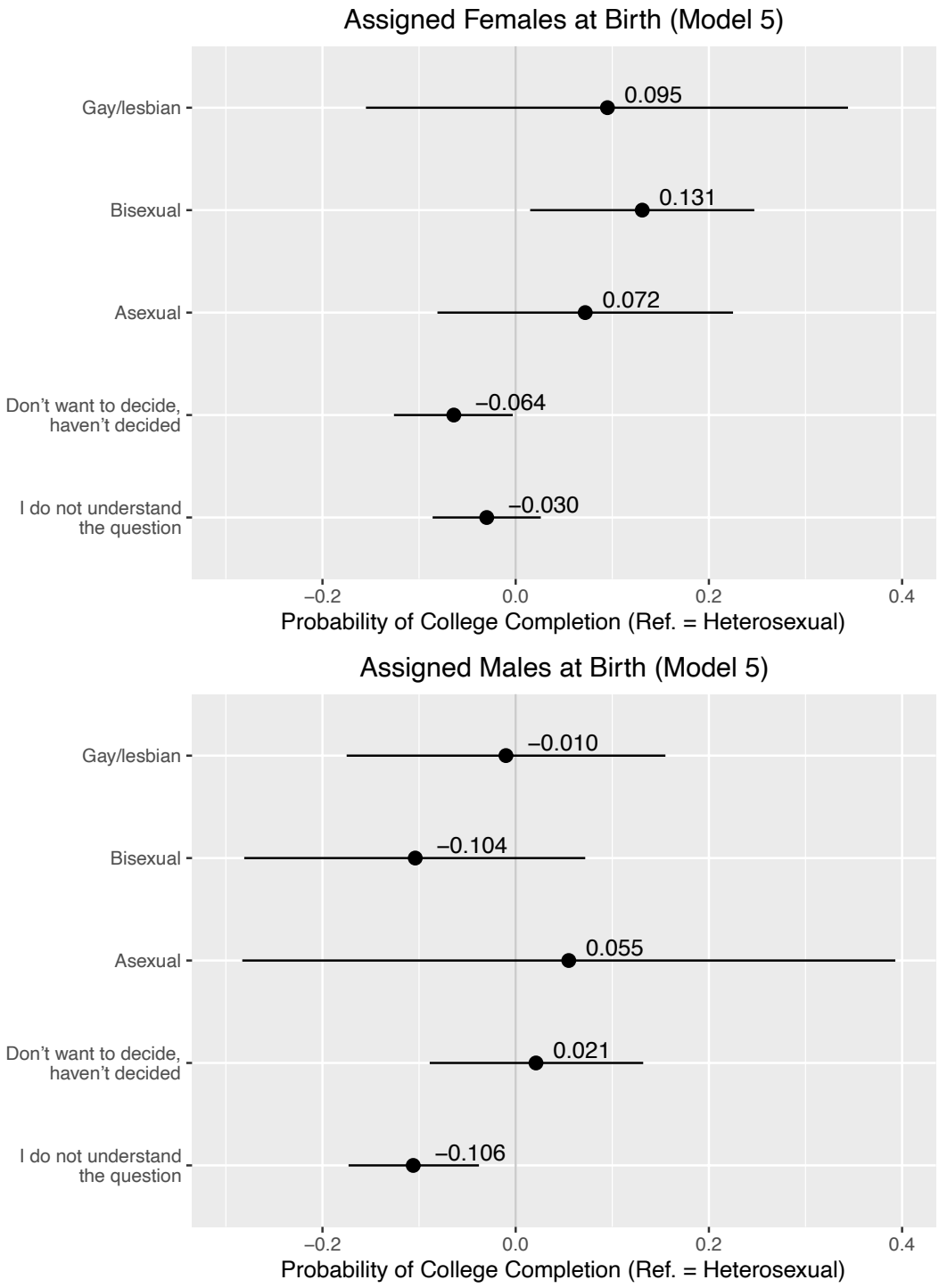
Based on the final model (Model 5), gay/lesbian people assigned male at birth are 1.0% less likely than heterosexual people assigned male at birth to graduate from college. Bisexual people assigned male at birth are 10.4% less likely than heterosexual people assigned male at birth to graduate from college. Those who "do not understand the question" assigned male at birth are 10.6% less likely than heterosexual people assigned male at birth to graduate from college. On the other hand, asexual people assigned male at birth are 5.5% more likely than heterosexual people assigned male at birth to graduate from college. Similarly, those who "don't want to decide, haven't decided" their sexual orientation assigned male at birth are 2.1% more likely than heterosexual people assigned male at birth to graduate from college. Figure 4.1 below visualizes the results of Model 5. Transgender people assigned male at birth are 14.7% less likely than cisgender people assigned male at birth to graduate from college, based on Model 5.

Table 4.4. OLS Regression Analysis of College Completion on Sexual Orientation Identity among Assigned Males at Birth, OCRS 2019

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
Heterosexual (Ref.)	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----
Gay/lesbian	0.037 (0.106)	.729	0.000 (0.106)	.997	0.035 (0.106)	.740	0.014 (0.097)	.886	-0.010 (0.100)	.918
Bisexual	-0.130 (0.117)	.268	-0.083 (0.120)	.488	-0.074 (0.115)	.519	-0.082 (0.106)	.437	-0.104 (0.107)	.331
Asexual	0.137 (0.221)	.536	0.207 (0.230)	.370	0.155 (0.222)	.484	0.058 (0.204)	.777	0.055 (0.205)	.787
Don't want to decide, haven't decided	-0.088 (0.073)	.225	-0.084 (0.072)	.246	-0.068 (0.070)	.330	0.007 (0.065)	.915	0.021 (0.067)	.749
I do not understand the question	-0.205 (0.046)	< .001	-0.195 (0.045)	< .001	-0.145 (0.044)	.001	-0.103 (0.041)	.011	-0.106 (0.041)	.010
Cisgender (Ref.)			----- (-----)	-----	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----
Transgender			-0.270 (0.177)	.128	-0.233 (0.181)	.200	-0.122 (0.167)	.464	-0.147 (0.169)	.383
Japanese (Ref.)			----- (-----)	-----	----- (-----)	-----	----- (-----)	-----	----- (-----)	-----
Non-Japanese			0.078 (0.073)	.284	0.126 (0.072)	.081	0.052 (0.066)	.430	0.032 (0.068)	.639
Age			-0.007 (0.001)	< .001	-0.004 (0.001)	.004	-0.004 (0.001)	.003	-0.003 (0.001)	.005
Mother's education (Bachelor's or higher)					0.049 (0.047)	.297	0.041 (0.044)	.349	0.035 (0.045)	.429
Father's education (Bachelor's or higher)					0.328 (0.030)	< .001	0.241 (0.028)	< .001	0.238 (0.029)	< .001
Grades							0.143 (0.009)	< .001	0.143 (0.009)	< .001
Verbal bullying									0.053 (0.045)	.236
Physical bullying									-0.012 (0.093)	.898
Constant	0.463 (0.014)	< .001	0.786 (0.060)	< .001	0.537 (0.063)	< .001	0.090 (0.064)	.158	0.080 (0.065)	.216

n =	1,510	1,508	1,487	1,486	1,462
Adjusted R^2	0.012	0.032	0.116	0.253	0.249

Notes: Standard errors are in parentheses.



Notes: The horizontal lines indicate 90% confidence intervals. Source: Osaka City Residents' Survey.

Figure 4.1. Sexual Orientation Identity and College Completion by Sex Assigned at Birth, OCRS 2019

4.6 Discussion

In this chapter, I focused on the relationship between sexual orientation and education. In particular, I asked the following two research questions: (1) Do sexual minorities in Japan have higher educational attainment than heterosexual people? (2) What may explain the differences found in educational attainment by sexual minority status?

Using the Osaka City Residents' Survey, the analysis showed that among those assigned female at birth, sexual minorities—such as gay/lesbian, bisexual, and asexual people—tended to have a higher probability of college completion than heterosexual people. However, those who selected "don't want to decide, haven't decided" and "I do not understand the question" tended to have a lower probability of college completion than heterosexual people. These results were found both when examining the unconditional relationship between sexual orientation and college completion and when other possible factors that may work as confounders or mediators—such as sociodemographic factors, self-selection into sexual minority, academic performance, and school experience—were accounted for.

On the other hand, the results for those assigned male at birth were more complicated. Substantially, there was little difference between the probability of college completion among heterosexual people and gay/lesbian people. For bisexual people, the analysis consistently showed a lower probability of college completion among bisexual people compared to heterosexual people. For asexual people, the analysis consistently showed a higher probability of college completion among asexual people compared to heterosexual people, although the number of asexual respondents assigned male at birth was extremely small. These results highlight the importance of not regarding sexual minorities as a monolithic minority group. Those who selected "don't want to decide, haven't decided" tended to have a lower probability of college

completion when examining the unconditional relationship. When other factors mentioned above were included, the negative relationship disappeared, and the probability became comparable to that of heterosexual people. For those who selected "I do not understand the question," the analysis consistently showed a lower probability of college completion.

In addition to describing the relationship between sexual orientation and college completion, I explored a set of confounding factors and three possible pathways that may explain part of the observed relationship. It should be noted that I did not conduct causal mediation analysis (VanderWeele 2015), given that this is the first study examining the relationship between sexual orientation and education using a population-based survey conducted in Japan. Therefore, the findings mentioned below may be due to one or more confounders of the pathways that may explain the relationship between sexual orientation and college completion. In exploring the confounders and possible pathways, I considered the change of coefficient from a model to another model that is as large as or larger than .05 (meaning that there is at least a .05 difference in the probability of college completion due to the introduction of new factors) as indicative of the fact that the factors introduced in the new model may partly explain the relationship.

Among a set of confounding factors (sociodemographic factors (Model 2)) and three possible pathways examined in the analysis (self-selection into sexual minority (Model 3), academic performance (Model 4), and school experience (Model 5)), sociodemographic factors and parents' education appeared to be important for gay/lesbian people assigned female at birth. Because the grades of gay/lesbian people assigned female at birth were lower than those of heterosexual people assigned at birth, academic performance did not appear to reduce the higher probability of college completion among gay/lesbian people. In fact, when academic

performance was accounted for, the already higher probability of college completion as compared to the heterosexual group becomes even higher (suppression). Similarly, school experience did not appear to function as a factor that explains the relationship. For bisexual people assigned female at birth, sociodemographic factors appeared to explain part of the positive relationship. On the other hand, because father's educational attainment is lower among bisexual people than among heterosexual people assigned female at birth, the magnitude of the positive relationship increased when parents' educational attainment was accounted for (suppression). The analysis suggested that the other two possible pathways (academic performance and school experience) did not appear to be the main explanations that illustrate the nature of the relationship between identifying as bisexual and college completion among those assigned female at birth. For asexual people and those who selected "don't want to decide, haven't decided," none of the four sets of factors appeared to explain the relationship between sexual orientation and education. For those who selected "I do not understand the question," low academic performance was suggested to be an important factor that may explain the negative relationship between selecting "I do not understand the question" and college completion. Table 4.5 summarizes the findings for assigned females at birth.

Table 4.5. Summary of the Results of Sexual Orientation Identity and College Completion among Assigned Females at Birth

	(Un)conditional relationship (Ref. = Heterosexual)	Sociodemographic factors	Self-selection	Academic performance	School experience
Gay/lesbian	+ (+)	○	○	S	×
Bisexual	+ (+)	○	S	×	×
Asexual	+ (+)	×	×	×	×
Don't want to decide, haven't decided	- (-)	×	×	×	×
I do not understand the question	- (0)	×	×	○	×

Notes: For the column "(Un)conditional relationship," the conditional results are in parentheses. "○" indicates that the factor(s) may explain part of the relationship between sexual orientation and college completion for the designated sexual orientation group. "×" indicates the opposite. "S" indicates that a possible suppression effect was found.

For those assigned male at birth, there was little difference in terms of college completion between gay/lesbian people assigned male at birth and heterosexual people assigned male at birth in both Models 1 and 5. Among a set of confounding factors (sociodemographic factors (Model 2)) and three possible pathways examined in the analysis (self-selection into sexual minority (Model 3), academic performance (Model 4), and school experience (Model 5)), none appeared to change the relationship between identifying as gay/lesbian and college completion. Similarly, for bisexual people assigned male at birth, none of the four explanations to educational disparity appeared to explain the negative relationship between identifying as bisexual and college completion. For asexual people assigned male at birth, self-selection and academic performance appeared to explain part of the positive relationship. On the other hand, the magnitude of the positive relationship increased when sociodemographic factors were accounted for (suppression). The analysis suggested that school experience did not appear to be the main explanation for the relationship between identifying as asexual and college completion among those assigned male at birth. For those who selected "don't want to decide, haven't decided," academic performance

appeared to explain the relationship between sexual orientation identity and educational attainment. Compared to heterosexual people assigned male at birth, the average grades of those who selected “don’t want to decide, haven’t decided” is lower. Once grades are accounted for, the negative relationship between selecting “don’t want to decide, haven’t decided” and college completion was diminished. None of the other factors appeared to explain the relationship between sexual orientation identity and college completion among this group. For those who selected “I do not understand the question,” low parental educational attainment was suggested to be an important factor that may explain the negative relationship between selecting “I do not understand the question” and college completion. Table 4.6 summarizes the findings for assigned males at birth.

Table 4.6. Summary of the Results of Sexual Orientation Identity and College Completion among Assigned Males at Birth

	(Un)conditional relationship (Ref. = Heterosexual)	Sociodemographic factors	Self-selection	Academic performance	School experience
Gay/lesbian	0 (0)	×	×	×	×
Bisexual	- (-)	×	×	×	×
Asexual	+ (+)	S	○	○	×
Don’t want to decide, haven’t decided	- (0)	×	×	○	×
I do not understand the question	- (-)	×	○	×	×

Notes: For the column “(Un)conditional relationship,” the conditional results are in parentheses. “○” indicates that the factor(s) may explain part of the relationship between sexual orientation and college completion for the designated sexual orientation group. “×” indicates the opposite. “S” indicates that a possible suppression effect was found.

Overall, this chapter showed that, similar to other previous studies in the United States, sexual minority people assigned female at birth in Japan were more likely to have higher educational attainment than heterosexual people assigned female at birth. On the other hand, in

contrast to extant research in the United States, sexual minority people assigned male at birth in Japan were found to be no more likely to graduate from college than heterosexual people assigned male at birth (asexual people assigned male at birth were 5.5% more likely to graduate from college than heterosexual people assigned male at birth in the final model, but this result should not be considered robust as there were only five asexual people assigned male at birth in the sample). In particular, bisexual people assigned male at birth were less likely to graduate from college than heterosexual people assigned male at birth. Regarding the possible pathways that generate educational disparity by sexual orientation identity, the analysis revealed that whether the explanations proposed in previous studies hold depended on sexual orientation identity categories as well as sex assigned at birth. Although the results did not, in general, show consistent patterns, one exception was the fact that school experience did not help explain educational disparity by sexual orientation identity, for both those assigned female and male at birth. The descriptive statistics indicate that sexual minority people are much more likely to be verbally bullied than their heterosexual counterparts, but the present study suggests that the experience of being bullied based on their sexual orientation and gender identity from elementary school through high school may not be detrimental to their educational attainment. Although it is possible that the experience of being verbally bullied may impact academic performance—which, may in turn, affect college completion—an additional analysis indicates that, for both those assigned female and male at birth, the addition of bullying does not appear to explain educational disparity by sexual orientation identity, even when grades are excluded as a control variable.

Like all research, this study is not without limitations. Although this chapter used college completion as the indicator of educational attainment, the use of other indicators of educational

attainment, such as college completion among those who entered college, may yield a different set of results from the result found in this chapter. Additionally, given that the present study uses a survey conducted in Osaka City, future research should use nationally representative surveys in Japan to examine whether the patterns found in this study are also seen on the national level. Similarly, more research, both qualitative and quantitative, is needed to better understand why some of the Japanese patterns differ from those found in previous studies in the United States. Although the present study largely compares its results in Japan with Western countries, it would be desirable to conduct a comparative analysis within East Asian countries that share similar socio-cultural contexts on LGBTQ issues. Some of the extant theoretical explanations for educational disparity based on sexual orientation developed in Western countries tend to assume that sexual minority youths have developed a strong identity as a sexual minority before entering college and that they rationally decide on their educational trajectory based on their sexual minority identity. However, it is unclear to what extent sexual minority youths in Japan have a clear plan for how much education they need to obtain based on their sexual minority status. Although the role played by the timing of identity was not taken into account in the current study, asking about when respondents first identified as their current sexual orientation may provide us with a more accurate illustration of the relationship between sexual orientation and educational attainment. Likewise, an additional analysis by age group with a larger dataset would yield a fuller understanding of how the relationship between sexual orientation and educational attainment may differ by age cohort.

In addition to describing educational disparity by sexual orientation, there is also a need for studies that examine what kind of interventions are necessary to close the existing education gap by sexual orientation. Regarding the role of school experience in understanding sexual

orientation and educational attainment, it is possible that those who have the experiences of being verbally and/or physically bullied based on their sexual orientation and gender identity may be a diverse group that includes those who rarely or sometimes get bullied as well as those who are bullied constantly. The allotted space of the questionnaire made it difficult to ask more granular questions, but a better measurement may yield a result that is more consistent with the extant literature. Likewise, this study cannot assess the degree of reliability and validity of this retrospective question. For example, those who currently experience bullying as adults may have more vivid experiences of being bullied than those who do not currently experience bullying as adults, who may try to forget their school-age experiences. However, despite the above limitations, I hope that this study, which uses a rare population-based survey conducted in Japan, serves as one of the first steps toward describing the educational gap by sexual orientation in Japan and enabling progress to be made in closing it.

Chapter 5. SEXUAL ORIENTATION AND OCCUPATION

5.1 INTRODUCTION

In this chapter, I examine the relationship between sexual orientation and occupation. Regarding gender and racial/ethnic differences in occupation, previous studies have found that women and men and racial/ethnic groups tend to work in different occupations. The gender segregation literature in the United States has shown that occupational segregation between women and men substantially declined over the 1970s and 1980s, changed little over the 1990s, and stalled over the 2000s (Blau et al. 2013). Past research on racial/ethnic segregation in the United States indicates that racial segregation, as measured by comparing Black workers and non-Black workers, decreased slightly from 1983—when occupational data from the Current Population Survey became available to disaggregate by Black and Hispanic statuses, through 2002—whereas ethnic segregation, as measured by comparing Hispanic workers and non-Hispanic workers, significantly increased over the same period (Queneau 2005). However, the number of studies examining sexual orientation and occupation is extremely small, although some research on sexual orientation and earnings points to occupation as a factor associated with earnings disparities by sexual orientation (Blandford 2003).

In addition to the fact that occupation may play an important role in understanding earnings inequality based on sexual orientation, focusing on occupation is traditionally considered important in the field of sociology, and in social stratification research in particular. Individual's occupation, a major source of inequality in modern industrialized societies, is known to have an impact on not only economic circumstances but also a wide range of non-economic aspects of one's social life (Nagamatsu 2018), such as voting intension (Weakliem 1991), attitudes toward sexual and gender minorities (Kamano et al. 2020), and leisure-time

physical activities (Burton and Turrell 2000). In social stratification research, understanding jobs and occupations is considered significant because (1) "job-holding is the most important social and economic role held by most adults outside their immediate family or household," (2) "job-holding tells us about the technical and social skills that we bring to the labor market, and for most people job-holding delimits current and future economic prospects," (3) "as market labor has become nearly universal among adult women as well as men, it is increasingly possible to characterize individuals in terms of their own current or past jobs," (4) "once we have a good job description, it is possible to map jobs into a multitude of classifications, scales, and measures, some of which may provide more information about economic standing than we can obtain from the usual questions about income or wealth," and (5) "measurement of jobs and occupations does not entail the same problems of refusal, recall, reliability, and stability as occur in the measurement of income or wealth" (Hauser and Warren 1997:179). Therefore, examining differences in the distribution of occupations by sexual orientation helps to understand not only the labor market experiences of sexual minority workers compared to those of heterosexual workers, but also the social circumstances of sexual minorities more generally.

As reviewed in Chapter 2, I argue that it is essential to study not only occupation in the strict sense but also other labor market outcomes that are often grouped together in Japanese sociology under the term "occupation" (in the broad sense) when examining Japanese labor markets. As previous studies of Japanese labor markets introduced in Chapter 2 show, focusing solely on occupation—which is the primary outcome typically employed when studying U.S. labor markets—provides only a partial understanding of the nature of labor markets structures in Japan. This is because Japanese labor markets are not necessarily organized exclusively around occupations as defining one's position within the labor market. In order to meaningfully capture

how one's sexual orientation is related to their labor market experiences, this study will examine the distribution of occupations, employment status, and firm size by sexual orientation.

5.2 Background

In this section, I first discuss U.S.-based studies on the relationship between sexual orientation and occupation (in the strict sense). Previous studies on sexual orientation and occupation show that, compared to heterosexual women, lesbians are less likely to work in managerial or clerical/sales positions, more likely to work in craft/operative and service positions, and about equally as likely to work in professional/technical occupations. Gay men, compared to heterosexual men, are less likely to work in managerial or blue-collar occupations, and more likely to be in professional/technical and service occupations (Badgett 1995). These patterns appeared in studies that analyzed the General Social Survey using sexual behavior as a measure of sexual orientation (Badgett and King 1997; Blandford 2003). Using household partner as a sexual orientation measure, studies using the U.S. Census also reported similar results (Antecol et al. 2008; Daneshvary, Waddoups, and Wimmer 2008).

Overall, these findings suggest that sexual minorities are more likely to hold occupations that are atypical for their genders than their heterosexual counterparts. In other words, compared to heterosexual women, non-heterosexual women tend to work in occupations with a higher percentage of men, and non-heterosexual men tend to work in occupations with a higher percentage of women compared to heterosexual men. However, this only means that the degree of occupational segregation among non-heterosexual people is lower than that among heterosexual people; as a whole, non-heterosexual women still tend to work in what are considered female occupations and non-heterosexual men still tend to work in what are considered male occupations (Baumle et al. 2009). Currently, there are four possible

explanations for how sexual orientation may be associated with occupational segregation, particularly by occupational gender typicality (Ueno, Peña-Talamantes, and Roach 2013).

The first explanation is based on gender-typed behaviors. From a socialization perspective, socialization within sexual minority culture may create a stronger preference for gender-atypical occupations among sexual minorities compared to their heterosexual counterparts. Given that in Japan, cultural representation of same-sex sexuality—in particular, male same-sex sexuality—is often conflated with transgender practices (McLelland 2000), there is a possibility that gay men are socialized to be oriented toward gender-atypical behavior, which, in turn, leads to stronger preferences for gender-atypical occupations. It is reported that the association between same-sex sexuality and gender-atypical behavior is stronger among men than women (Bailey and Zucker 1995).

The second explanation is discrimination against sexual minorities. Given that workers in certain occupations are more tolerant of sexual minorities than workers in other occupations (Badgett and King 1997; Kamano et al. 2020), lesbians and gay men may be more inclined to choose gender-atypical occupations that tend to be more tolerant of their sexuality. Sexual minorities appear to anticipate greater discrimination in occupations that emphasize gender-typical traits, such as assertiveness and decisiveness for men (Tilcsik 2011). Conversely, sexual minorities may interpret the existing concentration of sexual-minority workers in gender-atypical occupations as a sign of a safe work environment, which contributes to their self-selection into these occupations (Hewitt 1995).

The third explanation is family-status discrimination. The gender stratification literature shows that parenthood imposes an earnings penalty on women (Budig and England 2001; Takeuchi 2018), which is associated with employers' differential evaluation of parent and non-

parent workers (Correll, Benard, and Paik 2007). These employer biases may operate more strongly in male-typical occupations because those occupations value masculine behaviors and devalue feminine behaviors (Kanter 1977; Padavic and Reskin 1990), which may exacerbate employers' perceived impact of worker family statuses on work commitment. Similarly, employers may consider mothers as unfit for male-typical occupations because behavioral expectations in those occupations (e.g., aggressiveness, leadership) contradict the cultural expectations for mothers (e.g., caretaking) (Ridgeway and Correll 2004). If these processes are in effect, mothers will be selected out of male-typical occupations and into female-typical occupations, which would increase sexual-minority women's likelihood of entering male-typical occupations relative to heterosexual women, due to their lesser likelihood of having children. For men, employers' favorable treatment of married fathers in male-typical occupations would reduce sexual minorities' chance of holding these occupations because of their lesser likelihood of marriage and parenthood. Therefore, sexual-minority men may become selected into female-typical occupations (Black et al. 2007).

The fourth explanation is based on human capital theory. Human capital theory posits that, compared to their heterosexual counterparts, lesbians are more likely to accumulate human capital, whereas gay men are less likely to accumulate human capital, due to the need for lesbians to establish economic independence and the reduced pressure on gay men to assume the role of breadwinner (Badgett 2007). Therefore, their expectation around human capital accumulation may be associated with why lesbians tend to obtain more male-typical, higher-paying occupations that require high skill levels and gay men tend to obtain more female-typical, lower-paying occupations that do not require high skill levels (Berg and Lien 2002; Black et al. 2003; Padavic and Reskin 1994).

Next, I discuss the relationship between sexual orientation and other labor market outcomes, such as employment status and firm size. Because most previous studies on sexual orientation and labor market outcomes have been conducted in Western countries, neither employment status nor firm size are considered as theoretically important outcomes that characterize the core of the labor market structures. Most studies in Western countries assume that sexual minorities aim to minimize the risk of experiencing discrimination at work by choosing an occupation where they expect to experience greater tolerance (Badgett and King 1997). These studies do not fully discuss sexual minority workers' strategies to avoid workplace discrimination by selecting certain employment statuses or firm sizes.

However, the few existing studies show that lesbians are more likely to work full-time than heterosexual women and that gay men are less likely to work full-time than heterosexual men (Tebaldi and Elmslie 2006). Similarly, the 2000 U.S. Census data show that lesbians (women in same-sex couples) tend to work more hours per week and more weeks per year than married/partnered heterosexual women (women in opposite-sex couples) and that gay men (men in same-sex couples) tend to work few hours per week and fewer weeks per year than married/partnered heterosexual men (men in opposite-sex couples) (Black et al. 2007). Also, a study using the 2007–11 American Community Survey shows that the proportion of self-employed workers among gay men is lower than that among married heterosexual men, whereas the proportions of self-employed workers among lesbians and married heterosexual women were comparable (Jepsen and Jepsen 2017).

Regarding the relationship between sexual orientation and firm size, some studies on the relationship between sexual orientation and earnings include firm size as a possible factor that may explain the relationship. However, little research conducted in Western countries provides

insights about whether sexual minorities tend to work in a large firm or a small to mid-sized firm by examining firm size as a theoretically important factor that represents a worker's position within the labor market.

In Japan, "niji VOICE 2018–2020" was a series of community-based web surveys on LGBTQ issues and the workplace environment conducted between 2018 and 2020 by the nonprofit organization Nijiiro Diversity with the cooperation of the Center for Gender Studies at the International Christian University. Its findings indicated that the proportions of cisgender lesbians and cisgender heterosexual women under the non-standard employment are similar, but also that cisgender bisexual women, cisgender pansexual women, and cisgender asexual women are more likely to be under non-standard employment than cisgender heterosexual women. For men, the proportions of cisgender asexual men and cisgender heterosexual men under non-standard employment are similar, but cisgender gay men, cisgender bisexual men, and cisgender pansexual men are more likely to be under non-standard employment than cisgender heterosexual men. When sexual minority categories are grouped together, the proportions of non-standard employment among cisgender lesbian, gay, bisexual, pansexual, asexual people and people of other non-heterosexual orientations are higher than those of cisgender heterosexual people across the survey years (Muraki et al. 2021). Likewise, a qualitative study reports that although lesbians in Japan are more likely than heterosexual women to be in the labor force, they tend to occupy non-standard employment due to their prioritization of economic independence in light of the fact that they cannot rely on a male partner who earns more than women (Kamano 2009). This qualitative study suggests that the process of stratification by sexual orientation may occur at the level of employment status instead of, or in addition to, occupation.

Although these results about employment status are often brought up by LGBTQ activist organizations in Japan to make the argument that LGBTQ workers are disadvantaged partly through their precarious labor relations (i.e., non-standard employment status), cisgender heterosexual respondents in "niji VOICE 2018–2020" and its precedent surveys conducted between 2014–2016 tend to have higher educational and labor market attainment than the national average because some of the non-minority respondents were recruited by Nijiiro Diversity at corporate lectures on LGBTQ issues in the workplace, and the companies interested in LGBTQ issues in the workplace in Japan tend to be large firms. Therefore, a population-based survey is needed to confirm whether sexual minorities are, in fact, more likely to be under non-standard employment.

