

Social Tolerance of Homosexuality: The Patterns of Chinese Societies

by

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We acknowledge with respect the Lekwungen peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

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Abstract

In this thesis, three culturally similar yet distinct Chinese societies, China, Taiwan, and Singapore, are analysed in the context of their (in)tolerance towards homosexuality. Although they share many cultural similarities rooted in Chinese cultural heritage, these three societies are not always socially and politically homogenous. Differences in the political and social systems among the three societies contribute to divergences in social tolerance of homosexuality. Therefore, social tolerance of homosexuality and the social mechanisms behind it are explored in this thesis in order to comprehend the three Chinese societies better.

The thesis starts with an introduction to the primary purpose of the research and contextualises homosexuality in historically traditional Chinese culture. It then discerns whether Chinese people are more or less homophobic compared with others on a global scale. Next, through quantitative approaches and under Inglehart's postmaterialist theoretical framework, the research examines the socioeconomic and sociopolitical heterogeneity among Chinese societies. Overall, the findings confirm that homosexuality is still a form of identity politics in Chinese societies, and political and economic structures profoundly influence the tolerance of homosexuality. Also, Mainland China displays some unusual patterns with respect to the relationship between the economy and the tolerance, which sheds new light on the particularity of Chinese politics.

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Chapter 1

Introduction and History of Homosexuality in Chinese Societies

1.1 Introduction

Homosexuality, as a non-heterosexual orientation and behaviour, has been widely found in many cultures and different periods of human history. As an anomaly to the normalized heterosexuality, homosexuality and its politics have gained social exposure and hence raised social and political debates on a global extent.

In recent decades, social awareness on sexual orientation has become a focal point of human rights, where sexual minority communities have been promoting social policies to protect homosexuality, legalize same-sex marriage and enforce the civil rights of sexual minorities.

However, mainstream social narratives centring heteronormativity, monogamy, and patriarchy have collaboratively impeded global recognition and protection of the LGBTQ community, particularly in more traditional societies. Although several Western¹ and Latin American countries have successively legalized same-sex marriage and updated anti-discrimination laws, a majority of non-Western countries have not implemented any laws or policies to improve the social environment for sexual minorities. In some African and Middle-Eastern countries,

¹ “Western” countries or the “West” in this thesis denotes Western Europe, Australasia, and North America. These regions share lots of similarities in sociocultural heritage and democratic political systems, but I acknowledge internal heterogeneity within the “West.”

it continues to be criminalized. (Frank and McEnaney 1999; Boutcher and Camp 2009; Cobb 2014; Ayoub 2014).

In East Asia, the core social value is seemingly concerned about social harmony and tolerance, but only one society, Taiwan, has legalized same-sex marriage². Other Asian countries still remain taciturn on the systemic recognition and acceptance of homosexuality. Correspondingly, there is a lack of social, political, and academic discussion and social advocacy about homosexuality in this region.

Despite the East's lack of social recognition and academic discussion regarding homosexuality, modern-day Chinese societies' homosexual community is widely visible and found across the whole nations (Ruan and Tsai 1988; Li and Wang 1992). Some scholars suggest that China's homosexual population is the largest on a global scale, considering the country's vast population size (Li 1998).

Given that, the world's differing attitudes towards homosexuality, particularly between Western and Eastern spheres, is worth studying further. Notably, a focus on sociological research is needed to analyze social, political, and cultural elements behind this divergence.

Under a Euro-American cultural and political hegemony, most contemporary social agendas flow from West to East, while non-Western perspectives toward homosexuality can be neglected and silenced. Indeed, contemporary sociological research regarding homosexuality mostly situates in a Western context.

² Taiwan and its Congress initiated the legal procedure for the legalization of same-sex marriage in 2018 and legalized it in 2019.

While some research has compared the Western world and the Middle East (Adamczyk and Hayes 2012; Adamczyk and Pitt 2009), few scholars have paid attention to societies farther to the east, particularly Chinese societies where there is a long history of homosexual behaviours and abundant historical literature of detailed and metaphorical descriptions about homosexuality.

In this thesis, three culturally similar yet distinct Chinese societies, China, Taiwan, and Singapore, are analyzed in the context of their (in)tolerance towards homosexuality. Although they share many cultural similarities, these three societies are not always culturally and politically homogenous. Difference between the political and social systems in these three eastern societies, as well as their different historical progress since the 1900s, may point to divergence in social tolerance of homosexuality.

Chapter 1 presents an introduction to the primary goal of this thesis and contextualizes homosexuality in a historically traditional Chinese culture. Chapter 2 attempts to discern whether Chinese people are more or less homophobic when compared to others on a global scale. Chapter 3, titled “A Comparative Research of Attitudes toward Homosexuality among Three Chinese Societies—Mainland China, Taiwan and Singapore”, provides insights into the reasons why these three Chinese societies have different perceptions toward homosexuality, regardless of their similar cultural roots. It reveals the socioeconomic and sociopolitical heterogeneity within Chinese societies. Chapter 4, “A further Scrutiny of Attitudes toward Homosexuality in Mainland China”, focuses on Mainland Chinese society and its regional differences. The final chapter

concludes empirical results and provides a further discussion regarding the theories and empirical results shown in this thesis.

This research sheds light on the relationships among politics, economic development and social liberalism. The relationships are not always consistent with the existing theories such as post-materialist theory. The findings contribute to a better understanding of the development of social liberal ideas in a society. Especially, in a society that lacks a well-developed democratic system, social liberalism such as tolerance of homosexuality is more influenced by politics than economic development.

1.2 Contextualizing the History of Homosexuality in Chinese Societies

Understanding homosexuality within contemporary Mainland Chinese, Taiwanese and Singaporean societies first requires contextualization of their social histories towards it. Also, an Eastern-approached understanding of modern-day homosexuality must be separately discerned from the contrasting and dominant Western one. Therefore, I contrast sociological discourse regarding homosexuality between Western and historically traditional Chinese culture, including Chinese political policy and ideology.

This section includes four segments: (1) a history of homosexuality in a Chinese context from ancient times to the modern period before 1949; (2) a history of homosexuality in Mainland China since 1949; (3) a history of homosexuality in Taiwan since 1949; and (4) a history of homosexuality in Singapore.

An in-depth analysis of how notable cultural influences, such as Chinese Confucianism and Westernization, impact and contribute to the social environment of homosexuality in Chinese societies, are also provided.

1.2.1 Ancient Era: A Unique Homosexual Culture

Homosexuality, particularly gay activity, is broadly found in ancient Chinese records and other historical Chinese literature (Pan 1947; Gulik 1997; Liu I-Ching 1976; Ruan and Tsai 1987). Male homosexual behaviour within ancient Chinese society was socially and culturally widespread, acknowledged and relatively tolerated. The gay activity was especially prevalent in upper-level class males and royal families (Ruan 1991; Samshasha 1997). Unlike ancient Christian Europe's rigorous persecution against homosexuality, ancient China did not cruelly punish or criminalize homosexual activities. In fact, the depiction of homosexuality in ancient Chinese literature is somewhat poetic, euphemistic, and attitudinally neutral.