Regarding the relationship between sexual orientation and firm size, "niji VOICE 2018–2020" shows that cisgender lesbians, cisgender bisexual women, cisgender pansexual women, and cisgender asexual women are less likely than cisgender heterosexual women to work at a large firm, which is defined as having 300 or more workers (Muraki et al. 2021). Similarly, the same study found that cisgender gay men, cisgender bisexual men, cisgender pansexual men, and cisgender asexual men are less likely than cisgender heterosexual men to work at a large firm. Although this is one of the few quantitative empirical data on firm size by sexual orientation, it is difficult to make generalizations due to the recruitment method described above.

More recently, multiple surveys in Japan have shown that large firms are more likely than small or medium-sized firms to implement LGBTQ policies (Mitsubishi UFJ Research and Consulting 2020; Muraki et al. 2021). For example, "niji VOICE 2018–2020" shows that about 20% of small firms implemented LGBTQ policies at work from 2018 through 2020; however, almost half of large firms had already implemented LGBTQ policies in 2018, and that

percentage increased to more than 60% by 2020. The most common LGBTQ policies include trainings and e-learning about sexual/gender minorities, articulating anti-discrimination policies as written rules, and implementing consulting services for workers. Other, less common policies include treating same-sex partners as spouses, supporting transgender workers, and establishing groups for LGBTQ and their ally workers (Muraki et al. 2021). However, given that the importance of LGBTQ rights in the workplace began to receive public attention only in the 2010s, the impact of this trend on the size of the firms where those minorities work is unknown. Overall, there are not enough data to make predictions about the relationship between sexual orientation and firm size, although firm size is traditionally considered to be one of the most important indicators of one's position within the Japanese labor market.

Building on these previous studies mentioned above, this dissertation advances what is known about sexual orientation and occupational segregation in the following way. By using data from Japan, I can test whether the findings in the United States can be extended to Japanese society. One study on occupational attainment acknowledges the role of social–institutional structures in understanding the relationship between sexual orientation and occupation and points out that "more studies in non-U.S. countries are needed to expand the existing literature" because factors that account for sexual orientation differences may vary by location (Ueno, Peña-Talamantes, et al. 2013:27). Most of the explanations of occupational segregation by sexual orientation currently assume labor market structures specific to the United States. In addition to describing the patterns of occupational segregation by sexual orientation in Japan, this dissertation aims to assess the importance of looking beyond occupation (in the strict sense) in order to understand one's position within the labor market across societies. Although LGBTQ activist organizations in Japan often invoke precarious employment relations among sexual and

gender minority workers as part of why they are disadvantaged in the labor market, their claim about the significance of employment status in understanding the socioeconomic situation of sexual minority workers is typically based on anecdotes or non-representative online surveys, and there are no reliable studies on this topic based on a random sampling survey in Japan.

5.3 Research Questions

This study seeks to answer the following three research questions using the Osaka City Residents' Survey, a population-based survey conducted in Osaka, Japan. Given the limited data availability discussed in Chapter 3, I will use a survey conducted in Osaka City to infer Japan's national-level patterns on the research questions below.

1. What does the occupational distribution of sexual minorities in Japan look like, compared to that of heterosexual people?
2. What does the distribution of employment status among sexual minorities in Japan look like, compared to that of heterosexual people?
3. What does the distribution of the size of the firms where sexual minorities in Japan work look like, compared to that of heterosexual people?

5.4 Data and Methods

As described in Chapter 3, the data used in this chapter come from the Osaka City Residents' Survey. Because this chapter focuses on labor market outcomes, those who are working and aged 25–60 years old are included in the sample.

The dependent variables in this chapter are occupation, employment status, and firm size. The main independent variable is sexual orientation identity. Detailed information about these variables is provided in Chapter 3.

5.4.1 *Analytic strategy*

Reflecting the fact that labor markets are highly gendered in Japan, the sample of this analysis is divided into assigned females at birth and assigned males at birth. Because the number of sexual minority respondents relative to the dependent variable categories—particularly occupation—is extremely small, this chapter focuses on descriptive patterns, not multivariate analysis. In order to ease the interpretation of the results, I will use an additional, simplified classifications of sexual orientation identity consisting of three categories. Under this classification, the categories of "heterosexual" and "I do not understand the question" are collapsed into the "majority" category; and "gay/lesbian," "bisexual," and "asexual" are collapsed into the "minority" category. The category "don't want to decide, haven't decided" is not included in either category (majority/minority) because there are both minority and majority respondents in this category, as discussed in Chapter 3.

In this chapter, I first examine occupational segregation by sexual orientation. Second, I examine the distribution of employment status by sexual orientation, Third, I examine the distribution of the size of the firms by sexual orientation. In the results section, I take up differences by sexual orientation that are as large as, or larger than, 5 percentage points and consider these to be potentially meaningful differences. All of the *p*-values shown in this chapter are computed by Monte Carlo simulation to account for the possibility that many cells have extremely low expected frequencies.

5.5 RESULTS

5.5.1 *Occupation*

Table 5.1 and Table 5.2 display the association between sexual orientation identity and occupation among assigned females at birth using the simplified and original sexual orientation classifications, respectively. Table 5.1 indicates that, compared to majority respondents, minority respondents are more likely to work as professional workers by 5.6 percentage points. The proportion of those who work as professional workers among those who selected "don't want to decide, haven't decided" is also higher than that of majority respondents by 10.0 percentage points. The rest of the occupational distributions appear similar when compared based on sexual orientation.

Table 5.2 indicates that the overrepresentation of minority workers in the professional occupations derives largely from the fact that bisexual workers are more likely than heterosexual workers to work in the professional occupations. In fact, among gay/lesbian and asexual respondents, the proportions of those who work as professional workers are lower than that of heterosexual respondents. However, the number of these sexual minority respondents—particularly gay/lesbian respondents—is extremely small, so the results should be interpreted carefully. Overall, the tables suggest that the occupational distribution of sexual minorities appears mostly similar to that of the majority, except that sexual minorities—in particular, bisexual people—are more likely to work as professional workers than the majority for assigned females at birth.

Table 5.1 Occupation by Sexual Orientation Identity among Assigned Females at Birth (Simplified Sexual Orientation Classification), OCRS 2019

	Majority (Heterosexual, I don't understand the question (n=1,571)	Minority (Gay/lesbian, bisexual, asexual) (n=49)	Don't want to decide, haven't decided (n=103)	Total (n=1,739)
Managerial	4.4	6.1	1.9	4.3
Professional	23.0	28.6	33.0	23.7
Clerical	32.8	28.6	30.1	32.4
Sales	11.6	12.2	7.8	11.4
Service	18.7	16.3	14.6	18.5
Blue-collar	8.7	8.2	12.6	9.0
Other	0.4	0.0	0.0	0.4

χ^2: 11.390 (p =.463), Cramer's V: 0.058 (p = .466)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 16) are not reported but are included in the "Total" column.

Table 5.2 Occupation by Sexual Orientation Identity among Assigned Females at Birth (Original Sexual Orientation Classification), OCRS 2019

	Heterosexual (n=1,446)	Gay/lesbian (n=6)	Bisexual (n=28)	Asexual (n=15)	Don't want to decide, haven't decided (n=103)	I do not understand the question (n=125)	Total (n=1,739)
Managerial	4.6	0.0	7.1	6.7	1.9	2.4	4.3
Professional	23.4	16.7	35.7	20.0	33.0	17.6	23.7
Clerical	33.4	16.7	32.1	26.7	30.1	25.6	32.4
Sales	11.8	16.7	7.1	20.0	7.8	10.4	11.4
Service	18.2	50.0	10.7	13.3	14.6	24.8	18.5
Blue-collar	7.9	0.0	7.1	13.3	12.6	19.2	9.0
Other	0.5	0.0	0.0	0.0	0.0	0.0	0.4

χ^2: 45.458 (p =.009), Cramer's V: 0.072 (p = .009)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 16) are not reported but are included in the "Total" column.

Table 5.3 and Table 5.4 display the association between sexual orientation identity and occupation among assigned males at birth using the simplified and original sexual orientation

classifications, respectively. Table 5.3 indicates that minority respondents are more likely than majority respondents to work as service, managerial and professional workers by 13.7, 15.0 and 6.0 percentage points, respectively. Those who selected "don't want to decide, haven't decided" are more likely than majority respondents to work as blue-collar and service workers by 15.8 and 9.5 percentage points, respectively. On the other hand, they are less likely than majority respondents to work as professional, clerical and managerial workers by 14.1, 6.0 and 5.2 percentage points, respectively.

Table 5.4 indicates that respondents in all sexual minority categories (i.e., gay/lesbian, bisexual, and asexual) are more likely to work as service workers than majority respondents. On the other hand, respondents in all sexual minority categories are less likely to work as managerial workers than majority respondents; in fact, none of the gay/lesbian and asexual respondents work as managerial workers. For the professional occupations, gay/lesbian respondents are more likely to work in these occupations than heterosexual respondents, but both bisexual and asexual respondents are much less likely than heterosexual respondents to work in these occupations, leading to the underrepresentation of minority professional workers mentioned above. However, it should be noted that the number of these sexual minority respondents—particularly asexual respondents—is extremely small, so the results should be interpreted with caution. Overall, the tables suggest that, unlike assigned females at birth, the occupational distribution of sexual minorities appears different from that of the majority, suggesting that the degree of occupational segregation by sexual orientation may be larger among assigned males at birth. In particular, the degrees of the overrepresentation of service workers and the underrepresentation of managerial workers among sexual minorities assigned males at birth is especially large.

Table 5.3 Occupation by Sexual Orientation Identity among Assigned Males at Birth (Simplified Sexual Orientation Classification), OCRS 2019

	Majority (Heterosexual, I don't understand the question (n=1,376)	Minority (Gay/lesbian, bisexual, asexual) (n=39)	Don't want to decide, haven't decided (n=40)	Total (n=1,467)
Managerial	22.7	7.7	17.5	22.0
Professional	29.1	23.1	15.0	28.4
Clerical	8.5	10.3	2.5	8.6
Sales	13.0	15.4	22.5	13.4
Service	6.8	20.5	7.5	7.2
Blue-collar	19.2	23.1	35.0	19.8
Other	0.2	0.0	0.0	0.2

χ^2: 27.053 (p =.018), Cramer's V: 0.097 (p = .018)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 12) are not reported but are included in the "Total" column.

Table 5.4 Occupation by Sexual Orientation Identity among Assigned Males at Birth (Original Sexual Orientation Classification), OCRS 2019

	Heterosexual (n=1,257)	Gay/lesbian (n=18)	Bisexual (n=16)	Asexual (n=5)	Don't want to decide, haven't decided (n=40)	I do not understand the question (n=119)	Total (n=1,467)
Managerial	22.9	0.0	18.8	0.0	17.5	21.0	22.0
Professional	29.8	44.4	6.3	0.0	15.0	21.8	28.4
Clerical	8.9	11.1	6.3	20.0	2.5	4.2	8.6
Sales	12.9	11.1	18.8	20.0	22.5	15.1	13.4
Service	7.1	22.2	12.5	40.0	7.5	4.2	7.2
Blue-collar	17.9	11.1	37.5	20.0	35.0	32.8	19.8
Other	0.2	0.0	0.0	0.0	0.0	0.8	0.2

χ^2: 64.106 (p =.018), Cramer's V: 0.094 (p =.018)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 12) are not reported but are included in the "Total" column.

5.5.2 *Employment status*

Table 5.5 and Table 5.6 display the association between sexual orientation identity and employment status among assigned females at birth using the simplified and original sexual

orientation classifications, respectively. Table 5.5 indicates that there is little difference between majority respondents and minority respondents in terms of their employment status. For example, the proportion of standard employees for majority respondents is 43.9%, whereas that of minority respondents is 47.0%. Similarly, the proportion of standard employees for those who selected “don’t want to decide, haven’t decided” is 44.7%, and there is little difference when compared to majority respondents.

Table 5.6 indicates that the slightly larger proportion of standard employees among minority respondents derives from the fact that the majority of gay/lesbian respondents work as standard employees. However, the number of gay/lesbian respondents among those assigned female at birth is extremely small, and it is difficult to make a conclusive statement that sexual minorities—particularly gay/lesbian people—assigned female at birth are more likely to work as standard employees. Overall, the tables suggest that the distribution of employment status among sexual minorities appears similar to that of the majority, suggesting that sexual orientation may not play a significant role in the distribution of employment status among assigned females at birth.

Table 5.5 Employment Status by Sexual Orientation Identity among Assigned Females at Birth (Simplified Sexual Orientation Classification), OCRS 2019

	Majority (Heterosexual, I don't understand the question (n=1,571)	Minority (Gay/lesbian, bisexual, asexual) (n=49)	Don't want to decide, haven't decided (n=103)	Total (n=1,739)
Employer	2.0	2.0	1.0	1.9
Standard employee	43.9	47.0	44.7	44.0
Non-standard employee	45.7	42.9	46.6	45.6
Self-employed	4.8	4.1	3.9	4.9
Family worker	3.3	4.1	2.9	3.3

χ^2: 1.099 (p =.999), Cramer's V: 0.018 (p = .999)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 16) are not reported but are included in the "Total" column.

Table 5.6 Employment Status by Sexual Orientation Identity among Assigned Females at Birth (Original Sexual Orientation Classification), OCRS 2019

	Heterosexual (n=1,446)	Gay/lesbian (n=6)	Bisexual (n=28)	Asexual (n=15)	Don't want to decide, haven't decided (n=103)	I do not understand the question (n=125)	Total (n=1,739)
Employer	2.1	0.0	3.6	0.0	1.0	0.8	1.9
Standard employee	43.9	66.7	42.9	46.7	44.7	43.2	44.0
Non-standard employee	45.3	33.3	42.9	46.7	46.6	50.4	45.6
Self-employed	4.9	0.0	7.1	0.0	3.9	4.0	4.9
Family worker	3.5	0.0	3.6	6.7	2.9	1.6	3.3

χ^2: 7.639 (p =.994), Cramer's V: 0.033 (p = .994)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 16) are not reported but are included in the "Total" column.

Table 5.7 and Table 5.8 display the association between sexual orientation identity and employment status among assigned males at birth using the simplified and original sexual orientation classifications, respectively. Table 5.7 indicates that minority respondents are more likely than majority respondents to work as non-standard employees, standard employees and

self-employed workers by 20.3, 11.2 and 7.2 percentage points, respectively. The low percentage of self-employed workers among sexual minority respondents exhibits a different pattern from the high percentage of self-employed workers among Korean men in Japan, another minority population who are excluded from Japan's primary labor market (Kim 2003). Although the fact that sexual minority workers tend to be younger than heterosexual workers is partly associated with this difference, it may also suggest that sexual minorities and ethnic minorities in Japan employ different strategies to mitigate the hostile environment in the labor market. In fact, the pattern observed in this study is similar to the pattern observed in the United States (Jepsen and Jepsen 2017). Those who selected "don't want to decide, haven't decided" are as likely as majority respondents to work as employers, non-standard employees, self-employed workers, and family workers, but less likely than majority respondents to work as standard employees by 7.7 percentage points.

Table 5.8 indicates that respondents in all sexual minority categories (i.e., gay/lesbian, bisexual, and asexual) are more likely to work as non-standard employees than majority respondents. In particular, much higher proportions of bisexual and asexual respondents work as non-standard employees (note the small number of asexual respondents (n = 5)). Likewise, the low proportion of standard employees among minority respondents is driven by the low proportion of standard employees among bisexual and asexual respondents. In fact, the proportion of standard employees among gay/lesbian respondents is higher than that among heterosexual respondents. For the proportion of self-employed workers, gay/lesbian and asexual respondents are less likely to work as self-employed workers than majority respondents. The proportion of bisexual respondents working as self-employed workers is comparable to that of heterosexual respondents. Overall, the tables suggest that, in contrast to the findings for assigned

females at birth, the distribution of employment status among sexual minorities appears different from that of the majority, suggesting that sexual orientation may play a significant role in driving the distribution of employment status among assigned males at birth. In particular, the degrees of overrepresentation of non-standard employees among sexual minorities assigned male at birth is large.

Table 5.7 Employment Status by Sexual Orientation Identity among Assigned Males at Birth (Simplified Sexual Orientation Classification), OCRS 2019

	Majority (Heterosexual, I don't understand the question (n=1,376)	Minority (Gay/lesbian, bisexual, asexual) (n=39)	Don't want to decide, haven't decided (n=40)	Total (n=1,467)
Employer	6.4	5.1	5.0	6.3
Standard employee	72.7	61.5	65.0	72.0
Non-standard employee	10.5	30.8	15.0	11.2
Self-employed	9.8	2.6	12.5	10.0
Family worker	0.4	0.0	2.5	0.5

χ^2: 21.536 (p =.008), Cramer's V: 0.086 (p = .008)

Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 12) are not reported but are included in the "Total" column.

Table 5.8 Employment Status by Sexual Orientation Identity among Assigned Males at Birth (Original Sexual Orientation Classification), OCRS 2019

	Heterosexual (n=1,257)	Gay/lesbian (n=18)	Bisexual (n=16)	Asexual (n=5)	Don't want to decide, haven't decided (n=40)	I do not understand the question (n=119)	Total (n=1,467)
Employer	6.4	5.6	6.3	0.0	5.0	5.9	6.3
Standard employee	72.6	77.8	50.0	40.0	65.0	73.9	72.0
Non-standard employee	10.5	16.7	37.5	60.0	15.0	10.9	11.2
Self-employed	9.9	0.0	6.3	0.0	12.5	8.4	10.0
Family worker	0.4	0.0	0.0	0.0	2.5	0.8	0.5

χ^2: 31.888 (p =.091), Cramer's V: 0.074 (p = .091)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 12) are not reported but are included in the "Total" column.

5.5.3 *Firm size*

Table 5.9 and Table 5.10 display the association between sexual orientation identity and firm size among assigned females at birth using the simplified and original sexual orientation classifications, respectively. Table 5.9 indicates that there is little difference between majority respondents and minority respondents in terms of the size of the firm they work at, except that the proportion of minority respondents who do not know their firm size is higher than that of majority respondents by 6.3 percentage points, and the proportion of those whose firm size is medium is lower than that of majority respondents by 11.0 percentage points. Likewise, the distribution of firm size among those who selected "don't want to decide, haven't decided" is similar to that of majority respondents.

Table 5.10 indicates that the larger proportion of those who do not know their firm size among minority respondents comes from the fact that the proportion of asexual people who do not know their firm size is particularly large. Regarding the lower proportion of sexual minority

respondents whose firm size is medium, gay/lesbian and bisexual respondents are less likely to work at a medium-sized firm than majority respondents. Bisexual respondents are more likely than majority respondents to work at a small firm. Overall, the tables suggest that the distribution of firm size among sexual minorities appears mostly similar to that of the majority; however, there are some differences, such as the low proportion of those working at a medium-sized firm among minority respondents.

Table 5.9 Firm Size by Sexual Orientation Identity among Assigned Females at Birth (Simplified Sexual Orientation Classification), OCRS 2019

	Majority (Heterosexual, I don't understand the question (n=1,571)	Minority (Gay/lesbian, bisexual, asexual) (n=49)	Don't want to decide, haven't decided (n=103)	Total (n=1,739)
Small	29.5	32.7	25.2	29.4
Medium	25.3	14.3	28.2	25.3
Large	33.8	34.7	36.9	33.9
Government	3.1	4.1	2.9	3.0
Unknown	8.0	14.3	6.8	8.0

χ^2: 6.464 (p =.600), Cramer's V: 0.043 (p = .600)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 16) are not reported but are included in the "Total" column.

Table 5.10 Firm Size by Sexual Orientation Identity among Assigned Females at Birth (Original Sexual Orientation Classification), OCRS 2019

	Heterosexual (n=1,446)	Gay/lesbian (n=6)	Bisexual (n=28)	Asexual (n=15)	Don't want to decide, haven't decided (n=103)	I do not understand the question (n=125)	Total (n=1,739)
Small	30.1	16.7	42.9	20.0	25.2	22.4	29.4
Medium	24.1	16.7	10.7	20.0	28.2	39.2	25.3
Large	34.4	50.0	32.1	33.4	36.9	27.2	33.9
Government	3.1	16.7	3.6	0.0	2.9	2.4	3.0
Unknown	7.9	0.0	10.7	26.7	6.8	8.8	8.0

χ^2: 33.108 (p =.046), Cramer's V: 0.069 (p = .046)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 16) are not reported but are included in the "Total" column.

Table 5.11 and Table 5.12 display the association between sexual orientation identity and firm size among assigned males at birth using the simplified and original sexual orientation classifications, respectively. Table 5.11 indicates that there is little difference between majority respondents and minority respondents in terms of the size of the firm they work at, except that the proportion of those who do not know their firm size among minority respondents is higher than that among majority respondents by 7.9 percentage points. For the distribution of firm size among those who selected "don't want to decide, haven't decided," the proportion of those whose firm size is medium is higher than that among majority respondents by 5.0 percentage points, and the proportion of those whose firm size is large is lower than that among majority respondents by 5.7 percentage points.

Table 5.12 indicates that bisexual and asexual respondents are more likely than majority respondents to select "unknown" as firm size Also, bisexual respondents are more likely than majority respondents to work at a large firm, in contrast to bisexual respondents assigned female at birth, who are more likely than majority respondents assigned female at birth to work at a

small firm. Overall, the tables suggest that the distribution of firm size among sexual minorities appears mostly similar to that of the majority, which is similar to the findings for assigned females at birth.

Table 5.11 Firm Size by Sexual Orientation Identity among Assigned Males at Birth (Simplified Sexual Orientation Classification), OCRS 2019

	Majority (Heterosexual, I don't understand the question (n=1,376)	Minority (Gay/lesbian, bisexual, asexual) (n=39)	Don't want to decide, haven't decided (n=40)	Total (n=1,467)
Small	30.0	25.6	32.5	30.1
Medium	25.0	25.6	30.0	25.0
Large	38.2	35.9	32.5	37.9
Government	4.3	0.0	2.5	4.2
Unknown	2.4	10.3	2.5	2.6

χ^2: 12.245 (p =.141), Cramer's V: 0.065 (p = .141)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 12) are not reported but are included in the "Total" column.

Table 5.12 Firm Size by Sexual Orientation Identity among Assigned Males at Birth (Original Sexual Orientation Classification), OCRS 2019

	Heterosexual (n=1,257)	Gay/lesbian (n=18)	Bisexual (n=16)	Asexual (n=5)	Don't want to decide, haven't decided (n=40)	I do not understand the question (n=119)	Total (n=1,467)
Small	29.5	27.8	25.0	20.0	32.5	33.6	30.1
Medium	24.7	33.3	18.8	20.0	30.0	27.7	25.0
Large	38.5	33.3	43.8	20.0	32.5	35.3	37.9
Government	4.5	0.0	0.0	0.0	2.5	2.5	4.2
Unknown	2.5	5.6	12.5	20.0	2.5	0.8	2.6

χ^2: 22.009 (p =.334), Cramer's V: 0.062 (p = .334)
Note: Percentages are reported. The results for those who did not indicate their sexual orientation identity (n = 12) are not reported but are included in the "Total" column.

5.6 Discussion

In this chapter, I focused on the relationship between sexual orientation and occupation. In particular, I asked the following three research questions: (1) What does the occupational distribution of sexual minorities in Japan look like, compared to that of heterosexual people? (2) What does the distribution of employment status among sexual minorities in Japan look like, compared to that of heterosexual people? (3) What does the distribution of the size of the firms where sexual minorities in Japan work look like, compared to that of heterosexual people?

Using the Osaka City Residents' Survey, the analysis showed that among those assigned female at birth, sexual minorities—such as gay/lesbian, bisexual, and asexual people—were more likely than heterosexual people to work as professional workers. However, among those assigned male at birth, sexual minorities were more likely than heterosexual people to work as service workers but less likely to work as managerial or professional workers. One of the possible explanations for these findings includes the educational attainment of sexual minorities. In particular, bisexual people assigned male at birth had lower educational attainment, which may be associated with the higher proportion of blue-collar workers and the lower proportion of professional workers among bisexual people assigned male at birth. For employment status, there were no substantial differences observed between sexual minorities and heterosexual people assigned female at birth. On the other hand, among those assigned male at birth, sexual minorities were more likely than heterosexual people to work under non-standard employment, and less likely to work under standard employment or work as self-employed workers. Similar to the case of occupation, many bisexual people assigned male at birth work under non-standard employment, in particular. Regarding firm size, sexual minorities assigned female at birth were less likely to work in a medium-sized firm, whereas there were no substantial differences

between sexual minorities and heterosexual people assigned male at birth. Table 5.13 summarizes the findings observed in this chapter.

Table 5.13. Summary of the Results of Sexual Orientation Identity and Occupation (Occupation, Employment Status, and Firm Size)

	Assigned females at birth	Assigned males at birth
Occupation	Professional (+)	Service (+) Managerial (-) Professional (-)
Employment status	Little difference	Non-standard (+) Standard (-) Self-employed (-)
Firm size	Medium-sized (-)	Little difference

Notes: The results shown here are the characteristics of sexual minorities compared to those of heterosexual people.

Overall, this chapter showed that the existence of occupational segregation by sexual orientation in Japan cannot be denied, particularly among those assigned male at birth. The less pronounced segregations across various labor market outcomes (occupation, employment status, firm size) among those assigned female at birth suggest that the factor of sexual orientation may play a minimal role in one's labor market position for assigned females at birth and, furthermore, that being an assigned female at birth may have a much stronger impact on one's occupation, employment status, and firm size due to Japan's strong gender inequality in the labor market. On the other hand, segregations of various labor market outcomes—occupation and employment status, in particular—observed among those assigned male at birth suggest that the labor market is an important site where assigned males at birth are stratified by sexual orientation.

Moreover, the results suggested that in Japan, unlike in the United States (Badgett and King 1997), sexual minorities assigned female at birth—but not sexual minorities assigned male at birth—were more likely to work in tolerant occupations. For example, a nationally

representative survey on attitudes toward sexual and gender minorities conducted in 2019 in Japan shows that managerial occupation (which is underrepresented among sexual minorities assigned male at birth) is the most tolerant occupation in terms of sexual orientation, followed by professional occupation (which is overrepresented among sexual minorities assigned female at birth and underrepresented among sexual minorities assigned male at birth) as the second most tolerant occupation. The survey also shows that clerical/sales/service ranks as the third (male respondents) or fourth (female respondents) most tolerant occupation among the five broad occupation categories (Kamano et al. 2020). On the other hand, employment status among sexual minorities assigned male at birth was more precarious than that among heterosexual people assigned male at birth, and this result was similar to the findings of U.S. studies showing that gay men are less likely than heterosexual men to work full-time. However, the stronger labor market commitment observed among lesbians in the United States was not seen in Japan, as there was little difference of employment status by sexual orientation among those assigned female at birth. Regarding firm size, this study did not support the findings from previous studies in Japan (i.e., that sexual minorities are less likely to work in a large firm) or the theoretical prediction based on recent trends of LGBTQ policies at work (i.e., that sexual minorities are more likely to work in a large firm).

Like all research, this study is not without limitations. Given that the present study uses a survey conducted in Osaka City, future research should use nationally representative surveys in Japan to examine whether the patterns found in this study are also seen on the national level. Although detailed information about the occupational structure in Osaka City is not readily available, Osaka is famous for its traditional strength in manufacturing;[34] this may have an

[34] https://www.city.osaka.lg.jp/toshikeikaku/cmsfiles/contents/0000456/456238/h29kekka2.pdf

impact on the labor market structure of Osaka City, making it difficult to generalize the results in this chapter to Japan as a whole. Moreover, the model of occupational categorization used in the Osaka City Residents' Survey was crude, thereby potentially underestimating the degree of occupational segregation by sexual orientation. Introducing a question on sexual orientation in social surveys and other government surveys commonly employed by stratification scholars and other social scientists in Japan, who routinely use detailed occupations in their analysis, would be desirable so that more common indexes of occupational segregation, such as the Duncan Segregation Index, can be used (Duncan and Duncan 1955; Finnigan 2020).