Homosexual euphemisms such as "*yu tao*" (sharing the remaining peach), "*duan xiu*" (the cut sleeve), and "*xiang gong*" (handsome young man) indicate a non-judgemental opinion towards male homosexual behaviours in Chinese historical records. "*Dui shi*" (facing each other and eating a meal), "*mo jing zi*" (rubbing mirrors), "*jin lan qi*" (golden orchid contract) and "*shou pa jiao*" (handkerchief relationship) poetically denote lesbianism in an unprejudiced light.

However, the existence of homosexual behaviours can not decisively illustrate a historically tolerant public attitude towards homosexuality. In ancient China, homosexual behaviour was considered a type of entertainment for wealthy and influential people. Some research demonstrates that the majority of people did not entirely accept homosexuality and homosexual people usually were not able to do specific jobs due to the sensitivity of their sexual identity (Samshasha 1997). Thus, we must further discern between historical tolerance towards homosexuality, which is the consistent and preferred sexual attraction to one of the same sex, and homosexual behaviour, which is a sexual interaction between two or more people of the same sex.

To further understand homosexuality in ancient China, we must refer back to a cultural and linguistic perspective whereby the concept of homosexuality does not rest on a Western discursive stand. Unlike the romanticized Western relationship of homosexuality, whereby two people of the same sex share deep romantic feelings for each other, same-sex behaviour in ancient China was most likely homo-eroticism within a classist context³ (Gulik 1997; Hinsch 1990). More strictly speaking, vocabularies including words such as “heterosexuality”, “homosexuality”, or “bisexuality” did not exist in Chinese history or ancient Chinese language (Chou 2001). In fact, the Western understanding that explicitly dichotomizes sexual orientation from homosexual behaviours does not apply to traditional Chinese culture (Chou 2001). In Chinese historical records, terms depicting homosexual behaviours are verbalized as a type of preference or

³ Though we cannot simply reason that there is no romantic homosexual relationship in ancient China.

obsession rather than as an illness or as having any derogatory connotations as many ancient European societies did.

While historical Western societies depict sexual desire between individuals, mostly in a heterosexual context, sexual desires in ancient China were predominantly connected with an individual's position in the social hierarchy. In other words, people with wealth, power and in high social status, mostly upper-level class males, had absolute sexual domination over his wives (including concubines) and both male and female prostitutes (Chou 2001).

Li Yinhe, a prominent Chinese modern sexologist, concludes that "a penetration from a higher social-class male over lower-class females and males is mostly based on his social status rather than sexual orientation"(Li 2006:86). Thus, the act of penetration and being penetrated had little relationship with gender or sexual orientation, but instead with one's social class (Chou 2001; Li 2006).

The fact that homosexual behaviour was historically tied to social class rather than to sexual orientation in ancient China indicates a unique pattern of homosexual behaviour: homo-eroticism. Therefore, homosexuality cannot be interpreted merely within the predominantly Western dichotomy between sexual orientation and romanticisation. Heterosexuality in ancient China functioned as social and familial reproduction and maintenance of social order, while homosexuality provided sexual entertainment for upper-level males and represented the classist social norms.

1.2.2 Republican Era: from West to East

Following the Opium War in 1840 in the late Qing dynasty, China's defeat was a double-edged sword to its traditional society. Ancient China awoke with a startle from its centuries-old feudalist empire and was forced to accept several degrading territorial treaties imposed by the Japanese and the European. Semi-colonized China, since 1840, initiated a bilateral trade relationship with the Western world and, as a result, learned about Western technology and scholarship. Following the significant humiliation of defeat in the 1840 Opium war and subsequent breakdown of ancient Chinese societal roles, several social movements, organized by progressive Chinese intellectuals, became dedicated to reforming and modernizing China. As a consequence of this reformation, traditional Chinese culture was increasingly viewed as "backward", "decadent" and a pivotal contributor to long-standing feudalism. Traditional cultural practices such as "binding women's feet," "Manchu plait," polygamy, pre-arranged marriage, and homo-eroticism were not advocated and even mandatorily prohibited by the Republican government (Wu 2003).

Concomitantly, modern Western biology, medicine, and psychiatry were introduced to China, translated by Chinese intellectuals, and disseminated to the public. Samshasha (1997) and Sang (2003) believe that the term 'homosexuality' in modern Chinese came from a Japanese translation on the Western literature, which is linguistically gender-neutral and indicates both male and female same-sex behaviour.

However, the research on sexuality and homosexuality during the early 20th century in the Western world mostly rested on a psychological and psychiatric stand, in which homosexuals were commonly viewed as people with a mental health condition (Wu 2003; Kong 2016). This clinical perspective towards homosexuality aroused some social debates in China in the 1930s. Questions as to the moral basis of homosexuality and whether it can be cured or not were discussed at that time in China until Pan Guang-dan, a Western-trained Chinese sociologist and sexologist, established his predominant academic reputation in the field of sexuality and homosexuality (Kang 2009; Chiang 2010; Kong 2016).

As a eugenicist, Pan adopted Havelock Ellis's eugenic perspective of sexuality and the dichotomy between people being strictly hetero- or homosexual in the West, which later became the dominant and popular understanding in Republican China (Pan 1986; Wong 2016).

While the Chinese Republican era was experiencing cultural and political transitions, in addition to a flood of progressive Western knowledge, homo-eroticism based on social hierarchy was still widespread.

Shanghai, for example, a semi-colonized city, was once dubbed China's "sex and gay capital", where thousands of foreign sexual tourists flushed into local bars, clubs and hotels to experience their sensual journey with those of the same sex. In fact, not only was Mainland China once a famous hub of the erotic and homo-erotic industry, but also a shelter for foreign sex minorities whose sexual orientation was criminalized in their home societies. For example, those banished

by their mother countries for engaging in homosexual activities fled to China to pursue their sexual freedom without persecution (Brady 1995).

The chaos of the anti-Japanese and domestic wars in the 1940s did open some space more tolerant towards foreign homosexuals, though homosexuality was still not widely accepted by Chinese people during the Republican era, especially under the influence of the Western world's pathologization of homosexuality.

2.1 Mainland China: From 'Dark' Ages to Reform Era: Homosexuality in Communist China

While some scholars classify homosexuality in Communist Mainland China into two periods, from 1949 to 1979 and from 1979 to present day, I condense these two-time frames into one, which I will refer to as the Communist era period.

After 1949, the Communist government endeavoured to destroy outdated feudalist China and its "rotten" culture by building a socialist society based on Marxist, Leninist, and Maoist ideologies. Homosexuality was also labelled as a feudalist erotic tradition that now represented the classism and cultural degeneration of China's outdated past; eroticism was said to be proof of the "decline and evil of Western civilization" (Ruan 1991:121).

Although, according to the Supreme Court after 1949, same-sex activity "is not against the law if it is between two consenting adults", people could be persecuted for their homosexual activity during the anti-rightist movement and

Cultural Revolution (Chiang 2010; Kong 2016). Besides, academic disciplines were only allowed to serve “socialist construction” and orthodox political ideology. Subjects such as sociology and sexology were officially banned due to their “anti-revolutionist nature” and unnecessary social and academic function, according to Mao (Zheng and Li 2000; Kong 2016).

Similar to what the socialist Soviet Union exemplified, Chinese Maoist social construction also emphasized the necessity of population growth and productivity. A monogamous and heterosexual society, hence, was strongly encouraged, as is echoed by a famous quote from Mao: many hands make light work (Mao 1958). In the years following Communist China’s takeover in 1949, heterosexuality and gender binarism became socially compulsorily and normalized.

After the disastrous Cultural Revolution ended in 1976, China experienced a process of social and political rehabilitation. Chinese people previously persecuted for their political background and “wrongful” comments mistakenly were acquitted and readdressed. However, such “rehabilitation” did not pertain to homosexual people (Wan 1997; Wu 2003).

Despite the ‘reform and opening-up’ policy, implemented by head of government, Deng Xiaoping, in the 1980s, homosexuality was still politically and socially stigmatized. In the orthodox textbook, homosexuality was classified as a mental disorder and being homosexual was criminalized during China’s 1983 ‘Strike-Hard’ campaign, in which the Chinese government attempted to curb rising crime rates and ease social conflicts (Wu 2003; Kong 2016).

Correspondingly, the term “hooliganism,” describing sex crimes that violate “socialist morality” including (mostly male) homosexuality, was defined in order to more rigorously crush down on sexual minorities (Ruan 1991; Gao 1995; Wu 2003; Li 2006; Kong 2016). This further criminalization of homosexual behaviour lasted for more than a decade until 1997 when the Supreme Court reinstated the 1950’s penal code, which stated that homosexuality was legal between two consenting individuals.

On the other hand, China’s “reform and opening-up” policy provided more leniency towards homosexuality and related academic research, even though there was widespread criticism towards the Chinese government following these torpid social and political reforms.

Since the 2000s, Mainland China transformed into a ‘post-socialist’ society that has led to enormous sociopolitical changes related to LGBTQ right’s movements.

Notably, in 2001, homosexuality was removed from the list of mental illnesses; an agenda to prevent the spread of HIV was created; and more visible LGBTQ representation in social media and internet has been promoted (Wu 2003; Jeffreys 2006; Guo 2007; Rofel 2007; Chase 2012; Chua and Hildebrandt 2014; Kong 2016). Dissemination of knowledge pertaining to sexuality, including homosexuality, and LGBTQ movements have been facilitated from the West to China due to globalization, as well as global sexual awareness projects and organizations located in China (Bian and Zhang 2008; Li 2012; Kong 2016).

2.2 The Rise of Chinese Homosexual Research and the Status Quo

Most research from China during the 1980s, in the early stage of the reform era, had focused on the “pathological” aspects of homosexuality, where Chinese scholars perceived the origin and cause of homosexuality as an illness and attempted to find medical or psychiatric therapies for homosexuality, commonly referred to as “homosexuality modification” (Pan 1986; Pan Suiming 1989, 1990; Chan 2008; Wong 2016).

Western knowledge of sexuality and homosexuality was often considered as ‘excessive’ or ‘distorted’ by the Chinese government, due to China’s state-dominated discourse of sexuality and social functionalism (Wong 2016; Kong 2017). State ideology and propaganda over sexual research predominantly constructed “correct” or “morally socialist” sex education (e.g., sexual orientations, reproduction, and sex roles) and healthy family relationships or social stability (Wu 1982; Liu 1988; Ruan 1988; Kong 2016).

However, unlike the state-dominant research in sexuality and homosexuality fields, some Chinese scholars did apply Western LGBTQ research and theory into a Chinese context. This minority of researchers used a non-pathologizing approach to explore the mundane lives of homosexual people in both ancient and modern-day China.

Although dominant research regarding homosexuality in China is still within medical and public health domains, the intersectionality of these minority of researchers has allowed space for the Chinese homosexual community (Kong

2016). These intersectional studies are mainly qualitative which include in-depth interviews and participant observation (Ruan and Tsai 1988; Li 1992; Tong 2005; Sun *et al.* 2006; Rofel 2007; Wei 2007; Kong 2011; Engebretsen 2014), though many of these intersectional studies in China have accepted the Euro-American narrative of homosexuality uncritically.

However, some researchers have shifted their vision from the hetero-homosexual binary and Western-discursive hegemony to a sinicized homosexuality that takes into consideration distinctive Chinese cultural traits, such as strong family values and filial piety (e.g., Wu 2003; Wei 2007; Hu and Wang 2013; Qi 2013; Connell 2015).

Since the start of China's economic reform in the 1980s, rampant globalization in China has allowed a multiplicity of opportunities for homosexual communities within the country to organize. Subsequently, an unprecedented level of discussion and public exposure of homosexuality have improved public recognition and normalization of homosexuality in modern-day China.

However, since the Chinese government began promoting traditional Confucianism and "socialist moralism" in the 2000s, Mainland China has enforced rigorous control of free speech and political censorship, both of which detrimentally affect public perception towards homosexuality. Contents related to LGBTQ topic were banned and removed from Weibo, (a Twitter-like social media platform that has largest online users in China) in 2018 (the Guardian 2018), and similar contents are still strictly censored in films and television programs.

The small remaining demand for civil rights and cultural representation for China's homosexual community is often related to Eurocentric standards of human rights, democracy and social movements, which are officially considered as an intrusion of Western liberalism into Communist China. Due to the authoritarian features of Chinese politics, the contents associated with Western liberalism and democracy are automatically deemed as "*Wei Weng Dui Xiang*" (objects for safeguard stability), especially since Mainland China's current President, Xi, stepped into office.

Nevertheless, such strict censorship and expurgation against homosexuality have caused considerable controversies and received backlashes since 2018 — a significant number of millennials and scholars have expressed their dissatisfaction of China's strict censorship, which has resulted in Weibo allowing contents related to homosexuality, but not eroticism, on its platform as a compromise (the Guardian 2018).

Continued resistance against the general Chinese public and political perception of homosexuality, has enabled new, more flexible, understandings of homosexuality which necessitate relevant academic research on the complexity of Chinese society.

3 A Brief History of Homosexuality in Taiwanese Society

Before 1912, the beginning of the Republic of China, Taiwan had been a territory of the Chinese empire for centuries. Since the Ming and Qing dynasties (1662 – 1895), Han⁴ mainlanders flooded into Taiwan, causing the once indigenous majority to become the racial minority.