Also, more research, both qualitative and quantitative, is needed to better understand why the Japanese patterns differ from those found in previous studies in the United States. For example, a recent qualitative study shows that many sexual-minority young adults in Japan anticipate financial insecurity and consequently prioritize stability over pursuit of personal interests in their career planning, whereas sexual-minority young adults in the United States tend to develop optimistic views about their future careers (Ueno 2021). Although the present study largely compares its results in Japan with Western countries, it would also be desirable to conduct a comparative analysis within East Asian countries that share similar socio-cultural contexts on LGBTQ issues. Similarly, the results reported in this chapter are predominantly descriptive. In addition to describing segregation in the labor market by sexual orientation, there is a need to conduct studies that examine the mechanism by which one's position in the labor market is determined, as well as those that investigate what kinds of interventions are necessary to close the existing segregation by sexual orientation. However, despite the above limitations, I hope that this study, which uses a rare population-based survey conducted in Japan, serves as one

of the first steps toward describing segregation in the labor market by sexual orientation in Japan and facilitating integration.

Chapter 6. SEXUAL ORIENTATION AND EARNINGS

6.1 INTRODUCTION[35]

Earnings is an important area of study to understand the economic foundations for people's lives, and earnings are widely used by economists and sociologists to measure labor market inequality (Hara and Seiyama 2005; Kerbo 2012). In the past, most of the studies on earnings inequality in the United States focused on social attributes, such as gender and race (Altonji and Blank 1999; Morris and Western 1999). Since the mid-1990s, however, a growing number of studies have explored the association between sexual orientation and earnings. These studies generally show that gay men tend to earn less than their heterosexual counterparts (a phenomenon known as the "gay penalty") whereas lesbians tend to earn more than their heterosexual counterparts (a phenomenon known as the "lesbian premium") (Drydakis 2021; Kamano 2012; Klawitter 2015; Valfort 2017). However, some studies suggest the existence of a gay premium (Carpenter and Eppink 2017), and others have found evidence of an earnings disadvantage for lesbians (Curley 2018). Overall, lesbians tend to earn more than heterosexual women and gay men tend to earn less than heterosexual men, but there is a large variation among the existing studies. Also, it should be noted that although lesbians earn more than heterosexual women when compared among women, lesbians still earn less than gay men and heterosexual men, suggesting that the impact of gender on earnings is greater than that of sexual orientation (Waite and Denier 2015).

Regarding bisexual people, studies have shown that regardless of gender, bisexual people earn less than their heterosexual counterparts (Carpenter 2005; Mize 2016). However, there is

[35] Some of the material in this section and the next section also appears in Japanese in Iwamoto et al. (2019).

not enough research on the relationship between bisexuality and earnings. Studies of sexual orientation and earnings often use census data; however, census studies use same-sex couple status as a proxy for sexual orientation, which makes it impossible to distinguish between gay/lesbian and bisexual people. Similarly, survey studies are constrained by treating gay/lesbian and bisexual people as a single group because of the small number of sexual minority respondents. In Japan, one study points out the possibility that both sexual minority women and men may experience income disadvantage (Hiramori 2016), but there are no such studies using a population-based survey in Japan.

6.2 Background

Currently, there are three main explanations for the "lesbian premium" and "gay penalty" phenomena (Klawitter 2015). The first explanation is discrimination, and many studies refer to the possibility that earnings disparities are caused by discrimination against lesbians and gay men (Badgett 1995; Klawitter and Flatt 1998). In other words, it is argued that if earnings disparities by sexual orientation persist after accounting for factors related to skills (such as education and work experience), occupational factors, and other factors that may be associated with earnings (such as health and family formation), it is an indirect manifestation of the existence of discrimination by employers. For this reason, it is generally recommended to use hourly wages rather than annual income as the outcome of focus, as work hours may reflect worker's choice (e.g., married women with young children choosing to work part-time because of housework and childrearing responsibilities). If one's objective is to indirectly estimate the degree of direct discrimination by employers, hourly wages should be used, based on the human capital theory assumption that a worker's wages are determined by their own productivity or human capital.

However, although the gay penalty can be viewed as an instance of discrimination based on sexual orientation, field experiments have indicated a contradiction between the lesbian premium and the reported discrimination against lesbians (Mishel 2016). One potential explanation for this paradox would be that men, who tend to be more involved than women in making decisions about employment, are less tolerant toward gay men than toward lesbians (Kite and Whitley 1996). Also, lesbians may be less likely to be directly discriminated against because, compared to gay men, lesbians tend not to disclose their sexual orientation (Badgett 2001). Therefore, because lesbians tend to accumulate more human capital than heterosexual women, as described below, it is possible that this human capital advantage may offset discrimination against lesbians (Badgett 2007). Thus, the key to testing this hypothesis is to properly measure human capital and other possible forces that may be related to earnings so that the remaining disparity can be attributed to discrimination. Because the data used in this dissertation do not include information about direct discrimination by employers, I interpret the remaining (negative) impact of sexual orientation on earnings, after accounting for other factors that may confound or mediate the relationship between sexual orientation and earnings, as suggestive of the existence of discrimination; however, I use the term "disparities" throughout this dissertation because differences in unobserved factors not taken into account in this study, rather than direct discrimination, may explain the remaining impact of sexual orientation on earnings.

The second explanation is based on human capital theory. As mentioned in Chapter 1, many studies of sexual orientation and earnings are conducted by labor economists (Denier and Waite 2019), who tend to view the matter through the lens of human capital theory. Under human capital theory, workers receive earnings based on their productivity, which is increased

with human capital accumulation (Becker [1964] 1993a; Mincer 1974). Many of the previous studies in labor economics suggest that the lesbian premium exists because lesbians accumulate more human capital compared to heterosexual women. That is, lesbians are more likely to invest in human capital than heterosexual women because lesbians do not anticipate being partnered with a man; thus, lesbians need to be economically independent, whereas heterosexual women can rely on a male partner, who earns more than women (Badgett 2007). However, if this explanation holds, then it would also imply that gay men are less likely than heterosexual men to invest in human capital because gay men can rely on their partners' earnings, whereas heterosexual men are expected to be the household breadwinner once they are partnered with a woman, who tends to earn less than a man. Nevertheless, studies on sexual orientation and educational attainment in the United States show that both lesbians and gay men in the general population tend to have higher educational attainment than their heterosexual counterparts (Black et al. 2000; Laumann et al. 1994); this contradicts to the expected outcome among men. Another problem with the human capital explanation is that the existing studies typically use education and potential work experience—rather than actual experience—as indicators of human capital. Because potential work experience is calculated by the formula *(potential experience) = (age) - (years of education + 5)*, it is possible that this indicator cannot adequately control for full human capital accumulation, which is also related to the first explanation of earnings disparities by sexual orientation. In discussing the lesbian premium, economist Marieka Klawitter (2015:23) writes,

> One explanation for the lesbian advantage might be differences in work experience, not captured even studies including measures of "potential work experience." Unfortunately, none of the major datasets has information on actual work experience and the proxy normally used for experience (age less years of education

minus 5) will likely miss key differences in work history for lesbians and heterosexual women given patterns of work force attachment.

The third explanation focuses on gender and intrahousehold decisions. An example of this mechanism—particularly based on the level of expected earnings for the partner—has already been mentioned above, but there are also other mechanisms that fall into this category. For example, lesbians tend to work more hours per week than heterosexual women, while gay men tend to work fewer hours per week than heterosexual men (Baumle and Poston 2011). Certainly, this difference could be interpreted as the result of discrimination against gay men in the workplace, but it is also possible that work hours are determined by intrahousehold decisions (e.g., which partner works outside, and for how many hours, and which partner takes care of housework, and for how many hours). In addition, same-sex couples are less likely than opposite-sex couples to have children, which may be one reason for earnings disparities by sexual orientation (Black et al. 2007). However, one study found that the lesbian premium persisted even when comparing lesbians to heterosexual women without children, indicating that lesbians' lower likelihood of having children alone cannot explain the lesbian premium phenomenon (Jepsen 2007). Among men, parent status accounts for a large portion of the earnings gap by sexual orientation (Baumle 2009). Furthermore, because many previous studies use U.S. Census data—and are therefore restricted to using same-sex couple status as the indicator of sexual orientation—it is possible that the magnitude of earnings disparities by sexual orientation may be greater when same-sex couples are compared against opposite-sex couples than when gay men/lesbians are compared against heterosexual people as a whole (Carpenter and Gates 2008). Because partnered lesbians and gay men tend to share characteristics associated with high earnings (Carpenter and Gates 2008), it may be necessary to employ data that include

not only partnered lesbians and gay men, but also single lesbians and gay men, to better understand how having a partner may alter the relationship between sexual orientation and earnings.

Although these mechanisms may be applicable to the Japanese case, it is important to recognize that these explanations may assume features specific to Western societies, such as the fact that the proportion of sexual minority workers who disclose their sexual orientation at work is rising, which may increase their likelihood of experiencing direct discrimination from their employer. As reviewed in Chapter 2, it is important to take into account Japan's social–institutional structures to fully understand the earnings inequality based on sexual orientation in that country.

Building on the prior studies mentioned above, this dissertation advances what is known about sexual orientation and earnings in three ways. First, by using data from Japan, I can test whether the phenomena of the lesbian premium and the gay penalty can be extended to Japanese society. Although Japan shares many of the gender inequality patterns observed around the world such, as the fact that women have lower earnings than men (Yamaguchi 2008), Japan sometimes exhibits patterns of gender inequality that differ from those found in other major economies, such as the OECD countries. For example, 48.1% of men and 42.4% of women in Japan obtain bachelor's degrees or equivalent-level degrees, whereas in most OECD countries, women and men obtain bachelor's degrees at similar rates, or women are even more likely than men to obtain bachelor's degrees.[36] Moreover, as is seen in Chapters 4 and 5, the relationship between sexual orientation and educational attainment in Japan, as well as the relationship between sexual

[36] https://doi.org/10.1787/eag-2016-en

orientation and occupational segregation in Japan, are different from the patterns observed in Western countries.

Second, by using data specifically collected to study labor market outcomes including earnings, I can test how much of the previous studies' findings are associated with the use of potential work experience as an indicator of human capital. The dataset used in this dissertation includes a question about the respondent's number of years in the labor market (excluding childcare leave, a caregiver leave, etc.) to measure general human capital. In addition, a question about the years of service at the corporation or organization at which the respondents currently work is also included to measure firm-specific human capital (Becker [1964] 1993a). Although measuring firm-specific human capital may be less relevant in countries such as the United States, where workers' median length of tenure with the current employer is only around 4 years,[37] this measurement is essential in countries such as Japan, where the average length of service is around 12 years.[38] By employing these more precise measures of human capital, this study contributes to the literature on sexual orientation and earnings, which has tended to rely on secondary analyses of censuses or surveys and only rarely employs surveys designed by scholars who conduct the analysis for the specific purpose of overcoming the limitations of previous studies.

Third, by using data specifically designed to build a foundation for the demography of sexual orientation and gender identity in Japan, indicators of sexual orientation other than same-sex couple status have been made available by this study. This makes it possible to extend the range of the target population included in the analysis to those who are single, which was impossible to do using the U.S. Census data relied on by many previous studies on this topic.

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[37] https://www.bls.gov/news.release/pdf/tenure.pdf
[38] https://www.mhlw.go.jp/toukei/itiran/roudou/chingin/kouzou/z2019/dl/14.pdf

Moreover, although the sample size is small, the sexual orientation identity question includes a variety of sexual orientation options that are understudied, such as “bisexual” and “asexual.” This makes it possible to explore potential differences within sexual minorities who are typically grouped together. However, the few studies that place an emphasis on understanding particular earnings disadvantages experienced by bisexual women and men (e.g., Mize 2016) suggest that treating sexual orientation in a binary way (i.e., heterosexual/same-sex) may overlook the differences in treatment experienced by various sexual minorities experience in the labor market.

6.3 Research Questions

This study seeks to answer two research questions using the Osaka City Residents’ Survey, a population-based survey conducted in Osaka, Japan. Given the limited data availability discussed in Chapter 3, I will use a survey conducted in Osaka City to infer Japan’s national-level patterns on the research questions below.

1. Do sexual minorities in Japan have lower earnings than heterosexual people?
2. What may explain the differences found in earnings disparities by sexual orientation?

6.4 Data and Methods

As described in Chapter 3, the data used in this chapter come from the Osaka City Residents’ Survey. In this chapter, those who are currently working and aged 25–60 years old are included in the sample. In Japan, most people complete their lifetime education by the age of 25 (Ministry of Education, Culture, Sports, Science and Technology, Japan 2015). Also, due to Japan’s mandatory retirement system, the analytical sample should be limited to workers younger than 60 years old when the Japanese data are used to study earnings (Kawaguchi 2011). It should be noted that all of the respondents who were 60 years old at the time of survey

(January–March 2019) were 59 years old when the sample was drawn from the Basic Resident Register on October 1, 2018, and that the fiscal year in Japan ends on March 31 every year.

The dependent variable is the natural logarithm of the respondents' hourly wages in U.S. dollars ($1 = 100 Japanese yen). The main independent variable is sexual orientation identity. In addition, a series of independent variables indicated in the next section are included to account for potential confounders and to understand possible pathways to earnings disparities based on sexual orientation.

6.4.1 *Analytic strategy*

Reflecting the facts that Japan's labor market is highly gendered and that the impact of sexual orientation is known to differ by gender, the sample of this analysis is divided into assigned females at birth and assigned males at birth. First, I begin the analysis by describing the variables used in the subsequent multivariable analysis. Moving onto the multivariable analysis part, I describe the unconditional earnings differentials by sexual orientation, using an ordinary least squares (OLS) regression analysis to examine whether there is an earnings advantage for sexual minorities in Japan (Model 1). Next, transgender status and nationality are introduced to the analysis as sociodemographic control variables because they may confound the relationship between sexual orientation and earnings disparities (Model 2). Then, partnership and parent statuses are introduced to the analysis to examine the relationship between sexual orientation and earnings disparities after accounting for household structure (Model 3). Because it is known in the "motherhood penalty" literature that the number of children a woman has is not related to her earnings in a linear way (Budig and England 2001), I enter three dummy variables (one child aged younger than 18, two children aged younger than 18, and more than two children aged younger than 18) for parent status to account for the nonlinear nature of the impact of having

children. Then, education and years of potential work experience, along with its squared term divided by 100, are introduced to examine the relationship between sexual orientation and earnings after accounting for the differences in human capital (Model 4). In the next model, years of actual work experience is introduced as an alternative indicator of human capital accumulation in the labor market while excluding years of potential work experience from the model (Model 5). After that, I enter years of service at the same firm to account for firm-specific human capital (Model 6). In contrast to countries like the United States, Japan has a highly developed internal labor market (Kalleberg and Lincoln 1988) because of characteristics as the high prevalence of long-term employment and seniority-based wages, as well as the lack of the custom to include detailed job descriptions in labor contracts. Therefore, it is important to take into account firm-specific human capital accumulated through on-the-job training and job rotation among various positions within the same firm (Mincer and Higuchi 1988). In the final model (Model 7), I shift the focus of the analysis to one's employment position within the labor market and enter occupation, employment status, and firm size, which may be seen as an indicator of the existence of possible discrimination after accounting for demographic (Model 2), household (Model 3), human capital (Models 4–6), and labor market (Model 7) factors.

In this chapter, exponentiated regression coefficients are reported in the tables to help clarify the percentage difference that exists between the reference category and each dummy variable for categorical variables. For example, a factor change coefficient of 1.125 for gay/lesbian people means that gay/lesbian people earn 12.5% more than heterosexual people (the reference category for sexual orientation is "heterosexual"). For continuous variables, the exponentiated regression coefficients facilitate understanding of the percentage differential for a one-unit increase in the independent variable.

6.5 RESULTS

6.5.1 *Descriptive analysis*

Table 6.1 displays descriptive statistics of the variables used in the analysis stratified by sexual orientation identity among assigned females at birth. The coding of the variables is described in Chapter 3. The table includes variables that were used to construct the variables used in the analysis but not directly used in the analysis itself (e.g., hours worked per week). Also, because the number of respondents who are gay/lesbian is only six, the results for gay/lesbian people should be interpreted with case. This section will focus on the variables not mentioned in previous chapters. The patterns of descriptive statistics for transgender status, non-Japanese status, educational attainment, age, occupation, employment status, and firm size are similar to the pattern described in the chapter when these variables were introduced.

Regarding log wages, gay/lesbian respondents, on average, tend to have slightly higher log wages than heterosexual respondents (2.75 vs. 2.63); however, the log wages of bisexual and asexual respondents are similar to those of heterosexual respondents (2.60 and 2.65 vs. 2.63). The results of hourly wages and annual earnings are not reviewed here because wages/earnings are skewed to the right and comparing mean values is not meaningful. The table indicates that gay/lesbian respondents work more hours per week than heterosexual respondents, although it should be noted that there are only six gay/lesbian respondents. This result is similar to the pattern seen in the United States (Black et al. 2007). Except for this difference, there is little difference in terms of work hours by sexual orientation identity.

With regard to partnership status, gay/lesbian respondents are most likely to be partnered with someone; heterosexual respondents and those who selected “I do not understand the question” rank second; bisexual respondents and those who selected “don’t want to decide,

haven't decided" rank third; and asexual respondents are the least likely to be in a partnership. Regarding parental status, heterosexual respondents and those who selected "I do not understand the question" are most likely to have one or more children, whereas gay/lesbian and asexual respondents rarely have children. On the other hand, bisexual respondents and those who selected "don't want to decide, haven't decided" are less likely than heterosexual respondents to have children but are more likely than gay/lesbian and asexual respondents to have children.

Regarding the variables to measure human capital (potential years of work experience, actual experience, and length of service at the same firm), both potential experience and actual experience tend to be shorter among sexual minority respondents, largely reflecting the fact that they tend to be younger than heterosexual respondents. For example, mean potential experience of heterosexual respondents is 24.26, whereas that of gay/lesbian, bisexual, and asexual respondents is 14.67, 15.89, and 18.92, respectively. However, the difference by sexual orientation identity appears to be greater for potential experience than for actual experience, suggesting that potential experience may not fully capture the fact that many heterosexual female workers in Japan (temporarily) exit the labor market upon marriage and childbirth, and may also take childcare/caregiver leaves. For example, actual experience of heterosexual respondents is 19.85, whereas that of gay/lesbian, bisexual, and asexual respondents is 13.00, 12.50, and 16.54, respectively. Moreover, the length of service tends to be shorter among gay/lesbian and bisexual respondents than among heterosexual respondents, whereas it is mostly similar among asexual respondents and those who selected "don't want to decide, haven't decided"; it is slightly longer among those who selected "I do not understand the question." These differences are expected to be explained in part by the age distribution by sexual orientation identity.

Table 6.1. Descriptive Statistics of Variables Used in the Analysis of Log-Wages by Sexual Orientation Identity among Assigned Females at Birth, OCRS 2019

Variable	Heterosexual (n=1,387)	Gay/lesbian (n=6)	Bisexual (n=27)	Asexual (n=14)	Don't want to decide, haven't decided (n=97)	I do not understand the question (n=119)	Total (n=1,665)
Log wages	2.63 (0.78)	2.75 (0.37)	2.60 (0.77)	2.65 (0.74)	2.58 (0.69)	2.55 (0.79)	2.63 (0.77)
Hourly wages in US$	20.17 (33.99)	16.64 (6.54)	17.97 (15.14)	20.28 (27.13)	18.06 (26.22)	19.95 (37.83)	19.99 (33.42)
Annual earnings	29073.54 (22442.56)	35000.00 (17888.54)	28333.33 (22870.87)	26428.57 (12924.12)	27061.86 (17074.48)	24243.70 (19273.22)	28561.56 (21846.55)
Hours worked per week	34.02 (13.95)	40.33 (15.55)	34.81 (13.41)	36.14 (14.28)	35.98 (12.68)	32.46 (14.55)	34.05 (13.94)
Transgender	0.00	0.50	0.07	0.07	0.04	0.00	0.01
Non-Japanese	0.02	0.00	0.00	0.00	0.01	0.05	0.02
Partnership	0.59	0.83	0.48	0.23	0.47	0.57	0.58
No child	0.67	1.00	0.78	0.93	0.85	0.64	0.68
One child	0.16	0.00	0.07	0.07	0.09	0.18	0.15
Two children	0.14	0.00	0.15	0.00	0.05	0.16	0.13
More than two children	0.03	0.00	0.00	0.00	0.01	0.03	0.03
High school or less	0.31	0.50	0.19	0.38	0.38	0.51	0.33
Vocational school	0.16	0.17	0.15	0.23	0.15	0.14	0.16
Junior college	0.21	0.00	0.15	0.08	0.19	0.17	0.20
University	0.29	0.33	0.52	0.15	0.27	0.18	0.28
Graduate school	0.03	0.00	0.00	0.15	0.02	0.00	0.03
Years of education	14.08 (1.69)	13.67 (1.97)	14.67 (1.57)	14.15 (2.23)	13.88 (1.71)	13.33 (1.52)	14.02 (1.69)
Age in years	43.33 (9.55)	33.33 (6.22)	35.56 (9.00)	39.00 (10.24)	42.56 (10.60)	46.07 (9.90)	43.36 (9.74)
Potential experience	24.26 (10.16)	14.67 (5.43)	15.89 (9.73)	18.92 (11.46)	23.55 (11.22)	27.74 (10.55)	24.34 (10.37)
Actual experience	19.85 (9.86)	13.00 (6.69)	12.50 (8.50)	16.54 (11.65)	20.21 (10.93)	24.69 (10.82)	20.08 (10.12)
Length of service	8.50 (8.37)	4.50 (5.43)	6.15 (8.06)	8.43 (8.66)	9.16 (9.84)	10.27 (9.21)	8.62 (8.54)
Managerial	0.05	0.00	0.07	0.07	0.01	0.03	0.04
Professional	0.23	0.17	0.33	0.21	0.33	0.18	0.24
Clerical	0.34	0.17	0.33	0.29	0.31	0.27	0.32
Sales	0.12	0.17	0.07	0.21	0.08	0.10	0.12
Service	0.18	0.50	0.11	0.07	0.13	0.25	0.18

Blue-collar	0.08	0.00	0.07	0.14	0.13	0.17	0.09
Other occupation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employer	0.02	0.00	0.04	0.00	0.00	0.01	0.02
Standard employee	0.45	0.67	0.44	0.50	0.46	0.45	0.45
Non-standard employee	0.46	0.33	0.41	0.50	0.48	0.50	0.46
Self-employed	0.04	0.00	0.07	0.00	0.03	0.03	0.04
Family worker	0.03	0.00	0.04	0.00	0.03	0.02	0.03
Small company	0.29	0.17	0.44	0.14	0.23	0.22	0.29
Medium-sized company	0.24	0.17	0.11	0.21	0.28	0.29	0.25
Large company	0.35	0.50	0.33	0.36	0.39	0.29	0.35
Government	0.03	0.17	0.04	0.00	0.03	0.03	0.03
Unknown firm size	0.08	0.00	0.07	0.29	0.07	0.08	0.08

Note: For categorical variables, proportions are reported. For continuous variables, standard deviations are reported in parentheses, in addition to means. The results for those who did not indicate their sexual orientation identity (n = 15) are not reported but are included in the "Total" column.

Table 6.2 displays descriptive statistics for the variables used in the analysis stratified by sexual orientation identity among assigned males at birth. The coding of the variables is described in Chapter 3. The table includes variables that were used to construct the variables used in the analysis but not directly used in the analysis itself (e.g., hours worked per week). Also, because the number of respondents who are asexual is only four, the results of asexual people should be interpreted with case. This section will focus on the variables not mentioned in previous chapters. The patterns of descriptive statistics for transgender status, non-Japanese status, educational attainment, age, occupation, employment status, and firm size are similar to the pattern described in the chapter when these variables were introduced.

Regarding log wages, sexual minority respondents (gay/lesbian, bisexual, and asexual), on average, tend to have lower log wages than heterosexual respondents (2.82, 2.98, and 2.66 vs. 3.12). In addition, the log wages of those who selected "don't want to decide, haven't decided" or "I do not understand the question" are lower than those of heterosexual respondents (2.71 and

3.04 vs. 3.12). The results of hourly wages and annual earnings are not reviewed here because wages/earnings are skewed to the right and comparing mean values is not meaningful. The table indicates that, except for asexual respondents, respondents of all sexual orientation identities work the same number of hours per week as heterosexual respondents, although it should be noted that there are only four asexual respondents. In the United States, gay men (men in same-sex couples) tend to work fewer hours per week (Black et al. 2007), so the result in this study shows a different pattern. Except for this difference, however, there is little difference in terms of work hours by sexual orientation identity.

For partnership status, heterosexual respondents and those who selected "I do not understand the question" are most likely to be partnered with someone, whereas gay/lesbian and bisexual respondents, as well as those who selected "don't want to decide, haven't decided," are less likely to be in a partnership than the first group. None of the asexual respondents has a partner, although there are only four asexual respondents. Regarding parental status, heterosexual respondents and those who selected "I do not understand the question" are most likely to have one or more children, whereas gay/lesbian and asexual respondents rarely have children. On the other hand, bisexual respondents and those who selected "don't want to decide, haven't decided" are less likely than heterosexual respondents to have children but more likely than gay/lesbian and asexual respondents to have children.

Regarding the variables to measure human capital (potential years of work experience, actual experience, and the length of service at the same firm), both potential experience and actual experience tend to be shorter among gay/lesbian respondents but slightly longer among bisexual respondents compared to heterosexual respondents, which is largely attributable to the fact that gay/lesbian respondents tend to be younger, whereas bisexual respondents tend to be

slightly older, than heterosexual respondents. For example, mean potential experience of heterosexual respondents is 24.95, while that of gay/lesbian, bisexual, and asexual respondents is 17.07, 27.73, and 25.50, respectively. However, in contrast to the case of assigned females at birth, the difference between potential experience and actual experience tends to be larger among sexual minority respondents than among heterosexual respondents. For example, actual experience of heterosexual respondents is 22.50, whereas that of gay/lesbian, bisexual, and asexual respondents is 13.50, 23.57, and 21.00, respectively. This suggests that sexual minority workers assigned male at birth may be more likely than heterosexual workers assigned male at birth to (temporarily) exit the labor market for some reason. If this is true, this career interruption may be one of the reasons why sexual minority workers assigned male at birth are more likely to be in non-standard employment compared to heterosexual workers assigned male at birth. Moreover, the length of service tends to be shorter among gay/lesbian and bisexual respondents than among heterosexual respondents, whereas it is mostly similar among asexual respondents and those who selected “I do not understand the question,” and slightly shorter among those who selected “don’t want to decide, haven’t decided.” In contrast to the case of those assigned female at birth, it is expected that these differences can be explained, in part, not through the age distribution but rather through the distribution of employment status by sexual orientation identity.