The infusion of Chinese culture onto Taiwan island successfully amalgamated Taiwan into China's cultural jigsaw puzzle, where Confucianism, Buddhism, Taoism as well as Taiwan's cultural customs predominated Taiwanese society.

Homosexuality in Taiwan, as in ancient China, was a part of (homo) eroticism and existed historically as well. During the Qing dynasty, private and premium brothels included both male and female prostitution were common in the Wanhua area of Taipei, ports, and downtown (Kang 2009).

Following its complete defeat in the Jiawu War (also known as the First Sino-Japanese War of 1894-1895), Taiwan was ceded by the Chinese Qing Empire to Japan. Japan governed Taiwan with utter ruthlessness, despite the fact that riots and protests initiated by local Taiwanese challenged Japanese authority.

Under Japanese control, Taiwan began to modernize its society by expanding infrastructure and establishing modern bureaucratic and education systems. Japanese rulers suppressed traditional Chinese culture in Taiwan while modernization and Japanese culture were strongly advocated.

However, Taiwanese homo-eroticism remained especially prevalent in the red light district. Eroticism's prevalence in Taiwan did not fade until the 1950s, when

⁴The vast majority of Chinese people are Han ethnicity.

the Chinese national government (KMT) and its leader, Chiang Kai-shek, lost the Chinese Civil War against mainland Communist Party thereby placing Taiwan under temporary Chinese rule yet again.

Taiwan, then, became “the base of revival” and the capital of the Republic of China under Chiang’s draconian martial law. As a consequence, Taiwan was ruled dictatorially by Chiang and his government, where free speech and press were gagged to a great extent (Cheng 2018).

Beginning in the mid-1950s, Chiang’s government started the Mental Hygiene Movement to “tackle new social problems in a rapidly industrializing society” and to keep China’s morally traditional Confucianism that spouted harmony and peace (Huang 2011). However, unlike Communist Mainland China and its mass political movements across the strait, the Mental Hygiene Movement in Taiwan was milder and more tolerant (or less torturous) to homosexual people.

As the most prominent advocate and influential scholar of the Mental Hygiene Movement, Jiacong Bao did not categorize homosexuality as a type of perversion or abnormal sexuality. Homosexuality in Bao’s book (1962) was defined as *bingtai* (pathological) not *biantai* (perverted) and seen as medically treatable. Although the pathological perspective of homosexuality is still discriminatory, Bao’s definition of homosexuality showed more compassion and tolerance to non-heterosexual people. Since homosexuality was not criminalized in Taiwan, homosexual people could voluntarily talk to psychiatrists, rather than be forced to undergo “conversion therapy” (Huang 2011).

After the death of Chiang Kai-shek, the rise of social movements, as well as the significant growth and expansion of the opposition party, grasped at the opportunity to democratize and liberalize Taiwan. Chiang's son, his successor and then-president, and Taiwan's new government began to reduce prohibition severity and the press ban in 1988.

Taiwan's new government provided a more liberal, open and free social climate for the "newborn" Taiwan and also enabled minority communities, such as LGBTQ, to establish organizations and legally protest. Since the 2000s, the Taiwanese government as well the Ministry of Education has launched a series of anti-discrimination policies improving social, educational, and occupational environments for sexual minorities (Shih 2007).

Ultimately, in 2017, Taiwan's increased tolerance towards LGBTQ social movements pushed Taiwan's Constitutional Court to acknowledge that same-sex marriage should be constitutionalized and the amendment of relevant laws to take effect as of 2019 (*Taipei Times* 2018). As of 2019, Taiwan is the first Asian society that legally recognizes same-sex marriage.

4.1 A Brief Introduction of Homosexuality in Singapore

Unlike Taiwan and Mainland China's intermingled histories, Singapore stands as a "Chinese society" which stems from its history with Mainland China.

Therefore, I address Singapore's unique and historical perspectives on homosexuality below.

4.2 A Synopsis of History of Singapore

The earliest written records on Singapore can be traced back to the 3rd century B.C. in both Malai and Chinese documents describing the island as *Pu Luo Chung* or *Pulau Ujong*. From the 1300s to the early 1600s, Singapore was ruled by different Mongolian and Malaysian powers, including Kerajaan Singapura, Majapahit Empire, Malacca Sultanate, and the Johor Empire (Chew and Lee 1991).

In the mid 18th century, Singapore became an official colony solely under British India's jurisdiction and an important hub of British global maritime trade. During the British colonization and trade expansion, Singapore's economy and population skyrocketed. The sudden economic and population growth attracted many Chinese immigrants due to the geographic proximity to China. Since then, Han Chinese people gradually became the dominant ethnicity found in Singapore.

In 1942, Britain lost Singapore to Japan, and the island was occupied by Japan until the Axis Powers lost World War 2. Afterwards 1945, Singapore was once again governed by Britain and became part of Malaysian territory until 1965.

However, long-standing ethnic conflicts between Malay and Chinese Singaporeans, as well as the political dissent between Singaporean and

Malaysian governments, finally came to a head in 1965 resulting in the expulsion of Singapore from the Federation of Malaysia; this expulsion of Singapore from the Federation of Malaysia rendered it an independent country.

Although Singapore faced an uncertain future following its sudden independence, Singapore soon became the world's primary exporter of electronic products (Chew 1991). Since the 1980s, Singapore's economy has continued to grow and maintain a high GDP for its size, making Singapore one of the "Four Asian Dragons" (Chew 1991).

4.3 The History of Homosexuality in Singapore

During pre-colonial Singapore, homosexuality was mostly unknown due to a lack of relevant written records, though some Malaysian epic poems about gender fluidity were widespread within Malaysia itself.

During modern times, although many Mainland Chinese immigrants were more tolerant towards homosexuality, the implementation of a British legal system in Singapore meant that immoral sexual activities, such as homosexuality, were criminalized. British law and rule in Singapore were believed to "civilise backward Asian culture" and to reinforce British colonial governance. For instance, 1941, two male Europeans were sentenced to 15 months and five years imprisonment for buying sex with a male prostitute and "being addicted to homosexual practices" in Singapore (Chew 1991).

After the invasion of the Japanese army in Singapore in 1942, the British legal system was annulled overnight and replaced by the Japanese Military Law. The criminalization of homosexuality under Section 337A was scrapped; instead, gay activity and male prostitution venues, as well as the red-light district of Singapore, thrived again (Chew 1991).

Japanese military rule lasted until the end of World War 2, whereby the British legal system was reinstated. Singapore's 377A law continued to be in effect after Singapore's independence. Homosexual people were not eligible for military enlistment and even general employment. Even today, male homosexual behaviour is still a crime in Singapore (Khng 2001).

However, Singapore's rapid economic growth, westernization and the expansion of its LGBTQ neighbourhoods from the 1970s to the 1990s have provided more social space for its homosexual community. The emergence of gay clubs, red-light districts, and LGBTQ organizations and activism in Singapore has attracted public attention and hence reduced the country's extreme homophobia rooted in its legal system (Khng 2001).

Unfortunately, Singapore's social policy and official attitude towards homosexuality are still discriminatory and acrimonious, though the emergence of social activism has raised social awareness of LGBTQ rights. To this day, the Singaporean government has yet to improve the social environment for the LGBTQ community, and the homophobic tendencies in Singapore's cultural and political discourse are ongoing.

Chapter 2

A Worldwide Glimpse of Social Tolerance of Homosexuality

Introduction

This chapter delineates the birth of homosexuality in the form of identity politics and modern sociological studies on homosexuality. It aims to provide a clear-cut roadmap of how homosexuality evolves into an essential part of human rights and how sociologists understand and study it as a research object.

This chapter also examines the social acceptance of homosexuality in Chinese societies compared to the rest of the world by presenting a simple quantitative analysis. After knowing where Chinese people's stance toward homosexuality stands globally, further questions of why and what contributes to their (in)tolerance will be studied and answered in the next chapter.

Homosexuality: the Birth of Identity Politics

Homosexual behaviour, including homosexuality, has been historically found in many societies around the world. References, from the two-spirit gender-fluid figure in Native American communities to the metaphorical term "cute-sleeve" in ancient China, can be found as far back as thousands of years; from the prevailing gay activity in ancient Greece to the concept of third-sex in ancient Hindu philosophy, sexual relationship between two persons of the same sex or

gender has always appeared in human written and oral history and continues to be an essential topic in literature, art and music (Davis and Whitten 1987).

Nevertheless, homosexuality as a social identity requiring anti-discrimination policies is a more recent issue and has a robust eurocentric stance in its brief history. Since massive de- and re-construction to global societies following World War II, social norms and traditional sexual relations have been profoundly explored, challenged, and reshaped. As a result of the post-war trend of anti-tradition and religious secularization, a radical sexual revolution marked a new dawn in human history. This sexual revolution introduced new topics into the wider public arena, such as the normalization of contraception, public nudity, premarital sex, masturbation, the legalization of abortion, pornography, and homosexuality (Greer 1971).

The early mainstream academic findings on homosexuality, such as Kinsey's *Sexual Relations in the Human Male (1948)* and *Sexual Relations in the Human Female (1953)* articles, still had an inherently negative stance on homosexual people by way of suppressing/denying their social identity. These 'research' articles solely emphasized homosexual acts and experiences rather than this new non-heterosexual identity and a burgeoning sense of group consciousness (Escoffier 1985). As a result, homosexual behaviour became viewed as a type of sexual desire or kink that had no relation with one's sexual orientation; this further reinforced the dominant heterosexual discourse.

However, the backlash against the dominant, oppressive social narrative and theoretical framework also began to crop up. In 1968, Mary McIntosh's seminal

article, *the Homosexual Role*, argued that non-heterosexual identity is not merely a sexual behaviour or an act but a “whole pattern of feelings, expectations, and strategies” (McIntosh 1968). In McIntosh’s view, this pattern represented an identity for sexual minorities in response to the dominant social stigmatization against homosexuals.

In 1969, riots were organized in Stonewall by the Mattachine Society of New York; the sentiment of these riots resonated with McIntosh’s argument that sexual orientation was a form of social and organizing identity, thereby pushing sexual identity into the political sphere.

Meanwhile, academic articles such as Dennis Altman’s *Homosexual: Oppression and Liberation*, Jonathan Katz’s *Gay American History*, and *Gay Left* by a group of British activists and historians provided the theoretical framework in favour of the growing LGBTQ’ social movement and awareness (Escoffier 1985).

As a result, homosexuality was viewed not only a type of sexual behaviour but also as an integral part of broader social rights agendas including the women’s and civil rights and post-colonial movements (Neofotistos 2013).

A Brief Introduction of Sociological Research on Homosexuality

1. Early studies

After the emergence of homosexuality as a form of identity politics, both public discussion and academic research have paid substantial attention to the origin,

social context, individual experience, systematic and legal barriers, and politics of homosexuality. Given its profound and intricate social intersectionality, the topic of sexual orientation has inevitably come into contact with sociological research over the more recent years.

Early sociological research on homosexuality falls mainly into qualitative and theoretical domains and concentrates on four main topics: essentialism and social constructionism, the relationship between gender identity and sexuality, intimate relationships, the gay community and the stigmatization of AIDS (Risman and Schwartz 1988). These pioneering works provide a broad spectrum of sociological research in the field and have paved the way for subsequent research such as queer and intersectional theory in addition to third-wave feminism.

2. Two predominant modern theories in homosexual research

2.1 Post-materialist thesis

The early sociological research has also inspired quantitative researchers to explore how social mechanisms, political systems, cultures, and other societal indicators contribute to public perception toward homosexuality. One of the notable theoretical works in this field is Ronald Inglehart's postmaterialist theory and his two books, *Culture Shift in Advanced Industrial Society* (1990) and *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies* (1997).

In his research, Inglehart (1997) discovers that the resulting economic security and stability from continued economic growth has decreased the importance of materialistic concerns in modern societies, thus allowing people to focus on self-expression.

Inglehart and colleagues find out that when individuals' most basic needs for food, safety, shelter and security are satisfied in the society, they will pursue higher-level of needs that contain post-modern secularized and egalitarian values, such as women's rights, social equality, environment concerns, and also tolerating homosexuality (Inglehart 1997; Inglehart and Baker 2000; Inglehart and Welzel 2005).

Therefore, according to their studies, societies with higher existential security (e.g. economic development) have higher social tolerance towards homosexuality and a more LGBTQ-friendly social and political environment⁵.

In response to Inglehart's theory, subsequent sociological research has focused on public attitude towards homosexuality as well as the attitudinal difference across cultures, countries, religions, and political systems (e.g. Adamczyk and Cheng 2014; Adamczyk and Hayes 2012; Adamczyk and Pitt 2009; Anderson and Fetner 2008).

Studies have also examined individual-level indicators and the demographics which affect one's perception toward homosexuality, such as gender, age, education, income, marital status, political affiliation, social class, and religious

⁵ The theory has received a significant number of critiques from scholars such as D. Davis, Jackman, Miller, Swank and J. Davis. However, Inglehart has since responded to critiques and has further clarified previous statements.

beliefs (Adolfson et al. 2010; Brown and Henriquez 2008; Burdette et al. 2005; Cotton-Huston and Waite 2000; Detenber et al. 2007; Feng et al. 2012).