Table 6.2. Descriptive Statistics of Variables Used in the Analysis of Log-Wages by Sexual Orientation Identity among Assigned Males at Birth, OCRS 2019

Variable	Heterosexual (n=1,217)	Gay/lesbian (n=15)	Bisexual (n=15)	Asexual (n=4)	Don't want to decide, haven't decided (n=35)	I do not understand the question (n=111)	Total (n=1,409)
Log wages	3.12 (0.73)	2.82 (0.73)	2.98 (0.70)	2.66 (0.34)	2.71 (0.88)	3.04 (0.77)	3.09 (0.74)
Hourly wages in US$	30.43 (32.58)	23.02 (26.36)	26.38 (28.80)	15.00 (5.40)	20.29 (14.07)	29.19 (32.56)	29.80 (32.02)
Annual earnings	58203.33 (37914.24)	38333.33 (17593.29)	55312.56 (58798.75)	25000.00 (14142.14)	41571.43 (29008.50)	50405.41 (26859.36)	56691.37 (37102.51)
Hours worked per week	46.20 (14.88)	45.60 (14.75)	43.53 (13.45)	32.50 (9.574)	44.97 (14.98)	46.73 (20.00)	46.18 (15.31)
Transgender	0.00	0.00	0.20	0.25	0.03	0.01	0.00
Non-Japanese	0.02	0.13	0.00	0.00	0.06	0.07	0.03
Partnership	0.69	0.60	0.53	0.00	0.57	0.69	0.69
No child	0.60	1.00	0.80	1.00	0.66	0.61	0.61
One child	0.19	0.00	0.13	0.00	0.23	0.23	0.19
Two children	0.16	0.00	0.07	0.00	0.09	0.13	0.15
More than two children	0.05	0.00	0.00	0.00	0.03	0.03	0.05
High school or less	0.33	0.13	0.33	0.50	0.46	0.52	0.35
Vocational school	0.14	0.33	0.33	0.00	0.09	0.19	0.14
Junior college	0.02	0.00	0.00	0.00	0.03	0.01	0.02
University	0.44	0.20	0.27	0.50	0.40	0.25	0.42
Graduate school	0.07	0.33	0.07	0.00	0.03	0.04	0.07
Years of education	14.50 (1.99)	15.47 (2.20)	14.13 (1.92)	14.00 (2.31)	14.00 (2.00)	13.61 (1.88)	14.42 (2.00)
Age in years	44.46 (9.36)	37.53 (8.53)	46.87 (12.89)	44.50 (13.20)	44.94 (8.39)	46.00 (10.44)	44.57 (9.51)
Potential experience	24.95 (9.90)	17.07 (9.00)	27.73 (13.07)	25.50 (12.48)	25.94 (8.86)	27.20 (11.13)	25.12 (10.06)
Actual experience	22.50 (9.99)	13.50 (7.73)	23.57 (12.14)	21.00 (10.89)	23.91 (8.98)	25.19 (11.60)	22.68 (10.14)
Length of service	13.61 (10.57)	5.60 (5.21)	6.87 (7.56)	13.75 (4.92)	10.34 (7.99)	12.69 (11.00)	13.30 (10.55)
Managerial	0.23	0.00	0.20	0.00	0.17	0.21	0.22
Professional	0.30	0.46	0.07	0.00	0.17	0.23	0.29
Clerical	0.09	0.07	0.07	0.25	0.03	0.05	0.09
Sales	0.13	0.07	0.20	0.25	0.17	0.14	0.13
Service	0.07	0.27	0.07	0.25	0.86	0.05	0.07

Blue-collar	0.18	0.13	0.40	0.25	0.37	0.32	0.20
Other occupation	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Employer	0.06	0.07	0.07	0.00	0.06	0.06	0.06
Standard employee	0.73	0.80	0.53	0.50	0.63	0.77	0.73
Non-standard employee	0.10	0.13	0.33	0.50	0.14	0.09	0.11
Self-employed	0.10	0.00	0.07	0.00	0.14	0.07	0.10
Family worker	0.00	0.00	0.00	0.00	0.03	0.01	0.00
Small company	0.29	0.33	0.27	0.00	0.37	0.32	0.30
Medium-sized company	0.25	0.33	0.20	0.33	0.31	0.29	0.25
Large company	0.39	0.33	0.40	0.33	0.29	0.36	0.38
Government	0.05	0.00	0.00	0.00	0.00	0.03	0.04
Unknown firm size	0.02	0.00	0.13	0.33	0.03	0.01	0.02

Note: For categorical variables, proportions are reported. For continuous variables, standard deviations are reported in parentheses, in addition to means. The results for those who did not indicate their sexual orientation identity (n = 12) are not reported but are included in the "Total" column.

6.5.2 *Multivariable analysis*

6.5.2.1 The results for assigned females at birth

Table 6.3 displays the results of an OLS regression analysis of hourly wages on sexual orientation identity among assigned females at birth. Because the number of respondents who are gay/lesbian is only six, the results of gay/lesbian people should be interpreted with case. Model 1 examines the unconditional relationship between sexual orientation identity and wages. The results for Model 1 (assigned females at birth) indicate that gay/lesbian people earn 12.5% more than heterosexual people, bisexual people earn 3.5% less than heterosexual people, asexual people earn 1.4% more than heterosexual people, those who selected "don't want to decide, haven't decided" earn 5.0% less than heterosexual people, and those who selected "I do not understand the question" earn 8.2% less than heterosexual people. Although the results from Model 1 show that gay/lesbian people assigned female at birth earn more than heterosexual

people—which appears to support the lesbian premium hypothesis supported in Western countries—it should be noted that half of gay/lesbian people assigned female at birth in this sample are transgender.

In Model 2, sociodemographic factors, such as transgender status and non-Japanese status, are added to the analysis as control variables. The results for Model 2 (assigned females at birth) indicate that gay/lesbian people earn 0.9% more than heterosexual people, bisexual people earn 5.0% less than heterosexual people, asexual people earn 0.4% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 5.8% less than heterosexual people, and those who selected "I do not understand the question" earn 8.2% less than heterosexual people. From these results, it may be possible to argue that the lesbian premium found in Western countries is not observed in Japan, where gay/lesbian people assigned female at birth earn almost as much as heterosexual people assigned female at birth. For other sexual orientation identity categories, adding sociodemographic variables did not substantially alter the relationship between sexual orientation identity and wages. An interesting result is that transgender people earn 24.4% more than cisgender people, which may partially explain why gay/lesbian people earn more than heterosexual people in Model 1. Although the number of transgender people assigned female at birth is extremely small, this result suggests that some transgender people assigned female at birth may be economically disadvantaged by their transgender status but, at the same time, gain economic advantage by being regarded as men. It is possible that one may gain economic advantage by being regarded as a non-binary person, but it remains doubtful whether an employer can recognize their employee as having a gender other than that of a woman or man. According to a web survey in Japan, the "Survey on LGBT Issues in the Workplace Environment 2014," 33% of female-to-male transgender respondents are

regarded as male at work, 53% are regarded as female, and the remaining 14% are regarded as non-binary or as having another gender. Similarly, 7% of the non-binary transgender respondents assigned female at birth are regarded at work as non-binary as having another gender, 3% are regarded as male, and the remaining 90% are regarded as female (Nijiiro Diversity and the Center for Gender Studies, International Christian University 2014). In addition, it should be noted that the sample includes only those who are currently working, and not all transgender people are included in the sample.

To consider family structure, Model 3 includes partnership and parental statuses. The results for Model 3 (assigned females at birth) indicate that gay/lesbian people earn 0.6% more than heterosexual people, bisexual people earn 8.2% less than heterosexual people, asexual people earn 8.9% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 10.0% less than heterosexual people, and those who selected "I do not understand the question" earn 8.1% less than heterosexual people. Although asexual people experience greater earnings disadvantage once family structure is accounted for (i.e., part of why asexual people have wages comparable to those of heterosexual people may be explained by the fact that asexual people are less likely to be in a partnership and have children), the relationship between sexual orientation identity and wages did not substantially change for the other sexual orientation identity categories.

In Model 4, education and potential years of work experience, along with its squared form divided by 100, are entered to consider human capital accumulation. The results for Model 4 (assigned females at birth) indicate that gay/lesbian people earn 3.4% more than heterosexual people, bisexual people earn 9.1% less than heterosexual people, asexual people earn 5.6% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 8.9%

less than heterosexual people, and those who selected "I do not understand the question" earn 2.2% less than heterosexual people. The only category for which the degree of wage difference compared to heterosexual people decreased substantially is "I do not understand the question." The descriptive statistics show that those who selected this category tend to have lower educational attainment albeit longer work experience; this may partially explain why those who selected "I do not understand the question" have lower wages than heterosexual people (see Table 6.1).

Because it is known that potential work experience may not be the best measure to capture human capital accumulation in the labor market (Klawitter 2015), in Model 5 I dropped this variable and added a variable that measures actual years of work experience. The results for Model 5 (assigned females at birth) indicate that gay/lesbian people earn 3.4% more than heterosexual people, bisexual people earn 3.1% less than heterosexual people, asexual people earn 6.6% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 11.6% less than heterosexual people, and those who selected "I do not understand the question" earn 6.5% less than heterosexual people. When actual work experience (rather than potential work experience) is accounted for, the difference between bisexual people's wages and heterosexual people's wages decreased (-8.2% $\rightarrow$ -9.1% vs. -8.2% $\rightarrow$ -3.1%), which suggests that actual work experience may better explain the wage disadvantages experienced by bisexual people. On the other hand, such a decrease was not seen for gay/lesbian and asexual people, nor for those who selected "don't want to decide, haven't decided." Furthermore, the results for those who selected "I do not understand the question" suggest that, compared to actual work experience, potential work experience may better explain the source of earnings disadvantages experienced by those who selected this option.

To further account for human capital accumulation, length of service at the same firm is entered as a variable to measure firm-specific human capital in Model 6. Because of the rigid, highly developed internal labor markets that are characteristic of Japan, accounting for firm-specific human capital is important for an accurate measurement of human capital accumulation. The results for Model 6 (assigned females at birth) indicate that gay/lesbian people earn 9.9% more than heterosexual people, bisexual people earn 9.1% less than heterosexual people, asexual people earn 9.9% of heterosexual people, those who selected "don't want to decide, haven't decided" earn 11.7% less than heterosexual people, and those who selected "I do not understand the question" earn 8.7% less than heterosexual people. When sociodemographic factors, family structure, and human capital (including firm-specific human capital) are held constant, gay/lesbian people's earnings advantage over heterosexual people becomes even greater, compared to when firm-specific human capital was not accounted for (3.4% vs. 9.9%). On the other hand, when firm-specific human capital is included in the model, the difference between bisexual people's wages and heterosexual people's wages increased (-3.1% vs. -9.1%), suggesting that bisexual workers experience more severe earnings disadvantages compared to when length of service at the same firm is not accounted for. For the other sexual orientation identity categories, the introduction of firm-specific human capital does not substantially alter the relationship between sexual orientation identity and wages.

After examining how the existing association between sexual orientation identity and wages may be altered after taking human capital accumulation into consideration, workers' job positions within the labor market are entered into the final model (Model 7). In particular, occupation, employment status, and firm size were added to account for workers' position within the labor market. The results for Model 7 (assigned females at birth) indicate that gay/lesbian

people earn 3.6% less than heterosexual people, bisexual people earn 8.9% less than heterosexual people, asexual people earn 0.6% less than heterosexual people, those who selected “don’t want to decide, haven’t decided” earn 10.1% less than heterosexual people, and those who selected “I do not understand the question” earn 6.7% less than heterosexual people. These results suggest that, because gay/lesbian people are in a better job position than heterosexual people (especially in terms of employment status and firm size; see Table 6.1), their wages become lower than heterosexual people’s wages once the labor market factors are accounted for. Similarly, the results for asexual people suggest that their earnings disadvantages experienced in part by this group may be explained by their disadvantaged job position within the labor market. Once the labor market factors are accounted for, there is little difference between asexual people’s wages and heterosexual people’s wages. For the other sexual orientation identity categories, the results suggest that a worker’s position within the labor market plays a minimal role in understanding the relationship between sexual orientation identity and wages. Figure 6.1 visualizes the results for Model 7.

6.5.2.2 The results for assigned males at birth

Table 6.4 displays the results of an OLS regression analysis of hourly wages on sexual orientation identity among assigned males at birth. Because the number of respondents who are asexual is only four, the results of asexual people should be interpreted with care. Model 1 examines the unconditional relationship between sexual orientation identity and wages. The results for Model 1 (assigned males at birth) indicate that gay/lesbian people earn 26.2% less than heterosexual people, bisexual people earn 13.0% less than heterosexual people, asexual people earn 36.7% less than heterosexual people, those who selected “don’t want to decide, haven’t decided” earn 33.3% less than heterosexual people, and those who selected “I do not

understand the question" earn 7.5% less than heterosexual people. Similar to findings from Western countries where the gay penalty is present, the results from Model 1 show that sexual minorities assigned male at birth earn less than heterosexual people.

In Model 2, sociodemographic factors, such as transgender status and non-Japanese status, are added to the analysis as control variables. The results for Model 2 (assigned males at birth) indicate that gay/lesbian people earn 22.4% less than heterosexual people, bisexual people earn 11.0% less than heterosexual people, asexual people earn 34.7% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 31.9% less than heterosexual people, and those who selected "I do not understand the question" earn 5.3% less than heterosexual people. Overall, the results indicate that adding sociodemographic variables does not substantially alter the relationship between sexual orientation identity and wages. Although transgender people assigned female at birth earn 24.4% more than cisgender people assigned female at birth, Model 2 shows that transgender people assigned male at birth earn 15.0% less than cisgender people assigned male at birth. Although the number of transgender people assigned male at birth in the sample is extremely small, this result suggests that, unlike transgender people assigned female at birth (who may be economically disadvantaged by their transgender status but gain economic advantage by being regarded as men), transgender people assigned male at birth may be doubly disadvantaged by their transgender status and gender identity as women or non-binary. According to a web survey in Japan, the "Survey on LGBT Issues in the Workplace Environment 2014," 51% of male-to-female transgender respondents are regarded at work as female, 36% are regarded as male, and the remaining 13% are regarded as non-binary or as having another gender. Similarly, 16% of the non-binary transgender respondents assigned male at birth are regarded at work as non-binary or as having another

gender, 12% of them are regarded as female, and the remaining 72% are regarded as male (Nijiiro Diversity and the Center for Gender Studies, International Christian University 2014).

To consider family structure, partnership and parental statuses are entered in Model 3. The results for Model 3 (assigned males at birth) indicate that gay/lesbian people earn 17.5% less than heterosexual people, bisexual people earn 4.2% less than heterosexual people, asexual people earn 13.6% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 28.6% less than heterosexual people, and those who selected "I do not understand the question" earn 2.7% less than heterosexual people. The results suggest that family structure may partially explain the relationship between sexual orientation identity and wages among bisexual and asexual people (and to a lesser extent, among gay/lesbian people; there was a 4.9 percentage point increase). For the other sexual orientation identity categories, the relationship between sexual orientation identity and wages did not change substantially.

In Model 4, education and potential years of work experience, along with its squared form divided by 100, are entered to consider human capital accumulation. The results for Model 4 (assigned males at birth) indicate that gay/lesbian people earn 15.7% less than heterosexual people, bisexual people earn 1.3% less than heterosexual people, asexual people earn 16.8% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 28.1% less than heterosexual people, and those who selected "I do not understand the question" earn 3.0% more than heterosexual people. The only category for which the wage difference compared to heterosexual people decreased substantially is "I do not understand the question." In fact, the coefficient indicates that under Model 4, those who selected "I do not understand the question" now earn as much as heterosexual people. The descriptive statistics show that those who selected this category tend to have lower educational attainment, albeit longer work experience; this may

partially explain why those who selected “I do not understand the question” earn lower wages than heterosexual people (see Table 6.2).

Because it is known that potential work experience may not be the best measure to capture human capital accumulation in the labor market (Klawitter 2015), in Model 5 I dropped this variable and added a variable that measures actual years of work. The results for Model 5 (assigned males at birth) indicate that gay/lesbian people earn 15.2% less than heterosexual people, bisexual people earn 1.8% less than heterosexual people, asexual people earn 19.3% less than heterosexual people, those who selected “don’t want to decide, haven’t decided” earn 28.8% less than heterosexual people, and those who selected “I do not understand the question” earn 2.5% less than heterosexual people. When actual work experience (instead of potential work experience) is accounted for, only the difference between asexual people’s wages and heterosexual people’s wages changed (-13.6% $\rightarrow$ -16.8% vs. -13.6% $\rightarrow$ -19.3%), which suggests that potential work experience may slightly better explain the wage disadvantages experienced by asexual people. In contrast to the findings for assigned females at birth, the use of potential work experience may not be entirely problematic in the case of assigned males at birth, given that the difference between potential work experience and actual work experience among assigned males at birth is not so strongly related to sexual orientation identity as that among assigned females at birth, whose labor market attachment appears to differ considerably by sexual orientation.

To further account for human capital accumulation, length of service at the same firm is entered into Model 6 as a variable to measure firm-specific human capital. Because of the rigid, highly developed internal labor markets that are characteristic of Japan, accounting for firm-specific human capital is important for an accurate measurement of human capital accumulation.

The results for Model 6 (assigned males at birth) indicate that gay/lesbian people earn 11.1% less than heterosexual people, bisexual people earn 11.6% more than heterosexual people, asexual people earn 23.0% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 24.2% less than heterosexual people, and those who selected "I do not understand the question" earn 2.8% less than heterosexual people. The results show that the introduction of firm-specific human capital does not substantially alter the relationship between sexual orientation identity and wages for any of the sexual orientation identity categories. Although the coefficient does increase for the sexual orientation identity groups that tend to have shorter mean lengths of service at the same firm (i.e., gay/lesbian, bisexual, "don't want to decide, haven't decided"), the analysis suggests that length of service plays a minimal role in understanding the relationship between sexual orientation identity and wages even for these groups.

After examining how the existing association between sexual orientation identity and wages may be altered after taking human capital accumulation into consideration, workers' job positions within the labor market are entered into the final model (Model 7). In particular, occupation, employment status, and firm size were added to account for workers' position within the labor market. The results for Model 7 (assigned males at birth) indicate that gay/lesbian people earn 5.4% less than heterosexual people, bisexual people earn 7.8% more than heterosexual people, asexual people earn 21.2% less than heterosexual people, those who selected "don't want to decide, haven't decided" earn 21.1% less than heterosexual people, and those who selected "I do not understand the question" earn 2.8% less than heterosexual people. The results suggest that, because gay/lesbian people are in a worse job position than heterosexual people (especially in terms of occupation and firm size; see Table 6.2), their wages become

higher than heterosexual people's wages once the labor market factors are accounted for. For the other sexual orientation identity categories, workers' position within the labor market appears to play a minimal role in the relationship between sexual orientation identity and wages. Figure 6.1 visualizes the results for Model 7.

Table 6.3 OLS Regression Analysis of Log-Wages on Sexual Orientation Identity among Assigned Females at Birth, OCRS 2019

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
Heterosexual (Ref.)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	(-----)		(-----)		(-----)		(-----)		(-----)		(-----)		(-----)	
Gay/lesbian	1.125	0.709	1.009	0.980	1.006	0.987	1.034	0.921	1.034	0.918	1.099	0.764	0.964	0.900
	(0.316)		(0.341)		(0.338)		(0.334)		(0.327)		(0.314)		(0.288)	
Bisexual	0.965	0.812	0.950	0.732	0.918	0.570	0.909	0.522	0.969	0.830	0.909	0.512	0.911	0.483
	(0.150)		(0.151)		(0.150)		(0.149)		(0.149)		(0.145)		(0.133)	
Asexual	1.014	0.948	0.996	0.985	0.911	0.662	0.944	0.787	0.934	0.754	0.901	0.616	0.994	0.973
	(0.207)		(0.216)		(0.214)		(0.212)		(0.217)		(0.208)		(0.191)	
Don't want to decide, haven't decided	0.950	0.531	0.942	0.466	0.900	0.196	0.911	0.253	0.884	0.122	0.883	0.106	0.899	0.134
	(0.081)		(0.082)		(0.082)		(0.081)		(0.080)		(0.077)		(0.071)	
I do not understand the question	0.918	0.247	0.918	0.248	0.919	0.247	0.978	0.760	0.935	0.371	0.913	0.207	0.933	0.297
	(0.074)		(0.074)		(0.073)		(0.073)		(0.075)		(0.072)		(0.066)	
Transgender			1.244	0.394	1.216	0.441	1.241	0.388	1.292	0.297	1.209	0.421	1.157	0.501
			(0.256)		(0.253)		(0.250)		(0.246)		(0.236)		(0.216)	
Non-Japanese			1.002	0.989	0.982	0.892	0.987	0.922	0.967	0.816	0.994	0.964	0.989	0.931
			(0.136)		(0.137)		(0.136)		(0.143)		(0.137)		(0.126)	
Partnership					0.869	0.001	0.863	0.001	0.844	< .001	0.847	< .001	0.971	0.450
					(0.042)		(0.043)		(0.043)		(0.041)		(0.039)	
No child (Ref.)					-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
					(-----)		(-----)		(-----)		(-----)		(-----)	
One child					0.907	0.082	0.876	0.021	0.897	0.058	0.921	0.135	0.939	0.218
					(0.056)		(0.057)		(0.057)		(0.055)		(0.051)	
Two children					0.864	0.015	0.828	0.003	0.854	0.011	0.874	0.022	0.970	0.577

	(0.060)		(0.063)		(0.061)		(0.059)		(0.055)	
More than two children	0.664	< .001	0.648	< .001	0.707	0.002	0.735	0.005	0.785	0.016
	(0.114)		(0.115)		(0.114)		(0.109)		(0.101)	
High school or less (Ref.)			-----	-----	-----	-----	-----	-----	-----	-----
			(-----)		(-----)		(-----)		(-----)	
Vocational school			1.154	0.014	1.150	0.017	1.103	0.081	1.019	0.730
			(0.058)		(0.059)		(0.056)		(0.054)	
Junior college			1.105	0.063	1.083	0.140	1.025	0.628	0.992	0.865
			(0.053)		(0.054)		(0.052)		(0.049)	
University			1.419	< .001	1.443	< .001	1.316	< .001	1.128	0.015
			(0.053)		(0.053)		(0.052)		(0.050)	
Graduate school			1.415	0.007	1.410	0.007	1.291	0.036	1.083	0.482
			(0.128)		(0.127)		(0.122)		(0.114)	
Potential experience			1.033	0.001						
			(0.009)							
Potential experience^2/100			0.941	0.002						
			(0.020)							
Actual experience					1.032	< .001	1.019	0.017	1.024	0.001
					(0.008)		(0.008)		(0.007)	
Actual experience^2/100					0.942	0.001	0.945	0.002	0.944	0.001
					(0.019)		(0.018)		(0.017)	
Length of service							1.028	< .001	1.015	< .001

	(0.002)	(0.002)	
Managerial (Ref.)		-----	-----
		(-----)	
Professional		0.772	0.008
		(0.098)	
Clerical		0.656	< .001
		(0.096)	
Sales		0.636	< .001
		(0.104)	
Service		0.616	< .001
		(0.101)	
Blue-collar		0.601	< .001
		(0.111)	
Other occupation		1.060	0.835
		(0.280)	
Employer (Ref.)		-----	-----
		(-----)	
Standard employee		1.087	0.557
		(0.142)	
Non-standard employee		0.665	0.005
		(0.145)	
Self-employed		0.628	0.004
		(0.161)	
Family worker		0.667	0.020
		(0.173)	
Small firm (Ref.)		-----	-----
		(-----)	

Mid-sized firm													1.105	0.038
													(0.048)	
Large firm													1.248	< .001
													(0.046)	
Government													1.329	0.005
													(0.102)	
Unknown firm size													1.062	0.391
													(0.070)	
Constant	13.940	< .001	13.939	< .001	15.896	< .001	9.660	< .001	9.942	< .001	10.413	< .001	16.119	< .001
	(0.021)		(0.021)		(0.031)		(0.108)		(0.087)		(0.084)		(0.158)	
n =	1,649		1,647		1,642		1,638		1,557		1,551		1,541	
Adjusted R^2	-0.002		-0.003		0.022		0.049		0.056		0.131		0.275	

Notes: OLS coefficients are exponentiated to indicate factor changes. Standard errors are in parentheses.

Table 6.4 OLS Regression Analysis of Log-Wages on Sexual Orientation Identity among Assigned Males at Birth, OCRS 2019

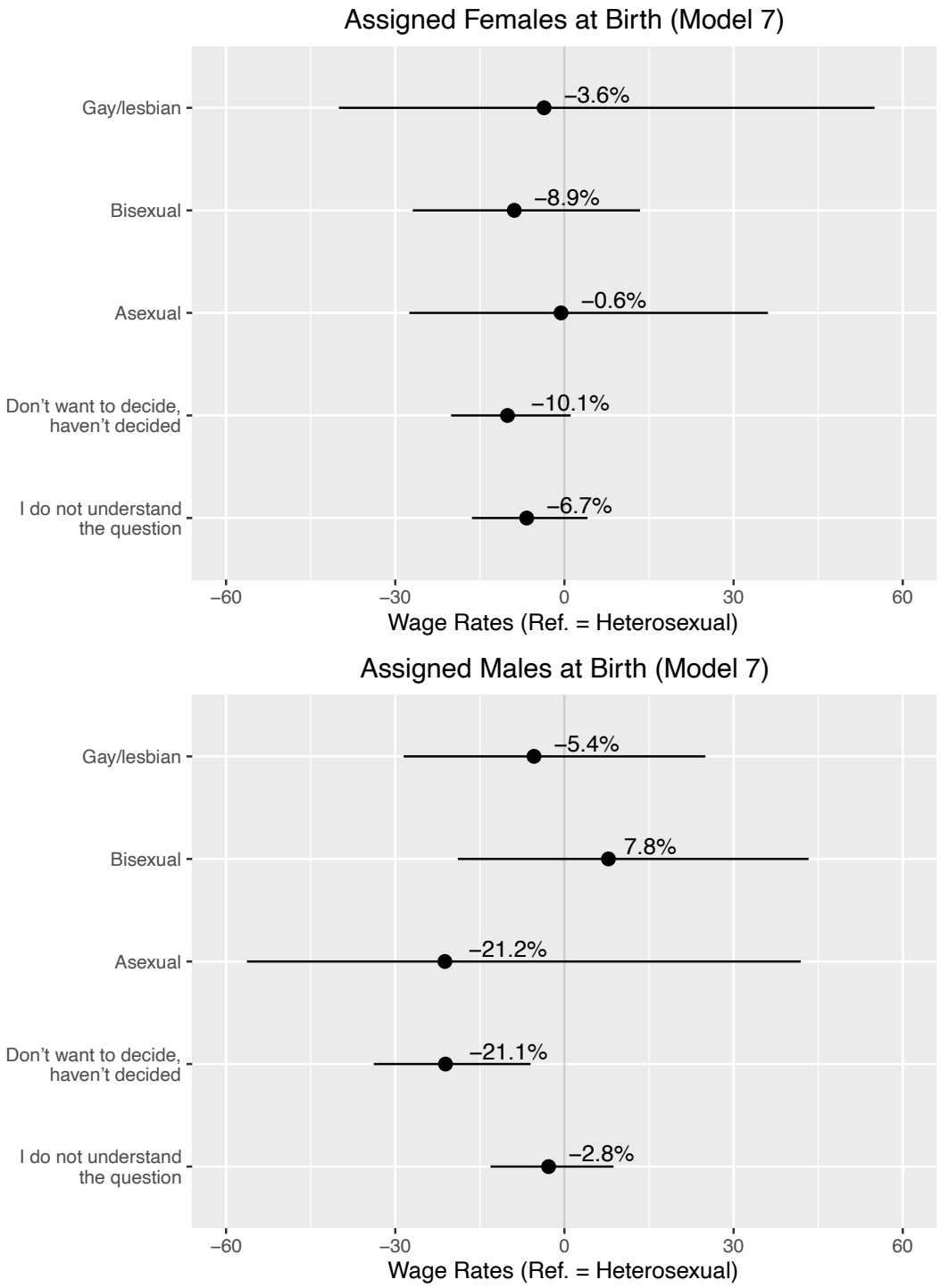
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
Heterosexual (Ref.)	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	(-----)		(-----)		(-----)		(-----)		(-----)		(-----)		(-----)	
Gay/lesbian	0.738	0.115	0.776	0.188	0.825	0.302	0.843	0.346	0.848	0.376	0.889	0.514	0.946	0.741
	(0.192)		(0.192)		(0.186)		(0.182)		(0.186)		(0.180)		(0.170)	
Bisexual	0.870	0.471	0.890	0.564	0.958	0.828	0.987	0.943	0.982	0.922	1.116	0.548	1.078	0.665
	(0.192)		(0.202)		(0.196)		(0.189)		(0.188)		(0.183)		(0.173)	
Asexual	0.633	0.218	0.653	0.259	0.864	0.690	0.832	0.602	0.807	0.540	0.770	0.442	0.788	0.504
	(0.371)		(0.378)		(0.366)		(0.354)		(0.350)		(0.339)		(0.358)	
Don't want to decide, haven't decided	0.667	0.001	0.681	0.002	0.714	0.006	0.719	0.006	0.712	0.004	0.758	0.015	0.789	0.026
	(0.127)		(0.127)		(0.123)		(0.118)		(0.117)		(0.114)		(0.107)	
I do not understand the question	0.925	0.286	0.947	0.459	0.973	0.706	1.030	0.675	0.975	0.732	1.018	0.807	0.972	0.672
	(0.073)		(0.073)		(0.072)		(0.071)		(0.074)		(0.072)		(0.068)	
Transgender			0.850	0.619	0.830	0.556	0.954	0.877	1.084	0.802	1.073	0.822	1.359	0.352
			(0.326)		(0.315)		(0.304)		(0.323)		(0.313)		(0.330)	
Non-Japanese			0.632	< .001	0.625	< .001	0.613	< .001	0.645	< .001	0.700	0.002	0.764	0.018
			(0.121)		(0.117)		(0.114)		(0.119)		(0.116)		(0.113)	
Partnership					1.432	< .001	1.330	< .001	1.303	< .001	1.272	< .001	1.210	< .001
					(0.046)		(0.046)		(0.047)		(0.046)		(0.044)	
No child (Ref.)					-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
					(-----)		(-----)		(-----)		(-----)		(-----)	
One child					1.073	0.190	1.120	0.037	1.120	0.037	1.100	0.071	1.062	0.221
					(0.053)		(0.054)		(0.054)		(0.053)		(0.049)	
Two children					1.065	0.286	1.057	0.358	1.053	0.400	1.043	0.481	0.979	0.708

	(0.059)		(0.061)		(0.061)		(0.059)		(0.056)	
More than two children	1.086	0.388	1.109	0.276	1.101	0.310	1.104	0.281	1.140	0.129
	(0.096)		(0.095)		(0.095)		(0.092)		(0.086)	
High school or less (Ref.)			-----	-----	-----	-----	-----	-----	-----	-----
			(-----)		(-----)		(-----)		(-----)	
Vocational school			1.056	0.364	1.071	0.258	1.041	0.495	1.029	0.610
			(0.060)		(0.061)		(0.059)		(0.056)	
Junior college			1.405	0.010	1.407	0.009	1.280	0.052	1.123	0.339
			(0.132)		(0.130)		(0.127)		(0.122)	
University			1.421	< .001	1.433	< .001	1.365	< .001	1.210	< .001
			(0.046)		(0.046)		(0.045)		(0.044)	
Graduate school			1.804	< .001	1.857	< .001	1.756	< .001	1.447	< .001
			(0.082)		(0.082)		(0.079)		(0.077)	
Potential experience			1.032	0.001						
			(0.010)							
Potential experience^2/100			0.957	0.028						
			(0.020)							
Actual experience					1.032	< .001	1.022	0.010	1.017	0.035
					(0.009)		(0.008)		(0.008)	
Actual experience^2/100					0.958	0.026	0.955	0.015	0.973	0.126
					(0.019)		(0.019)		(0.018)	
Length of service							1.019	< .001	1.010	< .001

	(0.002)	(0.002)	
Managerial (Ref.)		-----	-----
		(-----)	
Professional		0.842	0.001
		(0.052)	
Clerical		0.864	0.044
		(0.073)	
Sales		0.770	< .001
		(0.064)	
Service		0.671	< .001
		(0.080)	
Blue-collar		0.719	< .001
		(0.060)	
Other occupation		0.648	0.324
		(0.439)	
Employer (Ref.)		-----	-----
		(-----)	
Standard employee		0.684	< .001
		(0.080)	
Non-standard employee		0.490	< .001
		(0.100)	
Self-employed		0.597	< .001
		(0.092)	
Family worker		0.865	0.561
		(0.250)	
Small firm (Ref.)		-----	-----
		(-----)	

Mid-sized firm													1.281	< .001
													(0.052)	
Large firm													1.418	< .001
													(0.050)	
Government													1.433	< .001
													(0.096)	
Unknown firm size													1.304	0.024
													(0.118)	
Constant	22.634	< .001	22.874	< .001	17.378	< .001	9.230	< .001	9.448	< .001	9.710	< .001	17.878	< .001
	(0.021)		(0.021)		(0.036)		(0.111)		(0.093)		(0.090)		(0.119)	
n =	1,396		1,395		1,388		1,382		1,314		1,312		1,307	
Adjusted R^2	0.007		0.016		0.075		0.139		0.146		0.198		0.299	

Notes: OLS coefficients are exponentiated to indicate factor changes. Standard errors are in parentheses.