2.2 World society theory

World society theory, also known as world polity theory, studies on the influence of an extensive and approximately homogenous global culture, incorporated social and academic discourses that advocate by international organizations and institutions (Meyer et al. 1997). In contrast to the research focus of post-materialist theory on the formation of public attitude, world society theory pays attention to the formation of global culture, global attitudinal change, and how social and political norms and principles diffuse through the process of cultural globalization (Boli and Thomas 1997; Meyer et al. 1997).

Since World War II, the emergence of an unprecedented number of international organizations and institutions has promoted and accelerated the diffusion of global ideas and played a crucial role in forming the content of the global culture (Meyer et al. 1997). This newly formed world culture has particular core elements that originate from the achievements of long-term social and political movements in the West, including individualism, rationality, egalitarianism, and secularization (Meyer et al. 1997; Roberts 2019). These elements, as the cultural products of the Western world, have profoundly and expansively shaped the global culture and hence influenced the non-Western world.

The approval of homosexuality, derived from individualism (individual freedom and choice) and sexuality rights has also coalesced into the global culture, as an essential cultural element in this century (Frank and McEneaney 1999; Frank et al. 2010). In particular, international organizations, academic institutions and LGBTQ communities, such as EU, UN, and WHO, have been promoting decriminalization of same-sex behaviour, the expurgation of homosexuality from the list of mental disorders, anti-discrimination laws and policies, and legalization of same-sex marriage (Roberts 2019; Symons and Altman 2015).

This new norm of recognition and acceptance of homosexuality has been disseminated to the non-Western world through cultural globalization, helping local sex minorities navigate their identity and rights sociopolitically. Non-Western countries, such as Brazil, Colombia, Argentina, Mexico, Taiwan, and South Africa, have legalized same-sex marriage following the lead of the global trend. Other non-Western countries, including Chile, China, Cuba, India, Vietnam, and Japan, have had national debates on LGBTQ-related policies and laws⁶.

On the other hand, because of the historical Western origin of homosexuality as a form of identity politics in the democratic system and the dominant position that the Western world holds in this cultural globalization, some societies that have anti-Western sentiments regard the recognition of homosexuality as the decadence of the Western world. Hence those societies have further limited LGBTQ rights and relevant social activism and even decriminalized such behaviour (Halder and Symons 2018).

⁶ <https://www.cfr.org/background/same-sex-marriage-global-comparisons>

Underrepresentation of Non-Western World in Homosexual Research

Although social tolerance toward homosexuality has been extensively researched in different societies, these studies have mainly located research perspectives on North American and European societies and therefore have an overrepresentation of the Western world. Inglehart's research has also inevitably primarily focused on Western context, given his underlying assumption that all societies have a linear relationship between a society's economic prosperity and its social trends of liberalization and secularization. Non-Western societies such as those from Asia are usually underrepresented in those research.

However, this lack of non-Western research is somewhat surprising, given that many Asian societies have witnessed an increased awareness surrounding LGBTQ' rights and civil liberties (Misra 2009; The Economist 2009, 2013; Aquino 2013; Potts 2013; Borowiec 2014; Mann 2014).

A few studies that have examined Asian attitudes towards homosexuality found that East Asian people were less tolerant than those in Western-developed countries, but that East Asians also tended to be more tolerant towards homosexuality than those in Africa and the Middle East (Adamczyk and Cheng 2015). Adamczyk and Cheng (2015) explain that in some East Asian societies, such as China, Japan, Korea and Taiwan, Buddhist and Confucian social values that advocate benevolence, forgiveness and harmony may contribute to the overall tolerance of homosexuality.

Besides, the liberalizing and westernizing trend towards secularization, especially on the homosexual issue, flows from the global north to south and

continues to have a substantial effect on traditional social and political norms in Asia. As World Society Theory assumes, the world is widely homogenous and shares similar information flow (Meyer et al. 1997; Pierotti 2013; Velitchkova 2015). Under this context, individuals in the non-western world can be exposed to the influence of global ideas.

Are Chinese People More or Less Homophobic? A Simple OLS Analysis

In this section, a simple ordinary linear squares (OLS) regression is applied, in order to examine if Chinese people are more or less tolerant of homosexuality than people from other societies.

In Adamczyk and Cheng's research (2015), Confucian nations including China, Taiwan, Japan, South Korea, and Vietnam were found to be less tolerant of homosexuality than Central and South America, Europe, Australia, and North America, but more tolerant than non-Confucian Asia, Africa, and the Middle East.

I did not use the concept of Confucian society here, as the research focus is Chinese society specifically, hence it might be hard to make any comparison with their research. But we can still peek from previous research of how tolerance of homosexuality in East Asian societies looks like compared to the rest of the world.

The survey data used here is from Wave 6 of the World Values Survey (WVS) (Inglehart et al. 2014)⁷. The dependent variable, the toleration of homosexuality,

⁷ Wave 6 data was collected between the year of 2012 and 2013 and is available at <http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>. The WVS is a global network of social scientists studying changing values and their impact on social and political life, led by a team of

is measured through this question in the WVS: “Please tell me whether you think homosexuality can be justified?” The possible response ranges from never justifiable (1) to always justifiable (10) on a ten-point scale. A larger score indicates a higher level of tolerance towards homosexuality.

The only independent variable is the world region classified as five categories including Chinese societies⁸ (China, Taiwan and Singapore), African group, non-Chinese Asia-Pacific group, Eastern European group, Latin American and Caribbean Group (GRULAC), and Western European and other group (WEOG).

Table 1 presents the descriptive statistics for both independent and dependent variables. Table 2 presents results from the OLS model predicting tolerance of homosexuality in the world.

Model 1 is the only model employed in this chapter. The results indicate that three Chinese societies are more tolerant of homosexuality compared to Africa, Non-Chinese Asia-Pacific, and Eastern Europe. When comparing to GRULAC and WEOG, however, Chinese societies are less tolerant of homosexuality.

international scholars. The total sample size is 90, 350. However, participants from some countries were not asked a certain questions. After the removal of incomplete cases and missing values, the analytical sample contains 67, 364 individual variables.

⁸ The reference group in the region variable is Chinese societies.

Table 1 Descriptive Statistics for Variables Used in the Analysis

Variable	Mean	SD	Minimum	Maximum	N
Tolerance of homosexuality	3.27	3.03	1	10	83,008
Region:					90,350
Chinese societies	0.06	0.24	0	1	5,510
Africa	0.19	0.39	0	1	17,128
Non-Chinese Asia-Pacific	0.35	0.48	0	1	31,470
Eastern Europe	0.15	0.36	0	1	13,910
GRULAC ⁹	0.13	0.33	0	1	11,439
WEOG ¹⁰	0.12	0.33	0	1	10,893

⁹ GRULAC represents group of Latin America and Caribbean.

¹⁰ WEOG stands for West European and other group including North America.

Table 2 Estimates for OLS Model Predicting Tolerance toward Homosexuality

	Model 1
Region (Chinese societies):	
Africa	-1.029*** (.044)
Other Asia-Pacific	-.784*** (.410)
Eastern Europe	-.845*** (.044)
GRULAC	.859*** (.046)
WEOG	3.389*** (.046)
Intercept	3.323*** (.038)
N	83,002

Notes: (1) numbers in parentheses are standard errors; (2) from 2-tailed tests, * P<.05; ** P<.01; *** P<.001.

Conclusion

This chapter, in the beginning, summarizes how homosexuality became a part of identity politics and entered into the research field of social science. From a social phenomenon in ancient times to a social taboo, then to a segment of modern human rights, homosexuality, along with the progress of social and political transformations, gradually has become an essential sociological and political topic.

After coming into the sight of sociological studies, homosexuality has been respectively studied as a socially constructed sexual orientation, a form of identity politics in the sexual revolution, a theoretical framework along with feminism and queer theory, a pathological research object associated with AIDs, as well as a part of human rights in the legalization and social recognition and tolerance.

In the studies of social recognition and tolerance of homosexuality, two theoretical approaches are primarily employed: post-materialist thesis and world society theory. The former examines how social liberalism is generated by long-standing economic prosperity; while the latter one studies on the cultural homogeneity of the world and how world culture influences regional culture and politics. The two theoretical approaches indicate respectively, that economic development and cultural globalization are impactful to social acceptance of homosexuality.

Many sociological studies have applied these two theoretical approaches in different contexts, but mostly in Western societies. A few studies turn their vision to non-Western contexts such as East Asia, the Middle East, and Africa.

However, there is still a lack of in-depth research on how social and political system in non-Western societies, such as the focus in this research, Chinese nations, influence on public attitude toward homosexuality. This paucity of research demands us to explore the social tolerance of homosexuality in non-Western contexts.

The OLS model, as a preliminary analysis, in this chapter shows some interesting finding. According to the results, Chinese societies are less tolerant of homosexuality than developed Western countries¹¹ and South America, but more tolerant compared to the rest of societies. It leads to a further question of what and how social, political and demographic determinants influence social tolerance of homosexuality in Chinese societies, which will be examined in the following chapters.

¹¹ The mean in the tolerance of homosexuality in the US is significantly lower than other Western countries and only slightly higher than Taiwan and Singapore. In this sense, it may not be accurate to include the US in the concept of Western countries. This difference between the US and other Western countries is worth further attention in future research.

Chapter 3

Social Acceptance of Homosexuality in Three Chinese Societies

In this chapter, I counter Western perspectives towards homosexuality by examining public opinion towards homosexuality within a Chinese context. Drawing from the World Values Survey, this chapter also provides comparative empirical analysis in three particular Chinese societies, China, Taiwan, and Singapore. The fundamental questions upon these Chinese nations are: how do social attitudes toward homosexuality vary in these three Chinese societies, and what indicators contribute to the different level of social tolerance of homosexuality?

Quantitative results indicate that both demographic and socioeconomic factors such as education, generation, religiosity, views of democracy, traditional values, etc. have significant effects across the three Chinese societies. The interactions, such as the ones between education and country or between age and country, also show the societal difference in those Chinese societies.

Research Background

Past literature on homosexuality has explored social-cultural, socioeconomic, and socio-political factors that contribute to social tolerance of homosexuality. (e.g. Adamczyk & Pitt 2009; Adamczyk and Hayes 2012; Adamczyk and Cheng 2014; Anderson and Fetner 2008; Adolfsen et al. 2010; Burdette et al. 2005;

Brown and Henriquez 2008; Cotton-Huston and Waite 2000; Detenber et al. 2007; Feng et al. 2012).

However, most research regarding this theme is discussed within the Western context or, if relevant research is produced using a non-Western background, is less recognized altogether. In order to more accurately understand public attitude toward homosexuality, a more global perspective ought to be derived and integrated from differing parts of the world. In particular, Chinese societies should be analyzed, as Confucian belief has culturally transmitted the importance of social reproduction, lineage, and family values in many parts of the eastern world.

Mainland China, Taiwan and Singapore all have a traditionally unique culture surrounding family and social reproduction. Thus, the globalization of ideas, including the West's increased tolerance of homosexuality, may have different implications from Western counterparts.

According to World Society Theory, the world, like a giant society, is mostly homogenous regarding the tendency towards liberalization (Meyer et al. 1997), though ideological heterogeneity is salient between regions (Beckfield 2010). In East Asia, like the rest of the world, public tolerance of homosexuality has improved in the recent three decades (Pew Research Center 2013). However, the political recognition of homosexuality within the Asian continent varies greatly in different Asian countries. Even in so-called 'culturally-homogenous' Chinese societies, the public attitude toward homosexuality is multifarious.

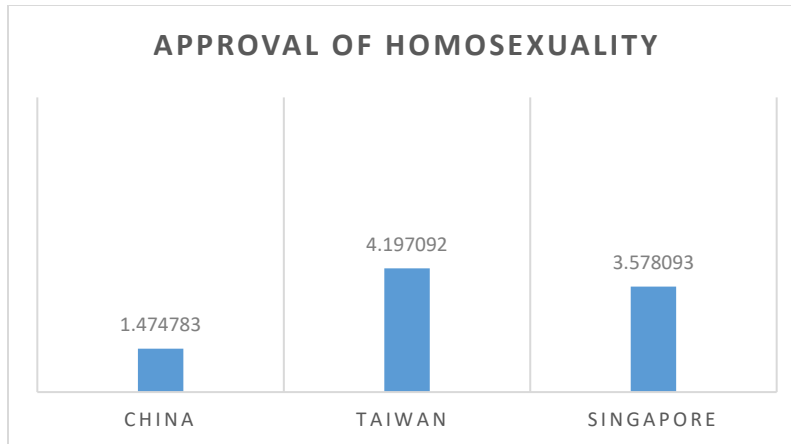


Figure 1: Approval of Homosexuality in Three Chinese Societies

Source: Wave 6 of the WVS. Approval of homosexuality is graded on a 10-point scale, in which ten is “always justifiable” and zero is “never justifiable”.

According to Wave 6 of the World Value Survey (Figure 1), approval of homosexuality in Mainland China averages 1.47, while average scores from Taiwan and Singapore is 4.19 and 3.57, respectively. Specifically, 49.4% Chinese participants think homosexuality is “never justifiable” (0 on the 10-point scale); 30.3% Singaporeans were inclined to respond “never justifiable”; and, 23.5% Taiwanese people regard homosexuality as “never justifiable” (WVS 2012).

According to this figure comparing three Chinese societies, Mainland China has the lowest average score when justifying homosexuality and the highest percentage of its population disapproving of homosexuality; Taiwan is the most tolerant of the three, and Singapore places between Mainland China and Taiwan in terms of viewing homosexuality as justifiable.