Notes: The horizontal lines indicate 90% confidence intervals. Source: Osaka City Residents' Survey.

Figure 6.1. Sexual Orientation Identity and Wage Rates by Sex Assigned at Birth, OCRS 2019

6.6 Discussion

In this chapter, I focused on the relationship between sexual orientation and earnings. Specifically, I asked the following two research questions: (1) Do sexual minorities in Japan have lower earnings than heterosexual people? (2) What may explain the differences found in earnings disparities by sexual orientation?

Using the Osaka City Residents' Survey, the analysis showed that among those assigned female at birth, sexual minorities—such as gay/lesbian, bisexual, and asexual people—tended to have earnings similar to those of heterosexual people. Although gay/lesbian people had higher wages than heterosexual people when examining the unconditional relationship between sexual orientation and wages, it should be noted that half of the gay/lesbian respondents in this sample were transgender, and that their earnings advantages disappeared once transgender status was taken into account. Thus, the lesbian premium found in Western countries was not observed in this study. This result supports the findings of earlier studies suggesting that employers in Japan may not view lesbians (who are less likely to marry and have children) as positively as Western employers do, because "strong women" with strong work commitment are less valued in Japanese society (Kamano 2009). In contrast to the United States, where many of the extant studies were conducted, Japanese societal expectations for femininity in women are more rigid than for masculinity in men (Sugihara and Katsurada 2000).

Those who selected "don't want to decide, haven't decided" and "I do not understand the question" tended to have lower earnings than heterosexual people. These results were largely unchanged after accounting for other possible factors that might act as confounders and mediators, such as sociodemographic factors, household structure, human capital accumulation, and job position in the labor market. When these factors were taken into account, bisexual people

had lower wages than heterosexual people, corroborating the findings of studies conducted in the United States (Mize 2016).

For the results of those assigned male at birth, the analysis showed that sexual minorities and those who selected “don’t want to decide, haven’t decided” and “I do not understand the question” had lower earnings than heterosexual people when examining the unconditional relationship between sexual orientation and wages. However, after accounting for other factors mentioned above, bisexual people had higher earnings than heterosexual people, which deviates from the pattern found in the United States (Mize 2016). Furthermore, the earnings disadvantages experienced by those who selected “I do not understand the question” disappeared when these other factors were taken into account.

In addition to describing the relationship between sexual orientation and wages, I also explored a set of confounding factors as well as five possible pathways that may explain part of the observed relationship. It should be noted that I did not conduct causal mediation analysis (VanderWeele 2015), given that this is the first study to examine the relationship between sexual orientation and wages using a population-based survey conducted in Japan. Therefore, the findings mentioned below may be attributable to one or more confounders of the pathways that may explain the relationship between sexual orientation and wages. In exploring the confounders and possible pathways, I considered coefficient changes of .05 or greater from one model to another (i.e., at least a 5.0% change in the wage rate due to the introduction of new factors) as indicative of the fact that the factors introduced in the new model may partially explain the relationship.

Sociodemographic factors, firm-specific human capital, and workers’ job position within the labor market appeared to be most important for gay/lesbian people assigned female at birth,

when evaluated from among a set of confounding factors (sociodemographic factors) (Model 2) and five possible pathways examined in the analysis, namely: household structure (Model 3); human capital (education and potential work experience) (Model 4); human capital (education and actual work experience) (Model 5)); human capital (education, actual work experience, and length of service at the same firm) (Model 6); and workers' job position within the labor market (Model 7)). As mentioned above, half of the gay/lesbian respondents in the sample were also transgender—a group that has an earnings advantage. Similarly, because gay/lesbian people are in a better job position than heterosexual people (especially in terms of employment status and firm size), their wages became lower than heterosexual people's wages after accounting for the labor market factors. On the other hand, the length of service among gay/lesbian people was shorter than that among heterosexual people. Therefore, when this factor was taken into consideration, gay/lesbian people gained further earnings advantages over heterosexual people.

For bisexual people assigned female at birth, actual work experience appeared to explain part of the negative relationship. On the other hand, because the length of service among bisexual people was shorter than that among heterosexual people, the magnitude of the negative relationship increased when this factor was taken into account (suppression).

For asexual people assigned female at birth, labor market factors appeared to explain part of their earnings disadvantages. However, when family structure was accounted for, asexual people experienced earnings disadvantages, suggesting that family structure may act as a suppressor. Asexual people were less likely to be in partnership and have children compared to heterosexual people; being in a relationship and having children are both known to be associated with lower earnings among women.

For those who selected "don't want to decide, haven't decided," none of the proposed factors appeared to explain the relationship between sexual orientation and wages. For those who selected "I do not understand the question," low educational attainment was suggested to be an important factor that may explain the negative relationship between selecting "I do not understand the question" and wages. Table 6.5 summarizes the findings for assigned females at birth.

Table 6.5. Summary of the Results of Sexual Orientation Identity and Log-Wages among Assigned Females at Birth

	(Un)conditional relationship (Ref. = Heterosexual)	Sociodemographic factors	Household structure	Human capital	Actual experience	Length of service	Job position
Gay/lesbian	+ (0)	○	×	×	×	S	○
Bisexual	0 (-)	×	×	×	○	S	×
Asexual	0 (0)	×	S	×	×	×	○
Don't want to decide, haven't decided	- (-)	×	×	×	×	×	×
I do not understand the question	- (-)	×	×	○	×	×	×

Notes: For the column "(Un)conditional relationship," the conditional results are in parentheses. "○" indicates that the factor(s) may explain part of the relationship between sexual orientation and wages for the designated sexual orientation group. "×" indicates the opposite. "S" indicates that a possible suppression effect was found.

The results for those assigned male at birth suggest that, unlike those assigned female at birth—for whom it appears different factors are at work for different sexual orientations—household structure may play a particularly important role in understanding the relationship between sexual orientation identity and wages for sexual minorities as a whole.

Family structure and workers' job position within the labor market appeared to be most important for gay/lesbian people assigned male at birth when evaluated from among a set of confounding factors (sociodemographic factors) (Model 2) and five possible pathways examined in the analysis, namely: household structure (Model 3); human capital (education and potential work experience) (Model 4); human capital (education and actual work experience) (Model 5)); human capital (education, actual work experience, and length of service at the same firm) (Model 6); and workers' job position within the labor market (Model 7)). Although the proportion of gay/lesbian people in a relationship was not so different from that of heterosexual people, none of the gay/lesbian respondents had children; this may be associated with the low earnings of gay/lesbian people. Similarly, because gay/lesbian people were in a worse job position than heterosexual people (especially in terms of occupation and firm size), the difference between gay/lesbian people's wages and heterosexual people's wages became smaller once the labor market factors were accounted for.

For bisexual people assigned male at birth, household structure appeared to explain part of the negative relationship. Bisexual people in the sample were less likely to be partnered and have children compared to heterosexual people. On the other hand, length of service at the same firm among bisexual people was shorter than that among heterosexual people. Thus, bisexual people gained earnings advantages over heterosexual people when this factor was taken into account, although bisexual people earned as much as heterosexual people before the length of service was taken into consideration (suppression).

For asexual people assigned male at birth, household structure appeared to explain part of the negative relationship. Although there were only four asexual respondents, none of them had a partner or children. However, when actual years of work experience were accounted for, asexual

people experienced greater earnings disadvantages, suggesting that actual work experience may act as a suppressor. This may be due to the fact that asexual people had fewer years of actual work experience and are more likely than heterosexual people to temporarily exit the labor market.

For those who selected "don't want to decide, haven't decided," none of the factors examined in this analysis appeared to explain the relationship between sexual orientation and wages. For those who selected "I do not understand the question," low educational attainment appeared to be an important factor that may explain the negative relationship between selecting "I do not understand the question" and wages. Table 6.6 summarizes the findings for assigned males at birth.

Table 6.6. Summary of the Results of Sexual Orientation Identity and Log-Wages among Assigned Males at Birth

	(Un)conditional relationship (Ref. = Heterosexual)	Sociodemographic factors	Household structure	Human capital	Actual experience	Length of service	Job position
Gay/lesbian	- (-)	×	○	×	×	×	○
Bisexual	- (+)	×	○	×	×	S	×
Asexual	- (-)	×	○	×	S	×	×
Don't want to decide, haven't decided	- (-)	×	×	×	×	×	×
I do not understand the question	- (0)	×	×	○	×	×	×

Notes: For the column "(Un)conditional relationship," the conditional results are in parentheses. "○" indicates that the factor(s) may explain part of the relationship between sexual orientation and wages for the designated sexual orientation group. "×" indicates the opposite. "S" indicates that a possible suppression effect was found.

Overall, this chapter showed that, in contrast to the findings of prior studies in the United States, gay/lesbian people in Japan who were assigned female at birth did not earn more than their heterosexual counterparts. On the other hand, largely corroborating extant research from the United States, gay/lesbian people in Japan who were assigned male at birth earned less than their heterosexual counterparts.

The results for bisexual people were more complicated. When examining the unconditional relationship between sexual orientation and earnings, bisexual people in Japan who were assigned female at birth had earnings similar to those of their heterosexual counterparts; however, their earnings became less than those of heterosexual people once other factors related to sexual orientation and earnings were taken into account. On the other hand, bisexual people in Japan who were assigned male at birth earned less than their heterosexual counterparts when these factors were not taken into account; however, when these factors were accounted for, this group earned more than heterosexual people.

Japan's highly gendered labor market was indicated as the most likely explanation for the finding that possible confounders and pathways to earnings disparities by sexual orientation differed by sex assigned at birth. For example, the results for those assigned male at birth suggested that household structure may be key to understanding why sexual minorities assigned male at birth had lower earnings than heterosexual people assigned male at birth. On the other hand, the comparative rarity of partnerships and parenthood among sexual minorities assigned female at birth appeared to play a substantial role only for asexual people (the sole exception being partnerships among gay/lesbian people in the sample ($n = 6$), which were, proportionally, more prevalent than those among heterosexual respondents).

At the same time, some findings were consistent along the line of sex assigned at birth. For those assigned female at birth as well as those assigned male at birth, conventional measures of human capital used in Western countries (i.e., education and potential work experience) did not appear to play an important role in explaining earnings disparities by sexual orientation; those who selected "I do not understand the question" were the only exception. Descriptive statistics for those assigned female at birth as well as those assigned male at birth showed that both groups tended to have lower educational attainment. Although this result suggests that those who selected "I do not understand the question" did so because of their lower educational attainment, it is possible that those who selected "I do not understand the question" might be able to select "heterosexual" after receiving the necessary education and learn about sexual orientation.

Like all research, this study is not without limitations. Given that the present study uses a survey conducted in Osaka City, future research should use nationally representative surveys in Japan to assess whether the patterns found in this study are also seen on the national level. Similarly, more research, both qualitative and quantitative, is needed to better understand why the patterns observed in Japan differ from those found in previous studies in the United States. For example, understanding the mechanisms behind the absence of the lesbian premium in Japan may illuminate an intersected quality of gender and sexuality inequality in Japanese society. Although the present study largely compares its results in Japan with those from Western countries, there is a need to conduct further comparative analyses, namely within East Asian countries that share similar socio-cultural contexts on LGBTQ issues. In addition to describing earnings disparities by sexual orientation, there is also a need for studies that examine what kinds of interventions are necessary to close the existing earnings gap by sexual orientation. However,

despite the above limitations, I hope that this study, which uses a rare population-based survey conducted in Japan, serves as one of the first steps toward describing earnings gap by sexual orientation in Japan and making advances to close it.

Chapter 7. CONCLUSION

7.1 OVERVIEW

The study of social stratification and inequality is one of the pillars of sociology. Numerous studies have sought to describe various forms of inequality and to seek ways to close the gaps. One of the newly recognized forms of inequality is that based on sexual orientation. Despite the growing number of studies on this topic—particularly those focusing on earnings inequality—the literature currently suffers from the following three shortcomings. First, the number of studies examining the relationship between sexual orientation and education (Mollborn and Everett 2015), as well as between sexual orientation and occupation (Baumle et al. 2009), remains scant. Second, nearly all studies on sexual orientation and earnings are published by labor economists (Denier and Waite 2019). Third, nearly all existing studies of sexual orientation and earnings use data from Western countries. Therefore, this dissertation examined the relationship between sexual orientation and three indicators of socioeconomic inequality (education, occupation, and earnings) in contemporary Japan from a sociological perspective. By doing so, this study aimed to contribute to the construction of a theory of comparative sexuality stratification.

Studying sexuality stratification (stratification by sexual orientations that are recognized as normative or non-normative) is important as well as timely, in light of the growing attention being paid to LGBTQ issues in recent years. Furthermore, studying sexuality stratification is sociologically significant. Previous studies of stratification based on ascribed status have focused on gender and race—statuses that are largely visible in many social circumstances, unlike sexual orientation, which as an invisible trait (Tilcsik et al. 2015), points to the usefulness of sexual orientation as a potentially unique analytic case to advance theories of stratification based on

ascribed status. In other words, the focus on sexual orientation will facilitate exploration of potential mechanisms as well as explanations for how socioeconomic inequality by sexual orientation occurs when the sexual orientation of sexual minorities is not known to the people around them.

Japanese society is a useful case to construct a theory of sexuality stratification because sexual minorities in Japan are even less likely to disclose their minority status than those in the United States, despite having a similar level of public acceptance toward homosexuality. By comparing empirical findings in Western countries against the findings of this study, it also becomes possible to test whether existing theories about the relationship between sexual orientation and socioeconomic statuses found in previous studies can be extended to countries that do not share the socio-cultural contexts of Western societies.

I argue that the social–institutional perspective developed by sociologist Mary Brinton (1993)—being the overarching theoretical framework for understanding the relationship between sexual orientation and socioeconomic inequality—can be applied to the field of sexuality stratification. In her work on gender stratification in Japan, Brinton (1993) rejects simplistic views of Japan by neither focusing on cultural uniqueness of Japanese society to see Japan as "exceptional" and "unique" nor regarding Japan as merely a "follower" of Western countries. Brinton's theory is useful because it discourages scholars from resorting to purely cultural explanations that are applicable only to the country of focus, which would not be efficient as a theory of comparative social stratification. Instead, Brinton's theory combines Marxist–feminist theory with human capital theory to put forth a social–institutional elaboration of human capital theory that makes it possible to "[find] a way to link macro- and micro-level theories by locating individual action in the context of social structure … [and] analyze how the *structure of labor*

markets, the *structure of education*, and the *structure of the family* reproduce different economic roles for men and women" (Brinton 1993:72). I argue that those social contexts that surround the individual are important to understand how the degree and patterns of sexuality stratification vary across different economies. Therefore, by applying Brinton's theory of gender stratification to the area of sexuality stratification, I aimed to develop a theory of sexuality stratification that, to use Brinton's (1993:17) words, "combines principles of voluntaristic social action (how individuals make choices) and a structuralist perspective (how those choices are constrained by the environment)."

Addressing the social–institutional structures that may impact the relationship between sexual orientation and socioeconomic inequality, I cited the age-based education system in Japan, under which human capital accumulation is condensed and embedded in strict age norms. In addition, I provided an overview of how the concept of "occupation" is understood by sociologists in Japan, where firm size and employment status are similarly considered as important labor market outcomes. Because Japan's highly developed internal labor markets are separated along the lines of firm size and employment status, it is important to examine segregations of firm size and employment status by sexual orientation. In fact, gender stratification scholars have reported that in Japan, labor market segregation by gender occurs more sharply in the realm of employment status than in that of occupation (Brinton 1993; Shirahase and Ishida 1994). This illustrates the significance of a comparative, structuralist perspective for comprehensively understanding sexuality stratification across societies without imposing theoretical assumptions that are applicable only to certain societies. Measuring gender segregation by occupation based on an understanding that occupation is the main source of

gender segregation in Western countries obscures the fact of severe gender inequality in Japan's labor market in the form of segregation—not in occupation, but in employment status.

In order to examine the relationship between sexual orientation and three indicators of socioeconomic inequality (education, occupation, and earnings) in contemporary Japan from a sociological perspective, I used the Osaka City Residents' Survey, one of the few population-based surveys that ask about sexual orientation in Japan. Although the survey measures a total of four indicators of sexual orientation (sexual orientation identity, sexual attraction, romantic attraction, and sexual behavior), I used sexual orientation identity as the main indicator of sexual orientation. All of the analyses were separated by sex assigned at birth to account for the fact that Japan's educational system and labor markets are highly gendered.

7.2 Main Findings

Being the first study to examine socioeconomic inequality by sexual orientation using a population-based survey in Japan, this dissertation has reported a variety of important results that advance our understanding of the lives of sexual minorities in Japan by means of numbers. Given the extreme scarcity of descriptive data on this topic available in Japan, the following three sets of results particularly important.

First, the analysis of educational attainment showed that among those assigned female at birth, sexual minorities (i.e., gay/lesbian, bisexual, and asexual people) tended to have a higher probability of college completion than heterosexual people. These results were found not only when examining the unconditional relationship between sexual orientation and college completion, but also when accounting for other potentially confounding and mediating factors such as sociodemographics, self-selection into sexual minority, academic performance, and school experience. On the other hand, the results for those assigned male at birth were more

complicated. Substantively, there was little difference between the probability of college completion among heterosexual people and gay/lesbian people. The analysis consistently showed a lower probability of college completion among bisexual people compared to heterosexual people. The analysis consistently showed a higher probability of college completion among asexual people compared to heterosexual people, although the number of asexual respondents assigned male at birth was extremely small.

Second, the analysis of occupational segregation showed that among those assigned female at birth, sexual minorities were more likely than heterosexual people to work as professional workers. Regarding employment status, no substantial differences were observed between sexual minorities and heterosexual people assigned female at birth. Regarding firm size, sexual minorities assigned female at birth were less likely than heterosexual people assigned female at birth to work in medium-sized firms. Among those assigned male at birth, sexual minorities were more likely than heterosexual people to work as service workers but less likely to work as managerial or professional workers. Regarding employment status, sexual minorities assigned male at birth were more likely than heterosexual people assigned male at birth to work under non-standard employment, but less likely to work under standard employment or as self-employed workers. Regarding firm size, no substantial differences were observed between sexual minorities and heterosexual people assigned male at birth.

Third, the analysis of earnings disparities showed that among those assigned female at birth, sexual minorities tended to have earnings similar to those of their heterosexual counterparts. Thus, the lesbian premium found in Western countries was not observed in this study. When these factors that might mediate the relationship between sexual orientation and earnings were taken into account, bisexual people had lower wages than heterosexual people,

supporting the findings observed in the United States (Mize 2016). For the results of those assigned male at birth, the analysis showed that sexual minorities had lower earnings than heterosexual people when examining the unconditional relationship between sexual orientation and wages. However, when other factors were accounted for, bisexual people had higher earnings than heterosexual people, which deviates from the pattern found in the United States (Mize 2016).

Together, these findings appear to show that stratification by sexual orientation does exist in contemporary Japan, and furthermore, that the modality of sexuality stratification in Japan differs from that seen in Western societies. Similarly, this study shows that socioeconomic (dis)advantages experienced by sexual minorities differ by their sex assigned at birth as well as detailed sexual minority categories, such as gay/lesbian, bisexual, and asexual.

7.3 LIMITATIONS

Although my dissertation advances our knowledge on the socioeconomic conditions of sexual minorities in Japan as compared to heterosexual people, a few limitations should be noted here. Because each of the preceding empirical chapters have already outlined the limitations of that specific study, I will focus on broader limitations of the Osaka City Residents' Survey.

One major limitation of the Osaka City Residents' Survey is the fact that its findings are not generalizable to all of Japan. Osaka City is one of the three biggest cities in Japan, and it is expected that the degree of disadvantages experienced by sexual minorities living in Osaka City would be comparably lower than the national average. Although this means that any disadvantages found in this study would be a conservative estimate, part of the findings in this study suggests that some subgroups of sexual minorities gain advantages over heterosexual people. In order to evaluate whether the findings are specific to Osaka City or generalizable to all

of Japan, major nationally representative surveys designed by social scientists and governmental surveys should include sexual orientation (and gender identity) as routine demographic questions.

In addition, the number of sexual minority respondents in the Osaka City Residents' Survey is extremely small. Although I believe that it is important to conduct analysis using the best data available, there is a high likelihood that some of the findings offered in this dissertation may not be accurate. This is even truer when examining the results of transgender status. This dissertation did not explicitly focus on transgender people, because a theory of stratification based on transgender status is considered to be deeply related to, but distinct from, sexuality stratification. I decided to present the results pertaining to transgender people, given the extreme scarcity of quantitative data on transgender people in Japan, but these results should be interpreted with care.

As shown above and as also mentioned in each empirical chapter, this study contains certain limitations. Moreover, there are many other technical limitations that are not brought up here, given that the area of sexuality stratification is relatively new and that there is an ongoing lack of high-quality data on sexual orientation that precludes the use of more advanced statistical techniques. However, at the same time, the fact that this field is still in the process of expanding means that there are many possible future research projects that scholars of sexuality stratification can undertake.

7.4 Future Directions

One of the theoretical contributions of this dissertation was to show the significance of the social–institutional perspective for the theory of sexuality stratification by demonstrating the unsuitability directly applying human capital theory developed in the United States to Japanese

data when examining socioeconomic inequality by sexual orientation. As an extension of this study, comparisons of the patterns observed in Japan with those in other East Asian societies, which share similar cultural background but have distinct education and labor market structures, would further demonstrate the significance of the social–institutional perspective in the consideration of sexuality stratification. Although quantitative studies of socioeconomic inequality by sexual orientation in Japan tend to use theories and empirical results developed and found in Western countries, comparisons within East Asian societies would provide new insight into the influence of social–institutional structures on sexuality stratification across society. Although it may take time until scholars of sexuality stratification can conduct cross-national comparisons using representative data within East Asian societies, there are emerging studies that use community-based surveys to understand sexual minorities at work (e.g., Suen, Chan, and Badgett 2020), and the use of those rare non-representative surveys may be one way to better understand the similarities and differences with regard to sexuality stratification among the societies that share historical and cultural backgrounds.

In addition, more studies utilizing community-based surveys that purposefully recruit a large number of sexual minorities would provide more granular information about the lives of sexual minorities in Japan. In this dissertation, I extensively used the "niji VOICE" surveys, a series of non-representative web surveys conducted by the nonprofit organization Nijiiro Diversity in collaboration with the Center for Gender Studies at the International Christian University (Muraki et al. 2021). Although the sample is not representative of Japan, the surveys include detailed questions about LGBT policies at work, coming out experiences, the presence of allies who support sexual and gender minorities as cisgender heterosexual individuals, psychological safety, and other questions that cannot be asked in population-based surveys.

Studies using these surveys would complement the kind of research undertaken in this dissertation, which used a population-based survey to offer a fuller picture of the socioeconomic conditions of sexual minorities.

Moreover, there are many other socioeconomic indicators that I did not use in this dissertation available in the Osaka City Residents' Survey. Although education, occupation, and earnings are certainly core indicators of socioeconomic inequality by sexual orientation, there are many other forms of inequality based on sexual orientation. For example, labor force participation should be examined to see whether sexual minorities withdraw from the labor market. Similarly, household income is a distinct indicator of economic circumstances, and it is empirically known that some of the findings from the analysis of household income differ from those from the analysis of earnings. Household income of same-sex couples between women is lower than that of heterosexual couples and the household income of same-sex couples between men is similar to that of heterosexual couples (Klawitter 2011). More generally, scholarly research with regard to sexual minority workers and sexuality stratification in Japan has barely developed, and there are many other dimensions of sexuality stratification that scholars may investigate in future research. Once nationally representative surveys that measure sexual orientation become available, stratification scholars can provide new information on sexuality stratification using a variety of social indicators.

Another line of possible future research is to describe socioeconomic circumstances of transgender people in Japan. Although sexual orientation and gender identity are distinct phenomena, the issues of sexual and gender minorities have recently received public attention in Japan with the spread of the term "LGBT." Most existing studies of transgender people in education and at work are based on qualitative methods or quantitative methods using a non-

representative survey. Future research should build on this dissertation to provide a more accurate description of socioeconomic inequality experienced by transgender people in Japan.

7.5 Concluding Remarks

As a non-heterosexual social scientist born in Japan, I hope that this dissertation serves as one of the sources of information used in discussions of the socioeconomic lives of sexual and gender minorities in Japan for the general public and as an invitation to the social–institutional perspective for scholars working on socioeconomic inequality based on sexual orientation in Western countries. From the bibliography below, it is easy to see how much this study relies on the work of eminent predecessors in various research areas who have fought to better the lives of sexual and gender minorities. Given that this dissertation is highly exploratory, both theoretically and empirically, the purpose of this dissertation would be achieved if my study were used by future scholars to test and modify the theoretical claims or the empirical results I offer within it.

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APPENDIX A. ABSTRACT IN JAPANESE

日本語要旨

現代日本におけるセクシュアリティ階層――社会学的研究――

平森大規

本論文では、日本において数少ない性的指向をたずねている無作為抽出調査である「大阪市民調査」を用いて、日本における性的指向と教育達成、職域分離、賃金格差の関連性を検討した。教育達成の分析では、出生時に割り当てられた性別が女性の場合、セクシュアル・マイノリティ（ゲイ・レズビアン、バイセクシュアル、アセクシュアル）は、異性愛者に比べて大卒である確率が高い傾向にあった。出生時に割り当てられた性別が男性の場合、ゲイ・レズビアンの大卒確率は異性愛者と同程度であった。バイセクシュアルの大卒確率は異性愛者よりも低く、アセクシュアルの大卒確率は異性愛者よりも高かった。職域分離の分析では、出生時に割り当てられた性別が女性の場合、3つの労働市場の指標（職業、雇用形態、企業規模）にみられる性的指向による分離の程度は低かった一方で、出生時に割り当てられた性別が男性の場合、職業と雇用形態において無視できない程度の性的指向による分離がみられた。賃金格差の分析では、出生時に割り当てられた性別が女性の場合、セクシュアル・マイノリティは異性愛者と同程度の賃金を得ており、欧米社会でみられるレズビアンプレミアムは日本に当てはまらないことが示唆された。性的指向と賃金の関係性を交絡または媒介する可能性のある他の要因を考慮に入れると、バイセクシュアルは異性愛者よりも賃金が少なかった。出生時に割り当てられた性別が男性の場合、セクシュアル・マイノリティは異性愛者よりも賃金が少なかった。他の要因を考慮に入れると、バイセクシュアルは異性愛者よりも賃金が多く、欧米社会では観察されていない傾向がみられた。全体として、本論文はセクシュアリティ階層、すなわち規範的または非規範的と認識される性的指向による階層を考察する際に、家族システム、教育システム、労働市場システムなどの社会=制度的構造に注目することを提唱している。社会学における社会=制度的視点を取り入れることなしには、経済学における人的資本論のような個人レベルでの説明では、なぜ一部の社会において他の社会よりも性的指向に基づく社会経済的不平等が大きいのかを十分に明らかにすることはできないだろう。

APPENDIX B. SURVEY MATERIAL

The following documents are included in this appendix. In addition to these documents, an English translation of the survey questionnaire is also included at the end of the appendix.

- Survey questionnaire*
- A letter of explanation from Osaka City
- A letter of request from the research team as well as information about the translated survey questions in foreign languages
- A sheet explaining how to answer the survey online (a login ID and a password)
- A Q&A sheet
- An envelope sent to the respondents
- A pre-paid envelope in which to mail the completed questionnaire
- A reminder/thank-you postcard

* There are two typographical errors in the original survey questionnaire:

- Q35 “(1) Mother” → “(2) Mother”
- Q38 “1 I had no earnings from my job” → “1. No household income”

大阪市民の働き方と
暮らしの多様性と共生にかんするアンケート

2019 年 1 月

この度、厚生労働省 国立社会保障・人口問題研究所 室長 釜野さおりらの研究チームでは、大阪市の協力を得て、市内にお住まいの皆さまにお願いし、「働き方と暮らしの多様性と共生にかんするアンケート」を行うことといたしました。詳しくは「アンケートについて」、「研究チームからのお願い」、「Q&A」、アンケートご案内用ホームページをご覧ください。

お答えになりにくい質問もあるかと思いますが、純粋に学術的見地からの質問となっております。アンケートへの回答は任意ですが、おひとりおひとりの状況をできるだけ正確に結果に反映するために、ぜひご協力くださいますよう、こころよりお願い申し上げます。

最大設問数 **55** 問　**14** ページ　/　所要時間 **15~30** 分

回答期限　2019 年 1 月 28 日 まで

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4. お答えは、あてはまる番号を○印で囲んでいただくか、数字をご記入ください。

5. 正確にあてはまる選択肢がない場合でも、もっとも近いと思うものをお選びください。

6. 「その他」にあてはまる場合は、[　] に具体的にご記入ください。

7. ご記入は、問の番号や矢印 (---▶) の指示にそってお願いします。

8. どうしても答えたくない / 答えられない質問がある場合は、そのまま次の質問にお進みください。

9. 記入が終わりましたら、返信用封筒に封入し、1 月 28 日 (月) までに郵便ポストにご投函ください。
特に理由がない限り、記入漏 (も) れのないようにご協力ください。

はじめに、あなたの今のお仕事や、お仕事の経験について、うかがいます。

問 1　あなたは現在、収入をともなう仕事をしていますか。パート・アルバイト、自営業の手伝いや内職も含みます。　(○は 1 つ)

1　仕事を持ち、働いている
2　在職しているが、病気・育児などで休職中　→ 問 2 へ
3　仕事をしていない

問 1-1　あなたはこの中のどれにあたりますか。

1　学生
2　主に家事育児などをしている
3　失業中
4　定年退職・高齢のため無職
5　心身上の事情で働けない
6　その他 [具体的に：　]　→ 問 9 へ

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※ 問2 ～ 問8 の質問では、2 つ以上仕事をお持ちの場合、主な仕事についてお答えください。

問 2　あなたのお仕事は大きく分けて、この中のどれにあたりますか。　(○は 1 つ)

1　正社員
2　パート・アルバイト・臨時雇い
3　派遣社員
4　契約社員・嘱託
5　会社などの経営者・役員
6　自営業者・自由業者
7　家族従業者(家業の手伝い)
8　内職

問 3　あなたのお勤め先（職場）は、どのような事業をしていますか。次の中でもっとも近いものに○をつけてください。　(○は 1 つ)

1　農業、林業
2　漁業
3　鉱業、採石業、砂利採取業
4　建設業
5　製造業
6　電気・ガス・熱供給・水道業
7　情報通信業 (出版 , マスコミ業を含む)
8　運輸業、郵便業
9　卸売業、小売業
10　金融業、保険業
11　不動産業、物品賃貸業
12　学術研究、専門・技術サービス業 (広告 , 著述・芸術家業を含む)
13　宿泊業、飲食サービス業
14　生活関連サービス業、娯楽業 (洗濯・理容・美容・浴場業を含む)
15　教育、学習支援業
16　医療、福祉 (保健衛生 , 社会保険・介護事業 を含む)
17　複合サービス事業 (郵便局 , 協同組合)
18　その他のサービス業 (廃棄物処理 , 整備 , 修理 , 職業紹介・派遣事業を含む)
19　政治・経済・文化団体、宗教団体
20　公務 (政府・地方自治体固有の業務)
21　その他 [具体的に：　]

※公務の場合は、勤め先の事業が他の選択肢にない場合のみ、20 を選んでください。
※どの選択肢が適切かわからない場合は、21 に勤め先 (職場) の事業内容を具体的にお書きください。

問 4　**あなたは通常、お勤め先 (職場) でどのような仕事をしていますか。**
次の中でもっとも近いものに○をつけてください。(○は 1 つ)

1　管理職 (課長相当以上の役職)
2　専門職・技術職
3　事務職
4　販売・営業職
5　サービスの仕事
（介護職員 , 理美容師 , 接客業 , ビル管理人を含む）
6　保安の仕事 (自衛官 , 警察官 , 消防士 , 警備員など)
7　農林漁業の仕事
8　モノを製造・加工する仕事
9　機械や設備・乗物を運転する仕事
10　建設現場の仕事・採掘の仕事
11　運搬・清掃・包装の仕事
12　その他
[具体的に :　　]

問 5　**あなたの会社・組織で働いている人の人数はこの中のどれにあたりますか。**
身近な職場だけでなく、会社・組織全体でお答えください。
あなた自身、家族従業者、パートの方など、働いている方をすべて含めてください。(○は 1 つ)

1　1 人 (あなたのみ)
2　2~4 人
3　5~9 人
4　10~29 人
5　30~99 人
6　100~299 人
7　300~499 人
8　500~999 人
9　1000~1999 人
10　2000~9999 人
11　1 万人以上
12　官公庁
13　わからない

※ 省庁や自治体から給与をもらっている場合（公立学校の教師、消防署員など）は、
官公庁に含めてください。ただし、公社や各種法人は官公庁に含めません。

問 6　**あなたの役職はこの中のどれにあたりますか。**
もっとも近いものに○をつけてください。(○は 1 つ)

1　役職なし
2　職長・班長・組長など
3　係長 (係長相当)
4　課長 (課長相当)
5　部長 (部長相当)
6　社長・重役・役員・理事
7　その他の役職
[具体的に :　　]

問 7　**現在の会社・組織で何年間働いてきましたか。**
自営業の方は、自営で働き始めてからの年数でお答えください。

[　　]　**年間**　(1 年未満の場合は、0 ゼロと記入してください)

問 8　**ふだん、あなたは 1 週間あたり何時間働いていますか。残業も含めてください。**

1 週間あたり　[　　]　**時間**　(休憩時間は除く)

全員の方へ

問 9　**学校を出てはじめて仕事についたのは、何歳のときでしたか。(在学中の方や、学校を出てから一度も仕事についたことのない方は 1 か 2 に○をつけ、問 13 へお進みください。)**

[　　]　**歳のとき**

1　在学中 (まだ学校を出ていない)
2　学校を出てから一度も仕事についたことがない

問 10　あなたに、これまでに次のようなことはありましたか。(○はいくつでも)

1　心身の病気やケガで休職したこと
2　産前産後休業や育児休業を取得したこと
3　介護休業を取得したこと
4　失業や退職後、無職でいたこと
5　他の理由の休職や無職
　［具体的に：　　］
6　1~5 のような経験はない ---▶ 問 12 へ

問 11　では、問 10 の 1~5 のような理由で、休職したり無職であったりした期間を合計すると、およそ何年何ヶ月になりますか。

休職・無職期間の合計　□ **年**　□ **ヶ月**

問 12　昨年 1 年間にあなたがお仕事で得た収入 (税込) は、どれに近いですか。各種手当、賞与・ボーナスなども含めてお答えください。副収入 (主な仕事以外による収入)、年金、給付金、家賃収入、配当金、仕送りなどは含みません。(○は 1 つ)

1　仕事で得た収入はなかった
2　100 万円未満
3　100~200 万円未満
4　200~300 万円未満
5　300~400 万円未満
6　400~500 万円未満
7　500~600 万円未満
8　600~700 万円未満
9　700~800 万円未満
10　800~900 万円未満
11　900~1000 万円未満
12　1000~1100 万円未満
13　1100~1200 万円未満
14　1200~1300 万円未満
15　1300~1400 万円未満
16　1400~1500 万円未満
17　1500~1600 万円未満
18　1600~1700 万円未満
19　1700~1800 万円未満
20　1800万円以上
　［具体的に：　　円］
21　わからない

ここからは、あなたの健康や生活習慣について、うかがいます。

問 13　あなたの現在の健康状態は、いかがですか。(○は 1 つ)

1　よい　　2　まあよい　　3　ふつう　　4　あまりよくない　　5　よくない

問 14　あなたは煙草 (タバコ) を吸いますか。(○は 1 つ)

1　毎日吸っている
2　ときどき吸う日がある
3　以前は吸っていたが 1 ヶ月以上吸ってない
4　吸わない

問 15　あなたは、ふだんお酒を飲みますか。(○は 1 つ)

1　ほとんど毎日
2　週に数回
3　週に 1 回程度
4　月に 1 回程度
5　年に数回
6　年に 1 回程度
7　飲まない
8　飲めない

問 16 **この 1 年間、お酒を飲んで、次のようなことはありましたか。(○はいくつでも)**

1　イッキ飲みをした
2　酔いつぶれてしまった
3　飲みすぎて、嘔吐してしまった
4　飲みすぎて、記憶をなくした
5　いずれの経験もない

問 17 **あなたは、慢性的な病気または長期にわたる健康上の問題をかかえていますか。(○はいくつでも)**

1　高血圧・動脈硬化・心疾患
2　糖尿病
3　悪性腫瘍 (がん)
4　うつ病や他のこころの病気
5　その他［具体的に：　　］
6　健康上の問題はない

問 18 **最近 1 ヶ月間に、次の (1)~(6) のようなことがどれくらいひんぱんにありましたか。それぞれについて、あてはまる番号に○をつけてください。(それぞれ○は 1 つ)**

	いつも	たいてい	ときどき	少しだけ	まったくない
(1) 神経過敏に感じましたか	1	2	3	4	5
(2) 絶望的だと感じましたか	1	2	3	4	5
(3) そわそわ、落ち着かなく感じましたか	1	2	3	4	5
(4) 気分が沈み込んで、何が起こっても気が晴れないように感じましたか	1	2	3	4	5
(5) 何をするのも骨折りだと感じましたか	1	2	3	4	5
(6) 自分は価値のない人間だと感じましたか	1	2	3	4	5

問 19 **これまでに、次にあげるような経験はありましたか。(○はいくつでも)**

1　生きる価値がないと感じた
2　死ねたらと思った、または、自死の可能性を考えた
3　自殺について考えたり、自殺をほのめかす行動をとったりした
4　自殺を図った
→ 問 20 へ

5　上の 1~4 のようなことはなかった → 問 21 へ

問 20 **「最近の 1 年間」、「小・中学校の頃」、「高校・16~18 歳の頃」に次の (1)~(4) のような経験はありましたか。ある場合は「ある」に○を、ない場合は「ある」に × をつけてください。**

	(ア) 最近の1年間	(イ) 小・中学校の頃	(ウ) 高校・16〜18歳頃
回答例 →	(ある)	~~ある~~	(ある)
(1) 生きる価値がないと感じた	ある	ある	ある
(2) 死ねたらと思った、または、自死の可能性を考えた	ある	ある	ある
(3) 自殺について考えたり、自殺をほのめかす行動をとったりした	ある	ある	ある
(4) 自殺を図った	ある	ある	ある

ここでは、学校に通っていた頃や、大人になってからの人間関係についてうかがいます。

問 21 **小学校から高校時代のあいだに、次の (1) から (6) のようなことはありましたか。**
(ア)と (イ)のそれぞれについて、「ある」、「ない」のどちらかに○をつけてください。

小・中学校や高校での友人や同級生による･･･	(ア) 自分が受けたこと		(イ) 見聞きしたこと	
(1) 不快な冗談、からかい	ある	ない	ある	ない
(2) 暴力的行為	ある	ない	ある	ない
(3) 「ホモ」「おかま」「レズ」「おとこおんな」「オネエ」といったことにかかわる、不快な冗談、からかい	ある	ない	ある	ない
(4) 「ホモ」「おかま」「レズ」「おとこおんな」「オネエ」といったことでふるわれる、暴力的な行為	ある	ない	ある	ない
(5) 民族、人種、国籍などにかかわる不快な冗談、からかい	ある	ない	ある	ない
(6) 民族、人種、国籍などに関してふるわれる暴力的行為	ある	ない	ある	ない

問 22 **大人になってから、次の (1) から (6) のようなことはありましたか。**
(ア)と (イ)のそれぞれについて、「ある」、「ない」のどちらかに○をつけてください。

大人になってからの、身近な人による･･･	(ア) 自分が受けたこと		(イ) 見聞きしたこと	
(1) 不快な冗談、からかい	ある	ない	ある	ない
(2) 暴力的行為	ある	ない	ある	ない
(3) 「ホモ」「おかま」「レズ」「おとこおんな」「オネエ」といったことにかかわる、不快な冗談、からかい	ある	ない	ある	ない
(4) 「ホモ」「おかま」「レズ」「おとこおんな」「オネエ」といったことでふるわれる、暴力的な行為	ある	ない	ある	ない
(5) 民族、人種、国籍などにかかわる不快な冗談、からかい	ある	ない	ある	ない
(6) 民族、人種、国籍などに関してふるわれる暴力的行為	ある	ない	ある	ない

問 23 **過去 1 年間、必要なときに心配ごとを聞いてくれた人はいますか。**

1　いた　　2　いなかった　　3　心配ごとはなかった

問 24 **過去 1 年間、必要なときに経済面で助けてくれた人はいますか。**

1　いた　　2　いなかった　　3　経済的な援助を必要としたことはない

ここからは、あなたやご家族のことについて、うかがいます。

問 25　あなたの生まれた年月と年齢をご記入ください。（選択肢の○は 1 つ）

1　昭和
2　平成
3　西暦

□ 年 □ 月生まれ　満 □ 歳

問 26　あなたがお生まれになったのは、どちらの国ですか。
日本以外の方は、国名 (または地域) をご記入ください。

1　日本　　2　日本以外の国 ----▶ 国名 [　　]

問 27　現在、あなたといっしょに住んでいる方は、あなたを含めて全部で何人ですか。

あなたを含めて □ **人**　※一人暮らしの方は「1」を記入し、問 29 へお進みください。

問 28　現在、あなたといっしょに住んでいる方すべてに、○をつけてください。
[　] には、あてはまる人数をご記入ください。(○はいくつでも)

1　夫・妻・配偶者・パートナー
2　息子 [　　] 人
3　娘 [　　] 人
4　息子の妻・娘の夫 [　　] 人
5　父
6　母
7　義父
8　義母
9　きょうだい [　　] 人
10　孫 [　　] 人
11　他の親族 [　　] 人
12　その他［具体的に：　　］

問 29　あなたは現在ご結婚されていますか。(○は 1 つ)

1　結婚している
2　結婚したことがない
3　離別した
4　死別した
5　その他［具体的に：　　］

※この問いの「結婚」は、男女の結婚をさします。
　婚姻届を提出せずに事実上夫婦として生活している場合も含みます。

問 30　あなたに、お子さんは何人いますか。
いっしょに住んでいないお子さんも含めてください。(○は 1 つ)

1　1 人
2　2 人
3　3 人
4　4 人
5　5 人以上［具体的に：　　］
6　子どもはいない

問 31　18 歳未満のお子さんは何人いますか。
いっしょに住んでいないお子さんも含めてください。(○は 1 つ)

1　1 人
2　2 人
3　3 人
4　4 人
5　5 人以上［具体的に：　　］
6　18 歳未満の子どもはいない

問 32 **あなたが通った学校について、(1) 最後に通った (または通っている) 学校と、(2) その学校の卒業・中退・在学中の別をお答えください。(それぞれ○は１つ)**

問 32(1) **最後に通った (または通っている) 学校**

1 小・中学校
2 高校
3 専門・専修学校 (高卒後)
4 短大・高専
5 大学
6 大学院
7 その他 [具体的に:]

問 32(2) **卒業・在学の別**

1 卒業した
2 中退した
3 在学中 → [ ] 年生

問 33 **中学 3 年生の頃、あなたの成績は学年の中でどれくらいだったと思いますか。(○は１つ)**

1 上の方
2 やや上の方
3 真ん中のあたり
4 やや下の方
5 下の方

問 34 **あなたの現在の国籍はどちらですか。あてはまる国・地域の番号に○をつけてください。1〜10 にない場合は、国名 (または地域) をご記入ください。(○はいくつでも)**

1 日本	2 韓国・朝鮮	3 中国	4 ベトナム	5 台湾	6 フィリピン	7 米国	8 ネパール	9 インドネシア	10 タイ
11 その他：国名									

問 35 **お父さまと、お母さまが、最後に通った (あるいは在学中の) 学校は次のどれにあたりますか。卒業、中退、在学中は問いません。**

※亡くなられている場合も、わかる範囲でお答えください。問36 も同様です。

	(1) お父さま (○は１つ)	(1) お母さま (○は１つ)
1 中学校 (戦前の小学校 (尋常科・高等科) ・国民学校・青年学校))	1	1
2 高校 (戦前の中学校・高等女学校・実業学校・師範学校)	2	2
3 専門学校 (高卒後)	3	3
4 短大・高専 (戦前の高校・専門学校・高等師範学校)	4	4
5 大学	5	5
6 大学院	6	6
7 その他 ([ ] に具体的にご記入ください)	7 [ ]	7 [ ]
8 わからない	8	8

問 36 **お父さまと、お母さまが、お生まれになったのは、どちらの国ですか。日本以外の場合は、国名 (または地域) をご記入ください。**

問 36(1) **お父さま (○は１つ)**

1 日本
2 日本以外 → 国名 [ ]
3 わからない

問 36(2) **お母さま (○は１つ)**

1 日本
2 日本以外 → 国名 [ ]
3 わからない

問 37 **お父さまと、お母さまの現在の国籍はどちらですか。あてはまる番号に○をつけてください。1〜10 にない場合は、国名 (または地域) をご記入ください。(○はいくつでも)**

問 37(1) **お父さま**

1 日本	2 韓国・朝鮮	3 中国	4 ベトナム	5 台湾	6 フィリピン	7 米国	8 ネパール	9 インドネシア	10 タイ
11 その他：国名							12 わからない		

問 37(2) **お母さま**

1 日本	2 韓国・朝鮮	3 中国	4 ベトナム	5 台湾	6 フィリピン	7 米国	8 ネパール	9 インドネシア	10 タイ
11 その他：国名							12 わからない		

※亡くなられている場合は、最後に有していた国籍をお答えください。

ここでは、あなたのお宅(世帯)の暮らし向きや経済面についてうかがいます。

問 38 **昨年 1 年間、あなたのお宅 (世帯) では、全体でどれくらいの収入 (税込) がありましたか。生計を共にしている方々の分も合わせ、すべての収入 (年金、給付金、家賃収入、配当金、仕送りなどを含む) についてお答えください。(○は 1 つ)**

1 仕事で得た収入はなかった
2 100 万円未満
3 100~200 万円未満
4 200~300 万円未満
5 300~400 万円未満
6 400~500 万円未満
7 500~600 万円未満
8 600~700 万円未満
9 700~800 万円未満
10 800~900 万円未満
11 900~1000 万円未満
12 1000~1100 万円未満
13 1100~1200 万円未満
14 1200~1300 万円未満
15 1300~1400 万円未満
16 1400~1500 万円未満
17 1500~1600 万円未満
18 1600~1700 万円未満
19 1700~1800 万円未満
20 1800万円以上 [具体的に： 円]
21 わからない

問 39 **あなたのお宅（世帯）の預貯金等（貯蓄）の総額はどれくらいですか。もっとも近いものに○をつけてください。（○は 1 つ）**

1 貯蓄はない
2 50 万円未満
3 50~100 万円未満
4 100~200 万円未満
5 200~300 万円未満
6 300~400 万円未満
7 400~500 万円未満
8 500~600 万円未満
9 600~700 万円未満
10 700~800 万円未満
11 800~900 万円未満
12 900~1000 万円未満
13 1000~1500 万円未満
14 1500~2000 万円未満
15 2000~2500 万円未満
16 2500~3000 万円未満
17 3000 万円以上 [具体的に： 円]
18 わからない

※貯蓄とは、金融機関への預貯金、これまで払い込んだ保険金 (掛け捨て保険は除く)、株式・信託・債券等、財形貯蓄、社内預金等のことをいいます。自営業者世帯の場合は、事業用の貯蓄も含めてください。額の大小にかかわらず、総額に含めてください。

問 40 **あなたのお宅 (世帯) では、過去 1 年の間に、経済的な理由で次のようなことがありましたか。それぞれについて、あてはまるものに 1 つ○をつけてください。**

(1) 電気・ガス料金の未払い	1 あった	2 なかった	
(2) 家賃の滞納	1 あった	2 なかった	3 非該当 (賃貸ではない)
(3) 住宅ローンの滞納	1 あった	2 なかった	3 非該当 (住宅ローンはない)
(4) その他の債務不履行	1 あった	2 なかった	

ここでは、男女の役割、家族、性のあり方についてのお考えをうかがいます。

問 41　次の (1)〜(6) のそれぞれについて、あなたのお考えにもっとも近いものを 1、2、3、4 から 1 つ選んで○をつけてください。（それぞれ○は１つ）

	そう思う	どちらかといえばそう思う	どちらかといえばそう思わない	そう思わない
(1) 男女が一緒にくらすなら結婚すべきである	1	2	3	4
(2) 結婚したら、子どもは持つべきだ	1	2	3	4
(3) 結婚せずに、子どもを持ってもよい	1	2	3	4
(4) 結婚後は、夫は外で働き、妻は家庭を守るべきだ	1	2	3	4
(5) 結婚した男性にとって、家族と過ごす時間は仕事の成功よりも重要だ	1	2	3	4
(6) 男どうしや、女どうしのカップルが、子どもを育ててもよい	1	2	3	4

問 42　次の (1)〜(7) のそれぞれについて、あなたのお考えにもっとも近いものを 1、2、3、4 から 1 つ選んで○をつけてください。（それぞれ○は１つ）

	そう思う	どちらかといえばそう思う	どちらかといえばそう思わない	そう思わない
(1) 男性が男性に恋愛感情を抱くのはおかしい	1	2	3	4
(2) 女性が女性に恋愛感情を抱くのはおかしい	1	2	3	4
(3) 男性どうしの性行為は、気持ちが悪い	1	2	3	4
(4) 女性どうしの性行為は、気持ちが悪い	1	2	3	4
(5) 男女間の性行為は、気持ちが悪い	1	2	3	4
(6) 性別を男性から女性に変えるのは気持ちが悪い	1	2	3	4
(7) 性別を女性から男性に変えるのは気持ちが悪い	1	2	3	4

問 43　以下の人が同性愛者や性別を変えた人だったらあなたはどう思いますか。
(1)〜(6) のそれぞれについて、あなたのお気持ちやお考えにもっとも近いものを 1、2、3、4 から 1 つ選んで○をつけてください。

	嫌ではない	どちらかといえば嫌ではない	どちらかといえば嫌だ	嫌だ
以下の人が**同性愛者**だったら･･･(それぞれ○は１つ)				
(1) 職場の同僚	1	2	3	4
(2) 自分の子ども	1	2	3	4
(3) 仲の良い友人	1	2	3	4
以下の人が**性別を変えた人**だったら･･･(それぞれ○は１つ)				
(4) 職場の同僚	1	2	3	4
(5) 自分の子ども	1	2	3	4
(6) 仲の良い友人	1	2	3	4

ここでは、あなたの性別、恋愛、性にかかわることをうかがいます。性のあり方を多角的にとらえ、学術研究や、国･自治体の施策を考える上で、重要となっております。

問 44　あなたの性別に○をつけてください。[出生時の戸籍・出生届の性別](○は１つ)

1　男　　2　女

※「出生時」とは、生まれたときにもっとも近い時点のことをさします。

問 45　あなたは今のご自分の性別を、出生時の性別 (上で○をつけたもの) と同じだととらえていますか。左側で 2 や 3 に○をした方は、今の認識をお答えください。

(○はいくつでも)

1　出生時の性別と同じ
2　別の性別だととらえている
3　違和感がある

今の認識にもっとも近い性別 (○は１つ)
1　男　　3　その他
2　女　　[具体的に:　　]

問 46　次の中で、あなたにもっとも近いと思うものに○をつけてください。(○は１つ)

1　異性愛者、すなわちゲイ・レズビアン等**ではない**　[異性のみに性愛感情を抱く人]
2　ゲイ・レズビアン・同性愛者　[同性のみに性愛感情を抱く人]
3　バイセクシュアル・両性愛者　[男女どちらにも性愛感情を抱く人]
4　アセクシュアル・無性愛者　[誰に対しても性愛感情を抱かない人]
5　決めたくない・決めていない
6　質問の意味がわからない

問 47 **次の (1)~(3) について、(ア)これまでのことと、(イ)最近の 5 年間のことについて、それぞれもっとも近いものを 1〜6 から 1 つずつ選んで○をつけてください。**

(1) あなたが 恋愛感情を抱く相手

(ア)これまで (○は 1 つ)	(イ)最近の 5 年間 (○は 1 つ)
1 男女どちらにも恋愛感情を抱いたことがない	1 男女どちらにも恋愛感情を抱いたことがない
2 男性のみ	2 男性のみ
3 ほとんどが男性	3 ほとんどが男性
4 男性と女性同じくらい	4 男性と女性同じくらい
5 ほとんどが女性	5 ほとんどが女性
6 女性のみ	6 女性のみ

(2) あなたが性的に惹 (ひ) かれる相手

(ア)これまで (○は 1 つ)	(イ)最近の 5 年間 (○は 1 つ)
1 男女どちらにも性的に惹かれたことがない	1 男女どちらにも性的に惹かれたことがない
2 男性のみ	2 男性のみ
3 ほとんどが男性	3 ほとんどが男性
4 男性と女性同じくらい	4 男性と女性同じくらい
5 ほとんどが女性	5 ほとんどが女性
6 女性のみ	6 女性のみ

(3) あなたがセックスをする相手

(ア)これまで (○は 1 つ)	(イ)最近の 5 年間 (○は 1 つ)
1 セックスをしたことがない	1 セックスをしたことがない
2 男性のみ	2 男性のみ
3 ほとんどが男性	3 ほとんどが男性
4 男性と女性同じくらい	4 男性と女性同じくらい
5 ほとんどが女性	5 ほとんどが女性
6 女性のみ	6 女性のみ

問 48 **同性のパートナー (恋人) とつきあったり、同居したりしたことはありますか。**

同性パートナーとつきあった経験 (○は 1 つ)	同居の経験 (○は 1 つ)
1 ない	1 ない
2 現在、同性パートナーがいる	2 現在、同居している
3 現在はいないが、過去にいた	3 過去に、同居していた

問 49 **あなたの周りの人について、おたずねします。職場の同僚 (過去も含む) や、近しい友人、親せきや家族に、同性愛者はいますか。(○は 1 つ)**

1 いる　2 そうかもしれない人がいる　3 いないと思う　4 いない

問 50 **職場の同僚 (過去も含む) や、近しい友人、親せきや家族に、性別を変えた、あるいはそうしようと考えている人はいますか。(○は 1 つ)**

1 いる　2 そうかもしれない人がいる　3 いないと思う　4 いない

ここでは、性の多様性にかかわる、
国や自治体の取り組みについてのお考えをうかがいます。

問 51　次のような制度や取り組みについて、あなたは賛成ですか、反対ですか。
あなたのお考えにもっとも近いものに○をつけてください。(それぞれ○は 1 つ)

	賛成	やや賛成	やや反対	反対
(1) 同性カップル (女どうし・男どうしのカップル) が、法的に結婚できる制度	1	2	3	4
(2) 親が育てられない子どもを、同性カップルが養子や里子として迎え、育てることのできる制度	1	2	3	4
(3) 女どうしのカップルが、生殖補助医療などによって、子どもをもてるように支援する	1	2	3	4
(4) 職場・学校・地域で、同性愛者や性別を変えた人も、差別なく公平に扱われるための法律・条例の整備	1	2	3	4
(5) 職場、学校、地域における、多様な性のあり方についての啓発	1	2	3	4
(6) 同性愛という性のあり方があることや、性別を変えたいと望む人のことを、義務教育で教えること	1	2	3	4

問 52　LGBT などの性的少数者の方々が日常生活を営むうえで直面している
課題と思われるものを、1〜8 の中から選んでください。(○はいくつでも)

1　こども・教育 (学校の制服、宿泊行事、トイレ、更衣室、プール)
2　就労 (採用試験、更衣室、トイレ、結婚休暇や介護休暇などの福利厚生制度)
3　住宅 (賃貸住宅の入居拒否)
4　医療 (パートナーの手術の同意、安否情報の提供、看護)
5　民間サービス (家族と同等のサービス提供 (家族割引・生命保険の受取など))
6　死別 (葬儀への出席、遺産相続)
7　その他 [具体的に：　　]
8　直面している課題はないと思う

※「LGBT」とは、レズビアン（同性のみに性愛感情を抱く女性）、ゲイ（同性のみに性愛感情を抱く男性）、バイセクシュアル（男女どちらにも性愛感情を抱く人）、トランスジェンダー（出生時の（戸籍や出生届での）性別とは異なる性を自認する人）の英語の頭文字をとった言葉です。「性的少数者」には、LGBT 以外にも、誰に対しても性愛感情を抱かない人や、自分自身の性を決められない・わからない、などさまざまな人がいます。

問 53　大阪市において、次のような、LGBT などの性的少数者に対する偏見や差別を解消する取り組みや、これらの方々に配慮した取り組みを推進することについて、賛成ですか反対ですか。あなたのお考えにもっとも近いものに○をつけてください。

（それぞれ○は１つ）	賛成	やや賛成	やや反対	反対
(1) 市民への広報・啓発 (区民まつり、人権週間、ホームページ、広報紙など)	1	2	3	4
(2) 企業・事業者への啓発 (企業向け手引きの提供・顕彰制度など)	1	2	3	4
(3) 大阪市人権啓発・相談センターにおける相談事業	1	2	3	4
(4) 性同一性障がいなどの性別違和の方に配慮した申請書類等の性別記載欄の見直し	1	2	3	4
(5) 多目的トイレにおける「どなたでも利用できます」表示	1	2	3	4
(6) パートナーシップを証明する制度	1	2	3	4

問 54　現在お住まいの区は、どちらですか。あてはまる区に○をつけてください。(○は１つ)

1 北区	5 中央区	9 天王寺区	13 東淀川区	17 城東区	21 住吉区
2 都島区	6 西区	10 浪速区	14 東成区	18 鶴見区	22 東住吉区
3 福島区	7 港区	11 西淀川区	15 生野区	19 阿倍野区	23 平野区
4 此花区	8 大正区	12 淀川区	16 旭区	20 住之江区	24 西成区
					25 大阪市以外

問 55　大阪市内には、合計で何年間お住まいですか。

合計 ［　　］ **年**　（１年未満の場合は、０ゼロと記入してください）

現在市外にお住まいの方は、過去の合計をお答えください。

質問はこれで終わりです。ご協力ありがとうございました。

今日の日付をご記入ください　＿＿＿ **月**　＿＿＿ **日**

アンケートの外国語訳を参照して回答した方へ

- **본 앙케이트 조사에 응답할 때 홈페이지에 기재된 한국어 번역판을 참조하였습니까? ： 예 / 아니오**
- 回答此份问卷调查表时，参阅了网页里所登载的中国语简体字版了吗？：是　/　否
- Khi trả lời bản câu hỏi này, bạn có tham khảo phiên bản tiếng Việt trên trang chủ không? : Có / Không
- 回答此份問卷調查表時，參閱了網頁裡所登載的中國語繁體字版了嗎？：是　/　否
- Did you refer to the English version of the questionnaire on our website? : Yes / No
- Você precisou consultar a tradução em português de nosso Site,para responder este questionário? : Sim / Não

このページでは、アンケートへの感想をおたずねします。
今後の研究の参考とさせていただきますので、できる限りお答えいただけると幸いです。

アンケートへのご意見

Q 1　アンケート全般について

1　関心をもてた
2　ある程度、関心をもてた
3　あまり関心をもてなかった
4　関心をもてなかった

Q 2　質問に使われている言葉について (○は 1 つ)

1　わからない言葉はなかった
2　わからない言葉がいくつかあった
3　わからない言葉がかなりあった
4　わからない言葉ばかりだった

Q 3　アンケートご案内用ホームページについて (○は 1 つ)

1　役に立った
2　どちらともいえない
3　役に立たなかった
4　ホームページは、利用しなかった

Q 4　このアンケートについて、ご意見などがありましたら、ご自由にご記入ください。
上では十分に回答できなかったことを、補足していただくこともできます。

ご協力ありがとうございました。

ご記入後のアンケートは返信用封筒に入れ、1 月 28 日までに郵便ポストにご投函ください。
お手数をおかけしますが、どうぞよろしくお願い申し上げます。
(このアンケートや封筒には、お名前やご住所を記入しないでください。)

「大阪市民の働き方と暮らしの多様性と共生にかんするアンケート」について

平素は、大阪市政の推進にご理解、ご協力いただき、ありがとうございます。

大阪市では、「人権が尊重されるまち」になったと実感できる、住んで良かったと誇りを持って語れる「国際人権都市大阪」をめざし、市民との協働のもと、時代に即した実効性ある人権施策を推進しています。しかしながら、私たちのまわりには人権に関わる課題がまだまだ存在しているのが現状です。

こうした中、大阪市では人権課題のひとつであるLGBTなどの性的少数者にかかわる取り組みを進めており、その参考資料とさせていただくため、この度、国立社会保障・人口問題研究所が実施する「大阪市民の働き方と暮らしの多様性と共生にかんするアンケート」に協力することといたしました。

この学術アンケートの実施にあたっては、平成30(2018)年10月1日時点で、大阪市にお住まいの18～59歳の方から15,000人を無作為に選び、対象者とさせていただきました。皆さまの個人情報（対象者名簿）は、大阪市市民局が対象者の方にこのアンケートにかんする書類をお送りするためにのみ使用し、外部には提供いたしません。また、対象者名簿は、アンケートの実施後、すみやかに、適正に処分いたします。

回答は無記名でお願いしており、結果は統計的に処理しますので、回答者が特定されることや、個人の回答が外部に漏えいするといったこともありません。もちろん、回答していただくかどうかは皆さまの自由ですし、わからない質問にはお答えいただく必要はありません。皆さまのご回答は、アンケートの実施主体である国立社会保障・人口問題研究所の研究チームで集計した上で、今後の大阪市の施策の検討に活用させていただく予定ですので、ご理解いただければ幸いです。

今後とも大阪市政へご理解、ご協力くださいますよう、お願いいたします。

平成31(2019)年1月

大　　阪　　市

■「なぜ自分にこのアンケートが送られてきたのか」などのお問い合わせ先
大阪市市民局ダイバーシティ推進室人権企画課　（担当：廣原・永田）
・電話：06-6208-7611　・メール：ca0014@city.osaka.lg.jp

■　アンケートにかんするお問い合わせ先
新情報センター「働き方と暮らしの多様性と共生アンケート」事務局（担当：安藤・日高）
・電話（無料）：0800-800-2286　・メール：osaka-chosa@sjc.or.jp
（月～金 9:00～12:00/13:00～17:00）

■　研究チームにかんするお問い合わせ先
厚生労働省 国立社会保障・人口問題研究所 人口動向研究部 第２室長 釜野さおり 代表
「働き方と暮らしの多様性と共生」研究チーム
・電話：03-3595-2984　・メール：osaka-chosa@ipss.go.jp

大阪市民の働き方と暮らしの多様性と共生にかんするアンケート

研究チームからのお願い

この度、厚生労働省 国立社会保障・人口問題研究所 室長 釜野さおりらの研究チームでは、国の研究費補助金を受け、大阪市の協力を得て、市内にお住まいの 18 歳～59 歳の 1 万 5 千人の方にお願いし、「大阪市民の働き方と暮らしの多様性と共生にかんするアンケート」を行なうことといたしました。

このアンケートの目的は、働き方と暮らしの多様性と共生にかんする皆さまのご経験やお考えについて調査することにあります。仕事・職場、家計、心身の健康、性にかかわること、ご家族のこと、周りの方たちとの関係などを広くおたずねし、これらのことがらが、たがいにどう関連しあっているかを、学術的見地から分析します。調査の結果は学会・論文で発表するほか、記者会見などを通じて、広く社会に還元します。また、大阪市の人権課題のひとつである LGBT などの性的少数者にかかわる取り組みの参考としても活用されます。大阪市では、市民の多様性をふまえた数々の施策や取り組みが自治体や住民組織によって進められています。そのような状況の中、大阪市の現状を知ることが、今後の社会全体のあり方を考える上で、重要な指針になると考えております。

このアンケートをお送りしているのは、大阪市の住民基本台帳から、どなたが選ばれるかを偶然にゆだねる方法 (無作為抽出法) で、選ばせていただいた皆さまです。お名前やご住所は、今回のアンケート書類の送付以外で使われることはありません。また、ご回答は無記名でお願いしており、お答えいただいた内容は統計として取りまとめられますので、皆さまの個人的なことが明らかにされることはございません。皆さまのプライバシー・個人情報は守られておりますので、安心してご回答いただけます。

アンケートへの回答は任意ですが、趣旨をご理解いただいた上で、ご協力くださいますよう、お願い申し上げます。

平成 31 (2019) 年 1 月
「働き方と暮らしの多様性と共生」研究チーム

アンケートにかんするお問い合わせ先

☎ 0800-800-2286 [無料]
月～金 9:00-12:00/13:00-17:00

✉ osaka-chosa@sjc.or.jp

〔業務委託先〕 一般社団法人 新情報センター
「働き方と暮らしの多様性と共生アンケート」事務局（担当：安藤・日高）

アンケートにかんするご案内のホームページはこちら
https://osaka-chosa.jp

※このアンケートを返信用封筒に入れ、投函することで、本アンケートへの協力に同意いただいたものとさせていただきます。

○ 調査主体　厚生労働省　国立社会保障・人口問題研究所 人口動向研究部 第 2 室長 釜野さおり 代表
「働き方と暮らしの多様性と共生」研究チーム (日本学術振興会 科学研究費助成事業)
☎ 03-3595-2984　✉ osaka-chosa@ipss.go.jp

○ 調査協力　大阪市 (担当 : 大阪市市民局ダイバーシティ推進室人権企画課)

国立社会保障・人口問題研究所　科研費 KAKENHI
プライバシーマーク 12390041(08)

外国語によるアンケートのご案内

한글 | 中文简体 | Tiếng Việt | 中文繁體 | English | Português

앙케이트 조사 협력에 관한 부탁말씀

본 조사는 국립사회보장· 인구문제연구소 외 소속 연구팀이 진행하는'일과 생활 다양성 및 공생에 관한 앙케이트 조사'입니다. 오사카시의 협력을 받아 일, 가계, 건강, 성, 국적, 가족 등 오사카시민의 생활전반에 대하여 많은 분들께 조사응답을 의뢰하고 있습니다. 조사대상은 오사카시에 주민등록이 되어있는 시민들 중 무작위로 정해졌습니다. 앙케이트 조사 내용의 조선어/한국어 번역판은 다음의 URL을 참조하시기 바랍니다. 당신의 앙케이트 조사 응답은 일본어 앙케이트 조사 용지에 기입하여 반신용 봉투에 넣어 1월 21일까지 보내주시기 바랍니다. 응답여부는 임의선택이지만 협력해주시길 부탁드립니다.

* 앙케이트 조사 용지에 응답을 기입한 후 반신용 봉투에 넣어 우편함에 통해 본 앙케이트 조사에 협력 및 동의를 얻은 것으로 간주합니다.

https://osaka-chosa.jp/kr

请协助完成此问卷调查

此份调查是国立社会保障· 人口题研究所等的研究团队依据「工作方式和生活的多样性及共生相关的问卷调查」。已获得大阪市的协助，工作，家计（家庭经济），健康，性相关的事，国籍，家族等，请教住在大阪市的居民们关于生活全般的问题。调查对象从住民基本台帳随机抽选出来的。中国语简体字版的问卷调查请参考下面的 URL。请将您的回答填写于日本语的问卷调查表，把本问卷调查表放入回信用的信封里，请于 1 月 21 日之前投进邮筒。回答为任意的，敬请惠予拨冗回答本问卷调查。感谢您的协助。

* 将问卷表格放入回邮信封并邮寄给我们，即表示您同意参与此调查。

https://osaka-chosa.jp/zh-cn

Lời ngỏ phối hợp hoàn thành bản điều tra khảo sát.

Đây là bản "khảo sát về sự đa dạng trong cuộc sống, công việc, và sinh hoạt cộng đồng của các cư dân sinh sống tại thành phố Osaka" thực hiện bởi nhóm nghiên cứu thuộc Viện nghiên cứu quốc gia về dân số và an sinh xã hội. Cùng với sự hợp tác của thành phố Osaka, chúng tôi xin phép hỏi về cuộc sống của bạn tại thành phố Osaka nói chung trên một số phương diện như công việc, chi phí sinh hoạt, sức khoẻ, giới tính, quốc tịch và gia đình. Những người tham gia được chọn ngẫu nhiên từ hệ thống đăng ký cư trú của thành phố. Xem link URL bên dưới cho bản khảo sát bằng tiếng Việt. Vui lòng điền vào mẫu khảo sát bản tiếng Nhật và gửi lại với phong bì đính kèm qua đường bưu điện trước ngày 21 tháng 1. Mặc dù việc hoàn thành bản khảo sát là tự nguyện, nhưng chúng tôi thực sự đánh giá cao sự tham gia của bạn.

* Bằng cách đặt mẫu phiếu hỏi trong phong bì gửi lại và gửi cho chúng tôi, bạn đồng ý tham gia khảo sát.

https://osaka-chosa.jp/vt

請協助完成此問卷調查

此份調查是國立社會保障· 人口題研究所等的研究團隊依據「勞動方式和生活的多樣性及共生相關的問卷調查」。已獲得大阪市的協助，工作，家計（家庭經濟），健康，性相關的事，國籍，家族等，請教住在大阪市的居民們關於生活全般的問題。調查對象從住民基本台帳隨機抽選出來的。中國語繁體字版的問卷調查請參考下面的 URL。請將您的回答填寫於日本語的問卷調查表，把本問卷調查表放入回信用的信封裏，請於 1 月 21 日之前投進郵筒。回答為任意的，敬請惠予撥冗回答本問卷調查。感謝您的協助。

* 將問卷表格放入回郵信封並郵寄給我們，即表示您同意參與此調查

https://osaka-chosa.jp/zh-tw

Request for Cooperation with the Survey

This is the "Survey on Diversity of Work and Life, and Coexistence among the Residents of Osaka City" conducted by a research team at the National Institute of Population and Social Security Research. With the cooperation of Osaka city, we ask many people about the lives of people living in Osaka city in general, such as work, household expenses, health, gender and sexuality, nationality, and family. Participants have been randomly selected from the basic resident register of the city. Please see URL below for the English translation of the survey. Please fill out the Japanese survey form, put it in the return envelope, and drop it into the mailbox by January 21. Your participation is optional; however, we sincerely appreciate your cooperation.

*Putting the questionnaire form in the return envelope and mailing it will be seen as indication of your consent to participate in this survey.

https://osaka-chosa.jp/en

Prezados Participantes da Pesquisa

Esta pesquisa é uma "Pesquisa sobre a Diversidade de vida, Convivência e o Trabalho" conduzida pelo time de pesquisa do Instituto Nacional de Pesquisas da População e Segurança Social (Instituição vinculada ao Ministério de Saúde, Trabalho e Bem Estar) com a colaboração do Município de Osaka. O objetivo da pesquisa é descobrir como as pessoas residentes em Osaka vivem e trabalham, assim como ouvir opiniões e impressões sobre os assuntos em gerais do cotidiano, tais como, o trabalho, situação financeira, saúde, sexo, nacionalidade, família e outros. O alvo é escolhido aleatoriamente a partir do registro residente básico. Para visualizar o questionário em Português, por favor, acesse o link abaixo. Solicitamos que você responda às perguntas preenchendo diretamente no questionário em japonês e nos envie o questionário respondido até o dia 21 de janeiro. Use o envelope para resposta que acompanha este material. Contamos sinceramente com a sua preciosa colaboração. A resposta é opcional.

* Colocar o formulário do questionário no envelope de devolução e enviá-lo pelo correio será visto como indicação de seu consentimento para participar desta pesquisa.

https://osaka-chosa.jp/pt

インターネット回答のご案内

このアンケートは、スマートフォン、パソコン、タブレットから、インターネットでのご回答もできます。

インターネットによる回答の期限	2019年1月28日 まで

ご回答にあたって

- 必ず、対象となったご本人がご回答ください。
- ご回答はお一人につき１回でお願いします。
- ログイン ID やパスワードは第三者に伝えないなど、取扱いには十分にご注意ください。
- 本アンケートは１つ前の画面の入力情報までが自動保存されますので、仮に回答を中断した場合でもログイン ID とパスワードを入れることでご回答の続行が可能です。
  （ただしご回答を最後まで完了してしまうと、再度やりなおしはできません。ご注意ください）
- 画面をさかのぼる際は、ページの中に設けられた【戻るボタン】をご使用ください。
  (ブラウザの「戻る」ボタンや「戻る」メニューをご使用になりますと、それまでの回答がクリアされてしまうことがございますのでご注意ください)

回答方法

1 回答画面にアクセスしてください、

URL　https://sjc.post-survey.com/osaka-chosa/

QRコード

2 画面にしたがって、裏面のログイン ID とパスワードを入力し、回答を開始してください

ログイン ID　0000-見本-0000

パスワード　0000-見本-0000

インターネットで回答した方は、アンケート用紙を返送する必要はございません。
インターネットで回答を送信することで、このアンケートへの協力に同意いただいたものとさせていただきます。

インターネット回答用ログイン ID とパスワード

あなたのログイン ID とパスワードは以下のとおりです。

はち　なな　いち　ゼロ　さん

ログイン ID　87103

エックス　ダブリュー　ピー　ゼロ　ゼロ

パスワード　xwp00

※この用紙は、事務局が封筒に封入・密封してから、大阪市がご住所お名前のラベルを順不同で貼付しているため、どなたにどの ID・パスワードが送付されたかはわからない仕組みになっています。

ご回答にあたって

- ✔ 必ず、対象となったご本人がご回答ください。
- ✔ ご回答は、お一人につき１回でお願いします。
- ✔ ログイン ID やパスワードは、第三者に伝えないなど、取り扱いは十分にご注意ください。

大阪市民の働き方と暮らしの多様性と共生にかんするアンケート

Q&A

アンケートの対象者となった方あなた様へのご説明

Q1 これは何のためのアンケートですか？

皆さまの働き方と暮らしにかんするご回答を集計し、大阪市民の多様性と共生についての意識や実情を知るために行います。LGBT などの性的少数者にかかわる課題を検討する基礎資料としても活用します。「ある意見を支持する人は、何パーセント」、「パート・アルバイトで働く若年層は多くなっているか」といった形で、割合や傾向を分析するための学術調査です。

Q2 なぜ、私に送られてきたのですか？

どの方にアンケートをお願いするかは、大阪市在住の 18 歳～ 59 歳の方の中から１万５千人を無作為抽出法 (※) によって抽出し、決めさせていただきました。
※無作為抽出法とは、「くじびき」のように、誰が選ばれるかを偶然にゆだねる、科学的な調査の標準的な抽出方法です。

Q3 私は答えなくてもよいですか？／他の誰かが代わりに答えてもよいですか？／関心がないので答えたくありません

このアンケートは、対象者となった皆さまから寄せられる回答の結果が、大阪市にお住まいの方々の意識や実情の正確な縮図となるように設計されています。回答は任意であり、回答しなくてもあなたに不利益になることはありませんが、ひとりひとりのお考えを正しく結果に反映するため、封筒の宛名のご本人様がお答えくださいますよう、ご協力お願い申しあげます。

Q4 なぜ、大阪市の住民が対象になったのですか？

大阪市では住民の多様性を踏まえた数々の施策や取り組みが行われており、大阪市の現状を知ることが、社会全体でさまざまな取り組みを進めていく上での参考になると考えたからです。

Q5 住民基本台帳から住所や名前など（個人情報）を抜き出すのはプライバシーの侵害ではないですか？

大阪市で定められた住民基本台帳の利用に関する手続きを遵守し、アンケート書類の送付に必要な情報（住所・氏名）を抽出しています。
また、本アンケートは、国立社会保障・人口問題研究所の倫理審査委員会に倫理審査申請を行い、個人情報の扱いやプライバシー保護を含め、研究倫理上、問題がないことの承認を受けた上で実施しています。

Q6 住所や名前などの個人情報が漏（も）れるのではないですか？

アンケート書類を発送するための個人情報（住所・氏名）は、個人情報保護制度のもとで大阪市のみで保有し、研究チーム、業務委託先（お問い合わせ先・事務局）では保有しません。また、アンケートは無記名なので、個人の特定はできません。したがって、ご回答くださった方の個人情報が漏（も）れることはありません。

ウラ面へ

Q7 回答から個人を特定できるのではないですか？

回答いただいたアンケートから回答者を特定することはできません。アンケートには皆さまの住所や名前を特定するための情報は一切含まれていないからです。加えて、このアンケートは大阪市から直接皆さまに送られるため、研究チームは皆さまの住所や名前の情報を持っていません。したがって、どなたの回答かを特定できない仕組みになっています。

Q8 インターネットで回答したら、誰の端末から送られたのかが、わかるのではないですか？

インターネットの回答を集めるサーバーには端末の情報が届くことになりますが、回答の受付を締め切った時点で、まず端末に関する情報を完全に除去し、そののちに、集計を行います。また、回答の送信には暗号化がほどこされますので、安心してご回答ください。

Q9 答えたくない質問があります / 自分にあてはまる選択肢がありません

正確な結果につなげるために、できるだけお答えいただきたいところですが、どうしても答えたくない質問がありましたら、次に進んでいただいて構いません。回答は任意であり、回答しなくてもあなたに不利益になることはありません。途中でやめることもできます。一部しか答えていないアンケートでも、ご返送ください。また、あてはまる選択肢がない場合は、余白にあなたのご回答をお書きください。

Q10 アンケートに対して意見があります

最後のページ（インターネット回答の場合は最後の画面）の感想欄に、ご記入ください。重要な意見として、学術研究および今後のアンケートの実施方法を改善するために参考にさせていただきます。

Q11 このアンケートの結果はいつ、どこで見られますか？

2019年秋をめどに結果の概要を公表する予定です。この概要全文の入手方法は、このアンケートのホームページでご案内いたします。同時に、結果概要を新聞やニュースを通じて、皆さまにお伝えする予定です。
URL　https://osaka-chosa.jp

この紙を読んでもよくわからないことがありましたら、下記までお問い合わせください

アンケートにかんするお問い合わせ先

☎ 0800-800-2286［無料］
月～金 9:00-12:00/13:00-17:00

✉ osaka-chosa@sjc.or.jp

〔業務委託先〕 一般社団法人 新情報センター
「働き方と暮らしの多様性と共生アンケート」事務局（担当：安藤・日高）

アンケートにかんするご案内のホームページはこちら
https://osaka-chosa.jp

※アンケートを返信用封筒に入れて投函する、または、インターネットで回答を送信することで、このアンケートへの協力に同意いただいたものとさせていただきます。

※ このアンケートは、国立社会保障・人口問題研究所の倫理審査委員会に倫理審査申請を行い、研究倫理上、問題がないことの承認を受けた上で実施しています。（承認番号 IPSS-IBRA #18003）

大阪市役所内局
料金別納
郵便

2019年1月28日(月)までにご返信ください

大阪市民の働き方と暮らしの多様性と共生にかんするアンケート 在中

| アンケート記入用のボールペンが入っています |

調査主体　厚生労働省 国立社会保障・人口問題研究所

人口動向研究部 室長 釜野さおり 代表
「働き方と暮らしの多様性と共生」研究チーム

電話 03-3595-2984　Mail osaka-chosa@ipss.go.jp

web https://osaka-chosa.jp …アンケートご案内用ホームページ

アンケートにかんするお問い合わせ

一般社団法人 新情報センター(業務委託先)
「働き方と暮らしの多様性と共生アンケート」事務局(担当:安藤・日高)

電話 0800-800-2286[無料]　Mail osaka-chosa@sjc.or.jp
月～金 9:00-12:00/13:00-17:00

調査協力　大阪市市民局ダイバーシティ推進室人権企画課

配達員の方へ

不着の場合は本状を
〒530-8201 大阪市北区中之島1-3-20 大阪市市民局ダイバーシティ推進室人権企画課
に返還ください。

料金受取人払郵便

渋谷局
承　認
1041

差出有効期間
平成31年4月
15日まで

〈切手不要〉

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０５９

実物は長 3 封筒

（受 取 人）
東京都渋谷区恵比寿1－19－15
ウノサワ東急ビル1階
一般社団法人　新情報センター内

「働き方と暮らしの多様性と
共生アンケート」事務局 行

「大阪市民の働き方と
暮らしの多様性と共生にかんするアンケート」返送用

調査主体
厚生労働省 国立社会保障・人口問題研究所
人口動向研究部　釜野さおり 代表
「働き方と暮らしの多様性と共生」研究チーム

郵便はがき

大阪市役所内局
料金別納
郵便

調査主体　厚生労働省 国立社会保障・人口問題研究所
人口動向研究部 室長 釜野さおり 代表
「働き方と暮らしの多様性と共生」研究チーム

アンケートご案内用ホームページ
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調査協力　大阪市市民局ダイバーシティ推進室人権企画課

▶配達員の方へ
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国立社会保障・人口問題研究所　科研費 KAKENHI

大阪市民の働き方と暮らしの多様性と共生にかんするアンケート

ご協力へのお礼

この度は「大阪市民の働き方と暮らしの多様性と共生にかんするアンケート」にご協力いただき、誠にありがとうございます。いただいた回答は多様性と共生の研究と施策の提言等に広く役立ててまいります。

このはがきはアンケートをお送りしたすべての方に発送しています。まだ回答いただいていない場合は、アンケートの趣旨をご理解いただき、２月４日までに返送（投函）いただきますようお願いいたします。

お答えいただいた内容は統計として取りまとめられ、個人情報が外部に出るようなことはございません。回答は任意ですが、一人でも多くの方にご協力いただきますよう、お願い申し上げます。

アンケートはインターネットでも回答できます
https://sjc.post-survey.com/osaka-chosa/

※アンケート用紙がお手元にない方には再送します。
下記にご連絡ください。

● アンケートにかんするお問い合わせ先

電話　0800-800-2286［無料］　月～金 9:00-12:00/13:00-17:00

Mail　osaka-chosa@sjc.or.jp

（業務委託先）新情報センター　（担当：安藤・日高）
「働き方と暮らしの多様性と共生アンケート」事務局

Survey on Diversity of Work and Life, and Coexistence among the Residents of Osaka City

January 2019

The "Survey on Diversity of Work and Life, and Coexistence among the Residents of Osaka City" is being conducted by the research team headed by Saori Kamano, Senior Researcher at the National Institute of Population and Social Security Research, Ministry of Health, Labour and Welfare, with the cooperation of Osaka city, asking everyone living in the city for cooperation. Please see "Request for Cooperation," "Q&A," and the survey website for more information.

Although there might be some questions that are difficult to answer, all the questions are asked purely from an academic point of view. Although responding to the survey is voluntary, we humbly ask for your cooperation, so that the survey results reflect everyone's situation as accurately as possible.

The maximum number of questions: 55 questions, 14 pages
The amount of time required: 15-30 minutes
Response deadline: January 28, 2019

Contact information
Tel: 0800-800-2286 [toll-free] (Weekdays 9:00-12:00/13:00-17:00)
Email: osaka-chosa@sjc.or.jp
Office of the "Survey on Diversity of Work and Life, and Coexistence," General Incorporated Association Shin Joho Center (Staff: Ando and Hidaka) (commissioned by the research team)

Please see the survey website for more information: https://osaka-chosa.jp

*We consider putting this survey in the return envelope to mail as consenting to cooperate on the survey.

Executing Entity
"Diversity of Work and Life, and Coexistence" Research Team (Japan Society for the Promotion of Science Grant-in-Aid for Scientific Research)
Principal Investigator: Saori Kamano, Senior Researcher at the Department of Population Dynamics Research, National Institute of Population and Social Security Research, Ministry of Health, Labour and Welfare
Tel: 03-3595-2984 Email: osaka-chosa@ipss.go.jp
Cooperating Entity: Osaka City (Human Rights Planning Division, Diversity Promotion Office, Citizens' Affairs Bureau)

*This survey is being conducted after receiving approval that the survey does not contain any problems in terms of research ethics by applying to the Institutional Review Board at the National Institute of Population and Social Security Research for an ethical review. (Approval Number IPSS-IBRA #18003)

Instructions for completing the survey

1. We ask that the survey questions be answered only by the person whose name appears on the envelope.
2. Please do not write your name on the survey form.
3. Please use the enclosed ball pen for your response. You may also respond on the Internet. (Detailed information about responding online is provided on the back of "Request for Cooperation.")
4. Depending on the question, please either circle the number that describes your answer or write in a number yourself.
5. Even if there is no option that describes your ideas exactly, please select the closest option.
6. When your answer corresponds to the "other" category, please fill in the specific content in [ ].
7. Please answer the questions in order and follow the instructions with question numbers and arrows （→）.
8. If there are questions that you do not want to or cannot answer, proceed to the next question.
9. Once you have finished filling out the survey, please seal the return envelope and drop it into the mailbox by Monday, January 28. We humbly ask for your cooperation so that there are no missing responses, unless there is some particular reason.

(p.1)

First, we would like to ask some questions on your current job and work experience.

Q1 Do you currently have a paying job? It includes part-time temporary work, family work, and piece work at home. (Circle one)

1. I have a job and I work.
2. I have a job, but I am taking leave due to illness or childcare.

[For those who answered "1" or "2," proceed to Q2.]

3. I do not have a job.

[For those who answered "3," proceed to Q1-1.]

Q1-1 Which category below do you belong to?

1. Student
2. Mainly engaged in housework and childcare
3. Unemployed
4. Retired/Not working due to old age
5. Unable to work due to a mental and physical problem
6. Other (please specify:)

[Proceed to Q9]

*From Q2 through Q12, if you have two or more jobs, please answer concerning your main job.

Q2 Which one of the following categories best describes your job? (Circle one)

1. Standard employee
2. Part-time temporary employee
3. Dispatched worker from temporary personnel agency
4. Contract employee
5. Executive of a company or a corporation
6. Self-employed

7. Family worker
8. Doing piece work at home

Q3 What kind of business is your workplace (establishment such as factory, office, store, or hospital) engaged in? Circle the number that is closest to you. (Circle one)

1. Agriculture and forestry
2. Fisheries
3. Mining and quarrying of stone and gravel
4. Construction
5. Manufacturing
6. Electricity, gas, heat supply and water
7. Information and communications (including publishers and broadcasting)
8. Transport and postal services
9. Wholesale and retail trade
10. Finance and insurance
11. Real estate and goods rental and leasing
12. Scientific research, professional and technical services (including advertising, authors, and artists)
13. Accommodations, eating and drinking services
14. Living-related and personal services and amusement services (including laundry, beauty and bath services)
15. Education, learning support
16. Medical, health care and welfare (including public health and hygiene, social insurance, and care services)
17. Compound services (Postal services and cooperative associations)
18. Other services (including waste disposal business, maintenance services, repair services, and employment and dispatching services)
19. Political, business and cultural organizations, and religious organizations
20. Government, except elsewhere classified
21. Other (please specify:)

*If you work for the government, please choose 20 only if other choices are not applicable to the business at your workplace.
*If you are not sure, please choose 21 and describe the business at your workplace in detail.

(p.2)

Q4 What kind of job do you usually do at your workplace? Circle the number that is closest to you. (Circle one)

1. Administrative and managerial workers
2. Professional and engineering workers
3. Clerical workers
4. Sales workers
5. Service workers (including care workers, hairdressers and beauticians, and office building management personnel)
6. Security workers (such as self-defense officials, judicial police staff, firefighters, and security staff)
7. Agriculture, forestry, and fishery workers

8. Manufacturing process workers
9. Transport and machine operation workers
10. Construction and mining workers
11. Carrying, cleaning, packaging, and related workers
12. Other (please specify:)

Q5 How many people work in the entire corporation or organization where you work? Please answer the entire number of people in the corporation or organization. Please include all the working people such as yourself, family workers, and part-time workers. (Circle one)

1. 1 (only yourself)
2. 2-4
3. 5-9
4. 10-29
5. 30-99
6. 100-299
7. 300-499
8. 500-999
9. 1000-1999
10. 2000-9999
11. 10000 or over
12. Government agency
13. Don't know

*Choose government agency if receiving wages from the central government or local governments (public school teacher, firefighter, etc.). Public corporations do not apply to government agency.

Q6 Which of the following posts are you now appointed? Circle the number that is closest to you. (Circle one)

1. No managerial post
2. Group leader, foreperson
3. Sub-section head (or equivalent position)
4. Section head, manager (or equivalent position)
5. Department head, general manager (or equivalent position)
6. Executive of a company or a corporation
7. Other managerial post (please specify:)

Q7 How many years have you been working for the corporation or organization you currently work at? If you are self-employed, give the number of years self-employed.
__ year(s) (Please enter 0 (zero) in the column if you have worked for less than a year)

Q8 Normally, how many hours do you work per week? Please include overtime.
__ hour(s) (excluding break time)

Q9 At what age did you start working for the first time after leaving school? (If you are currently enrolled in school, or if you have never worked after leaving school, please circle 1 or 2 and proceed to Q13.)

At the age of __
1. Currently enrolled in school (not leaving school yet)
2. I have never worked since I left school.

(p.3)

Q10 Have you ever experienced any of the following? (Circle all that apply)
1. Taking leave due to mental and physical illness or injury
2. Taking a childcare leave
3. Taking a caregiver leave
4. Being non-employed after losing or retiring from a job
5. Leave or non-employment due to other reasons (please specify:)
6. I have never experienced 1-5. [Proceed to Q12]

Q11 Now, if you sum the period of your leave or non-employment for reasons such as 1-5 in Q10, how many years and months is the total period?
The total period of leave or non-employment: __ year(s) __ month(s)

Q12 Which one of the following best describes your annual earnings from your job (before tax) last year? Please include allowances and bonus. Income other than your main job, pension, rental income, stock dividend, and family supply are not included. (Circle one)
1. I had no earnings from my job
2. Less than 1 million yen
3. 1 million yen - 2 million yen
4. 2 million yen - 3 million yen
5. 3 million yen - 4 million yen
6. 4 million yen - 5 million yen
7. 5 million yen - 6 million yen
8. 6 million yen - 7 million yen
9. 7 million yen - 8 million yen
10. 8 million yen - 9 million yen
11. 9 million yen - 10 million yen
12. 10 million yen - 11 million yen
13. 11 million yen - 12 million yen
14. 12 million yen - 13 million yen
15. 13 million yen - 14 million yen
16. 14 million yen - 15 million yen
17. 15 million yen - 16 million yen
18. 16 million yen - 17 million yen
19. 17 million yen - 18 million yen
20. 18 million yen or over (please specify:)
21. Don’t know

From here, we would like to ask some questions on your health and lifestyle.
Q13 How would you rate your health condition? (Circle one)
1. Good
2. Somewhat good

3. Neither good nor bad
4. Somewhat bad
5. Bad

Q14 Do you smoke? (Circle one)
1. I smoke every day.
2. I sometimes smoke.
3. I used to smoke, but I have stopped smoking for at least one month.
4. I do not smoke.

Q15 How often do you drink alcoholic drinks? (Circle one)
1. Almost everyday
2. Several times a week
3. About once a week
4. About once a month
5. Several times a year
6. About once a year
7. Do not drink
8. Cannot drink

(p.4)

Q16 <u>During the last 12 months</u>, have you experienced any of the following after drinking alcoholic drinks? (Circle all that apply)
1. Chugged an entire glass of alcoholic drink all at once
2. Passed out drunk
3. Vomited due to drinking too much
4. Lost memory due to drinking too much
5. I do not have any of the above experiences

Q17 Do you have chronic disease or longstanding health problem? (Circle all that apply)
1. Hypertension, arteriosclerosis, heart disease
2. Diabetes
3. Malignant tumor (cancer)
4. Depression and other mental illnesses
5. Other (please specify:)
6. I do not have any health problems.

Q18 <u>During the past month</u>, about how often did you feel… (Circle one for each)
A) …nervous?
B) …hopeless?
C) …restless or fidgety?
D) …so depressed that nothing could cheer you up?
E) …that everything was an effort?
F) …worthless?

(1) All of the time, (2) most of the time, (3) some of the time, (4) a little of the time, (5) none of the time

Q19 Have you ever experienced any of the following? (Circle all that apply)
1. I felt life is not worth living.
2. I thought I wish I could die or thought about the possibility of suicide.
3. I thought about suicide or took actions that hint at suicide.
4. I attempted suicide.

[For those who answered "1" through "4," proceed to Q20.]
5. I have never experienced 1-4.

[For those who answered "5," proceed to Q21.]

Q20 Have you experienced any of the following (A) in the past year, (B) when you were in elementary or junior high school, and (C) when you were in high school or at the age of 16-18? If you have, please circle "Yes." If you haven't, please cross out "Yes."
Example -->
1. I felt life is not worth living.
2. I thought I wish I could die or thought about the possibility of suicide.
3. I thought about suicide or took actions that hint at suicide.
4. I attempted suicide.

(p.5)

Here, we would like to ask some questions on your interpersonal relationships of when you went to school and after you became an adult.

Q21 From when you went to an elementary school through high school, have you ever experienced any of the following from your friends or classmates? For each item A and B, please circle either "Yes" or "No."
A: I have experienced it myself, B: I have seen or heard of it.
1. Offensive jokes and teasing
2. Violent acts
3. Offensive jokes and teasing involving terms such as "homo," "fag," "dyke," and "tranny"
4. Violent acts involving terms such as "homo," "fag," "dyke," and "tranny"
5. Offensive jokes and teasing involving ethnicity, race, or nationality
6. Violent acts involving ethnicity, race, or nationality

Q22 After you became an adult, have you experienced any of the following from people you are familiar with? For each item A and B, please circle either "Yes" or "No."
A: I have experienced it myself, B: I have seen or heard of it.
1. Offensive jokes and teasing
2. Violent acts
3. Offensive jokes and teasing involving terms such as "homo," "fag," "dyke," and "tranny"
4. Violent acts involving terms such as "homo," "fag," "dyke," and "tranny"
5. Offensive jokes and teasing involving ethnicity, race, or nationality
6. Violent acts involving ethnicity, race, or nationality

Q23 Did anyone listen to your concerns in general when you needed it during the last 12 months?
1. Yes
2. No

3. I did not have such need.

Q24 Did anyone help you financially when you needed it during the last 12 months?
1. Yes
2. No
3. I did not have financial need.

(p.6)

From here, we would like to ask some questions on yourself and your family.

Q25 Please fill in the year and month you were born in, and your age.
1. Showa
2. Heisei
3. A.D.

Year: ____ Month: ____ | ____ years old

Q26 Which country were you born in? If it is not Japan, please fill in the country (or region) name.
1. Japan
2. A country other than Japan --> Country Name [____]

Q27 How many people do you currently live together with including yourself?
____ person(s) (including yourself)
*If you live by yourself, please enter "1," and proceed to Q29.

Q28 Please circle everyone who currently lives together with you. For [___], please enter the number of people. (Circle all that apply)
1. Husband, wife, spouse, partner
2. Son [ ] person(s)
3. Daughter [ ] person(s)
4. Son's wife, daughter's husband [ ] person(s)
5. Father
6. Mother
7. Father-in-law
8. Mother-in-law
9. Sibling [ ] person(s)
10. Grandchild [ ] person(s)
11. Other relatives [ ] person(s)
12. Other (please specify:)

Q29 Are you currently married? (Circle one)
1. Married
2. Never married
3. Divorced
4. Widowed
5. Other (please specify:)

*The “marriage” in this question indicates marriages between a man and a woman. It includes unregistered common-law marriages.

Q30 How many children do you have? Please include children who do not live together with you.
1. 1
2. 2
3. 3
4. 4
5. 5 or more (please specify:)
6. I do not have children.

[For those who answered “6,” proceed to Q32.]

Q31 How many children under the age of 18 do you have? Please include children who do not live together with you.
1. 1
2. 2
3. 3
4. 4
5. 5 or more (please specify:)
6. I do not have children under the age of 18.

(p.7)

Q32 Please answer (1) the last school you attended (or are attending) and (2) one of the following: graduated, dropped out, or currently enrolled in school. (Circle one for each)

Q32 (1) The last school you attended (or currently attending)
1. Elementary school/Junior high school
2. High school
3. Professional training college/Specialized training college (after high school)
4. Junior college/College of technology
5. University
6. Graduate school
7. Other (please specify:)

Q32 (2) Graduated or currently enrolled in school
1. Graduated
2. Dropped out
3. Currently enrolled in school (please specify grade:)

Q33 When you were in the third year of junior high school, what was your class rank? (Circle one)
1. High
2. Relatively high
3. About in the middle
4. Relatively low
5. Low

Q34 What is your current nationality? Circle the corresponding number. If none of them applies, please fill in the country (or region) name. (Circle all that apply)

1. Japan
2. (South) Korea
3. China
4. Vietnam
5. Taiwan
6. The Philippines
7. The United States of America
8. Nepal
9. Indonesia
10. Thailand
11. Other (Country name:)

Q35 Which of the following is the last school your father and mother attended (or are attending)? Consider "dropped out" and "currently enrolled in school" as "graduated."
*Please answer as far as you know, even if they are deceased. This applies to Q36 too.
(1) Father (Circle one), (2) Mother (Circle one)

1. Junior high school [elementary school before the WWII (ordinary elementary school, higher elementary school, national elementary school, and boys' school)
2. High school [junior high school, commerce school, and normal school before WWII]
3. Professional training college (after high school)
4. Junior college/College of technology [higher school, professional training college, and higher normal school before WWII]
5. University
6. Graduate school
7. Other (please specify:)
8. Don't know

Q36 Which countries were your father and mother born in? If they are not Japan, please fill in the country (region) names.
Q36 (1) Father (Circle one), Q36 (2) Mother (Circle one)

1. Japan
2. Not Japan --> Country Name [____]
3. Don't know

(p.8)

Q37 What are your father's and mother's <u>current nationalities</u>? Please circle the corresponding numbers. If none of them applies, please fill in the country (or region) names. (Circle all that apply)
Q37 (1) Father, Q37 (2) Mother

1. Japan
2. (South) Korea
3. China
4. Vietnam
5. Taiwan

6. The Philippines
7. The United States of America
8. Nepal
9. Indonesia
10. Thailand
11. Other (Country name:)
12. Don't know

*If they are deceased, please fill in the last nationalities that they had.

Here, we would like to ask some questions on the circumstances and economic situations in your household.

Q38 How much did your household earn last year (before tax)? Please include income from all sources (such as pension, benefit, rental income, stock dividend, and family supply) and from those who share living expenses with you. (Circle one)

1. No household income
2. Less than 1 million yen
3. 1 million yen - 2 million yen
4. 2 million yen - 3 million yen
5. 3 million yen - 4 million yen
6. 4 million yen - 5 million yen
7. 5 million yen - 6 million yen
8. 6 million yen - 7 million yen
9. 7 million yen - 8 million yen
10. 8 million yen - 9 million yen
11. 9 million yen - 10 million yen
12. 10 million yen - 11 million yen
13. 11 million yen - 12 million yen
14. 12 million yen - 13 million yen
15. 13 million yen - 14 million yen
16. 14 million yen - 15 million yen
17. 15 million yen - 16 million yen
18. 16 million yen - 17 million yen
19. 17 million yen - 18 million yen
20. 18 million yen or over (please specify:)
21. Don't know

Q39 How much savings does your household have in total? Please circle the number that is closest to your household. (Circle one)

1. No savings
2. Less than 500,000 yen
3. 500,000 yen - 1 million yen
4. 1 million yen - 2 million yen
5. 2 million yen - 3 million yen
6. 3 million yen - 4 million yen
7. 4 million yen - 5 million yen
8. 5 million yen - 6 million yen

9. 6 million yen - 7 million yen
10. 7 million yen - 8 million yen
11. 8 million yen - 9 million yen
12. 9 million yen - 10 million yen
13. 10 million yen - 15 million yen
14. 15 million yen - 20 million yen
15. 20 million yen - 25 million yen
16. 25 million yen - 30 million yen
17. 30 million yen or over (please specify:)
18. Don't know

*Savings refer to savings in banks, paid insurance (except for non-refundable insurance), stock, trust, bond, property accumulation savings, and company savings. Self-employed households should include savings for business. Please include these in the total amount, regardless of the amount of money.

Q40 Have your household experienced the following because of financial reasons in the past year? Please circle one for each item.
1: Yes, 2: No, 3: Not applicable

1. Falling behind with electricity or gas bills
2. Falling behind with rents
3. Falling behind with mortgages
4. Falling behind with other debts

(p.9)

Here, we would like to ask some questions on your thoughts about the roles of men and women, family, and ideas about gender and sexuality.

Q41 For each of the following from (1) to (6), please circle the number closest to your thoughts from 1 (agree), 2 (somewhat agree), 3 (somewhat disagree), and 4 (disagree). (Circle one for each)

1. If a man and a woman were to live together, they should get married.
2. Once married, people should have children.
3. It is all right to have children without getting married.
4. After getting married, the husband should work outside of the home and the wife should take care of the home.
5. For a married man, time spent with his family is more important than success in his job.
6. It is all right for two men or two women to raise children together as a couple.

Q42 For each of the following from (1) to (7), please circle the number closest to your thoughts from 1 (agree), 2 (somewhat agree), 3 (somewhat disagree), 4 (disagree). (Circle one for each)

1. It is wrong for a man to have romantic feelings for men.
2. It is wrong for a woman to have romantic feelings for women.
3. Sex between men is disgusting.
4. Sex between women is disgusting.
5. Sex between a man and a woman is disgusting.
6. It is disgusting for someone to change sex from male to female.
7. It is disgusting for someone to change sex from female to male.

(p.10)

Q43 How would <u>you</u> feel if the following people were homosexual or those who have changed their sex? For each of the following from (1) to (6), please circle the number closest to your feelings and thoughts from 1 (not unpleasant), 2 (not so unpleasant), 3 (somewhat unpleasant), and 4 (unpleasant).

If they were homosexual and are: (Circle one for each)

1. Colleagues at work
2. Your children
3. Close friends

If they have changed their sex and are: (Circle one for each)

4. Colleagues at work
5. Your children
6. Close friends

Here, we would like to ask some questions on your sex, romantic love, gender, and sexuality. These questions are important in understanding gender and sexuality from various perspectives and in thinking about national and local governmental policies informed by academic research.

Q44 Circle your sex. [sex on the family register at birth or birth certificate] (Circle one)

1. Male
2. Female

*"At birth" refers to the closest point of time to when you were born.

Q45 Do you consider that your current gender is the same as your sex at birth (the one you circled above)? If you circle 2 and/or 3, please answer your current recognition. (Circle all that apply)

1. Same as sex at birth
2. Different gender
3. Have a sense of discomfort

The gender that is closest to your current recognition: (Circle one)

1. Man
2. Woman
3. Other (please specify:)

Q46 Please circle the number that you think is closest to you. (Circle one)

1. Heterosexual [those who have sexual/romantic feelings only for different-sex people], that is, <u>**not** gay, lesbian, etc.</u>
2. Gay, lesbian, homosexual [those who have sexual/romantic feelings only for same-sex people]
3. Bisexual [those who have sexual/romantic feelings for both men and women]
4. Asexual [those who do not have sexual/romantic feelings for anyone]
5. Don't want to decide, haven't decided
6. I do not understand the question

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Q47 For each of the following from (1) to (3), please circle the numbers closest to you from 1 to 6, concerning your experience (A) up until now and (B) in the last five years. (Circle one for each)

(1) People you have romantic feeling for

(A) Up until now (Circle one)	(B) In the last five years (Circle one)
1. I have never had romantic feelings for either men or women	1. I have never had romantic feelings for either men or women
2. Exclusively men	2. Exclusively men
3. Mostly men	3. Mostly men
4. Men and women, equally	4. Men and women, equally
5. Mostly women	5. Mostly women
6. Exclusively women	6. Exclusively women

(2) People you are sexually attracted to

(A) Up until now (Circle one)	(B) In the last five years (Circle one)
1. I have never been sexually attracted to either men or women	1. I have never been sexually attracted to either men or women
2. Exclusively men	2. Exclusively men
3. Mostly men	3. Mostly men
4. Men and women, equally	4. Men and women, equally
5. Mostly women	5. Mostly women
6. Exclusively women	6. Exclusively women

(3) People you have sex with

(A) Up until now (Circle one)	(B) In the last five years (Circle one)
1. I have never had sex	1. I have never had sex
2. Exclusively men	2. Exclusively men
3. Mostly men	3. Mostly men
4. Men and women, equally	4. Men and women, equally
5. Mostly women	5. Mostly women
6. Exclusively women	6. Exclusively women

Q48 Have you ever been in a relationship with a same-sex partner (lover) or lived together with them?

Experience of being in a relationship with a same-sex partner (Circle one)

1. No [proceed to Q49]
2. Currently, I have a same-sex partner.
3. Not currently, but I used to have one.

Experience of cohabitation: (Circle one) [Only for those who answered “2” or “3” in Q48]

1. No
2. Currently, we live together.
3. Not currently, but we used to live together.

Q49 We would like to ask about people around you. Are there any homosexual people among your colleagues at work (including former colleagues) close friends, relatives, or family? (Circle one)

1. Yes
2. There are people who might be so.
3. I do not think there are any.
4. No

Q50 Are there anyone who has changed or is thinking of doing so among your colleagues at work (including former colleagues) close friends, relatives, or family? (Circle one)
1. Yes
2. There are people who might be so.
3. I do not think there are any.
4. No

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Here, we would like to ask some questions on your thoughts about national and local governmental efforts concerning the diversity of sexual orientation and gender identity.

Q51 Are you for or against the following legal institutions and efforts? Please circle the number closest to your thoughts. (Circle one for each)
1 (for), 2 (somewhat for), 3 (somewhat against), 4 (against)
1. A legal institution where same-sex couples (two men or two women as a couple) can legally get married
2. A legal institution where same-sex couples can raise adopted or foster children whom their parents cannot raise.
3. A legal institution where two women can have children together as a couple through assisted reproductive technology
4. Establishing laws and ordinances so that homosexual people and those who have changed their sex can be treated equitably without discrimination at work, in schools, and in neighborhoods.
5. Educational activities on the diversity of gender and sexuality at work, in schools, and in neighborhoods.
6. Teaching about homosexuality as a sexuality and about people who hope to change their sex in compulsory education

Q52 We would like to ask about your thoughts on sexual orientation and gender identity. Please choose what you think are issues that sexual and gender minorities face in their daily lives from 1 to 8. (Circle all that apply)
1. Childhood and education (school uniforms, school trips, bathrooms, changing rooms, pools)
2. Employment (examinations, changing rooms, bathrooms, benefit systems such as marriage leave and caregiver leave)
3. Housing (denial of move-in to the rental housing)
4. Medical care (partner's signature to agree to an operation, offering safety information, nursing)
5. Private-sector services (offering services equivalent to families (such as family discounts and life insurance benefits))
6. Death (arrangement of and attendance of a funeral, inheritance)
7. Other (please specify:)
8. I do not think they face any issues.

*“LGBT” is an English initialism that stands for lesbian (women who have sexual/romantic feelings only for same-sex people), gay (men who have sexual/romantic feelings only for same-sex people), bisexual (those who have sexual/romantic feelings for both men and women), and transgender (those whose gender identity differs from the sex at birth (on the family register or birth certificate)). In addition to LGBT people, “sexual and gender minorities” include various kinds of people, such as those who do not have sexual/romantic feelings for anyone, those who cannot decide or are unsure about their own gender, etc.

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Q53 Are you for or against the following efforts to eliminate prejudice and discrimination against sexual and gender minorities such as LGBT people, and are you for or against promoting efforts to make arrangements for sexual and gender minorities such as LGBT people in Osaka city? Please circle the number closest to your thoughts. (Circle one for each)
1 (for), 2 (somewhat for), 3 (somewhat against), 4 (against)

1. Publicity and educational activities for residents (ward festivals, human rights week, website, publicity papers, etc.)
2. Educational activities for company and business operator (offering handbooks for company, award system, etc.)
3. Consultation service at Osaka City Human Rights Promotion and Consultation Center
4. Reexamine gender entry column on application forms etc. to make an arrangement for people with gender dysphoria such as people with gender identity disorder
5. Indication of “Anyone can use” in multipurpose bathrooms
6. A legal institution that provides proof of partnership

Q54 Which ward do you currently live in? Circle the ward that applies to you. (Circle one)

1. Kita
2. Miyakojima
3. Fukushima
4. Konohana
5. Chuo
6. Nishi
7. Minato
8. Taisho
9. Tennoji
10. Naniwa
11. Nishiyodogawa
12. Yodogawa
13. Higashiyodogawa
14. Higashinari
15. Ikuno
16. Asahi
17. Joto
18. Tsurumi
19. Abeno
20. Suminoe

21. Sumiyoshi
22. Higashisumiyoshi
23. Hirano
24. Nishinari
25. Other than Osaka city

Q55 How long have you lived in Osaka city?
__ year(s) (Please enter 0 (zero) in the column if you have lived for less than a year)
If you currently live outside of the city, please enter the total number of years you used to live in the city for.

This is the end of the survey. Thank you for your cooperation.
Please fill in today's date. Month __ Day __

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On this page, we would like to ask for feedback on the survey.
We will use it for reference in our future research, so we would appreciate it if you could answer the following questions as much as possible.

Feedback on the survey
Q1 About the overall survey (Circle one)
1. It was interesting.
2. It was somewhat interesting.
3. It was somewhat uninteresting.
4. It was uninteresting.

Q2 About the terms used in the questionnaire (Circle one)
1. There were no terms that I could not understand.
2. There were a few terms that I could not understand.
3. There were quite a few terms that I could not understand.
4. There were too many terms that I could not understand.

Q3 About the survey website (Circle one)
1. It was useful.
2. It was neither useful nor useless.
3. It was useless.
4. I did not use the website.

Q4 If you have any comments about this survey, please feel free to write them here. You can also use this space to supplement your answers to the questions above.

Thank you for your cooperation.
Please put the completed survey in the return envelope and drop it into the mailbox by January 28. We are sorry for your inconvenience, but we sincerely appreciate your cooperation.
(Please do not write your name or mailing address on this survey or envelope.)

VITA

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