Although many Western and South American countries that have legalized same-sex marriage, the only Chinese society to have followed suit is Taiwan. Further, Mainland China and Singapore did not recognize or allow same-sex activity until the 1990s. Today, Singapore still prohibits the male homosexual activity, and violation of this law can be penalized (Aengus 2016). In contrast, As Asia's pioneer in LGBTQ rights, social advocacy, and legislation, Taiwan continues to eliminate discriminations against sexual minority people (Aengus 2016). As a result, Taiwan has the largest positive attitudinal shifts toward homosexuality in East Asian societies (Cheng et al. 2016): Taiwan's average score of approval of homosexuality has increased by 132% from 1995 to 2012 in two waves (5 & 6) of the World Values Survey.

Inglehart's (1987) post-materialist theory suggests that economic development and modernization result in individuals focusing on values, such as civil rights, instead of materialistic concerns, like personal career aspirations.

All three Chinese societies have achieved salient economic growth and social development in recent decades; Singapore and Taiwan are both rated as fully-developed nations. In Asia, both Singapore and Taiwan's GDP per capita and educational quality are ranked the highest (UNDP 2013). Mainland China, on the other hand, is still a developing country according to the UN index. However, both the domestic economy (GDP) and literacy rates in Mainland China have improved significantly along with the country's opening-up and reforming policies that began in the 1980s. Despite all three of these Chinese societies' vast economic growth, social tolerance of homosexuality continues to vary between

the three countries due to a variety of sociopolitical factors. Despite the three countries' sharing a baseline Confucian culture, the systemic difference could partially explain the difference in attitudes toward homosexuality.

Research Hypotheses

Education and the Interaction between Education and Country

Research has shown that education has a significant effect on social tolerance of homosexuality, where higher educational attainment tends to yield more tolerant opinions (e.g. Ohlander et al. 2005; Cheng et al. 2016).

Although all three Chinese societies, Mainland China, Taiwan and Singapore, have made a substantial improvement in average individual educational attainment and literacy rates, the three nations have differing educational and pedagogical systems from each other. This difference could play an important role in differentiating their tolerance of homosexuality.

For example, school textbooks in Mainland China still pathologize homosexuality as a type of mental disease (Qiu 2016). Additionally, the education system in Mainland China seldom refers to homosexual individuals at all. In Singapore, the government strictly forbids homosexual content in education systems and even from public commercials. In Taiwan, however, the Ministry of Education has included homosexual content when teaching about gender equality (2004 the Ministry of Education). Taiwan's *Gender Equity Education Act* was officially announced in 2004 in order to "promote substantive

gender equality, eliminate gender discrimination, uphold human dignity, and improve and establish education resources and environment of gender equality” (2004 the Ministry of Education). Given the effect of education on social tolerance towards homosexuality and the educational differences among these three nations, the interaction between education and country is hypothesized as follows:

H1: People with a higher education background are more likely to be tolerant of homosexuality;

H2: People with a higher education background in Taiwan are more tolerant of homosexuality than in China or Singapore.

Income and the Interaction

Although they share a similar cultural context, Chinese societies still have considerable social diversities. People from Mainland China and Singapore, for instance, prefer collectivistic values controlled by external beliefs such as the general concept of “country” and “family”; the Taiwanese, on the other hand, prefer more personal/individualistic values dominated by internal feelings (Lau 1992). Moreover, Mainland Chinese society emphasizes a person’s career accomplishment and material wealth; Singaporean society narrows in on moral values; while Taiwan values freedom of speech and equality. (Lau 1992).

The differences in societal values can be attributed partly to differences in economic development and politics, as the post-materialist theory suggests.

Indeed, China is undergoing drastic social and economic transformations; Taiwan and Singapore have already successfully transitioned into Western-style post-industrial societies that function using free-market policies.

As is also concluded to in Chapter 2, the post-materialist theory is compatible in Chinese contexts. Therefore, the hypotheses are:

H3: Income has a positive effect on attitudes toward homosexuality,

H4: The effect of income is stronger in Taiwan than in China and Singapore.

Age and the Interaction between Age and Country

Globally, the social and economic transformations in the last decades have positive effects on social tolerance towards civil-rights-related topics. Particularly, studies show that individuals in younger generations (mainly millennials) have more tolerant attitudes toward homosexuality on a global scale than their older-generation counterparts (e.g. Bibby 1983; Yang 1997; Andreson and Fetner 2008b; Cheng *et al.* 2016).

In fact, individuals from younger generations are more likely tolerant towards many of the social issues that were once widely intolerant by previous generations (e.g. Inglehart 1977).

Undoubtedly, an increase in the exposure of LGBTQ issues in recent decades via social media contributes to the more liberal viewpoints of many in younger generations. Similarly, the people in younger generations in three Chinese

societies, Mainland China, Taiwan, and Singapore, have more tolerant attitudes toward civil rights.

In these Chinese societies, homosexuality is viewed as strange for those born in the 1950s and 1960s. However, for people in XYZ generations, the concept of homosexuality is not as foreign thanks, in part, to the world-wide social media network. Both Taiwan and China started social and political transitions in the 1980s—China launched an opening-up and reforming policy and adopted a Western market economy, and Taiwan adopted Western democratic political system.

Cheng and colleague's (2016) research reveals a significant generational difference in attitudes toward homosexuality in Taiwan, where those in younger generations are more tolerant. However, compared with Taiwan, the generational effect might be less significant in China and Singapore, perhaps due to the countries' more widespread social and political oppression and political conservativeness. Therefore, the hypothesis here is:

H5: Younger people are more likely to be tolerant of homosexuality;

H6: Younger people in Taiwan are more tolerant of homosexuality than similarly-aged people in China and Singapore.

Religiosity and Religion

Interaction between Religious Affiliation and Country

An area's religion or religiosity has been shown to influence public opinion about homosexuality in different cultural contexts. In general, when people are more religious, they are less inclined to be tolerant towards homosexuality (Olson et al. 2006; Sherkat and Ellison 1997). Individually, those abiding by Protestant Christian and the Islamic faiths are the least tolerant towards homosexuality when compared to areligious individuals, Buddhists, Jews and other religiously-affiliated people (Adamczyk and Pitt 2009; Burdette et al. 2005; Detenber et al. 2007; Finlay and Walther 2003).

In terms of the most tolerant religious people, Buddhists and Taoists tend to be more tolerant to homosexuality compared with Western religions and Muslims (Adamczyk and Hayes 2012; Anderson and Fetner 2008; Cheng et al. 2016; Detenber et al. 2007).

Although the existing literature has shown that religiosity and religion have an impact on public attitudes toward homosexuality, its effect in the Chinese context has not been fully examined. Therefore, the effect of religious belief on the social tolerance towards homosexuality may vary in the three Chinese societies I examine. Different religious affiliations may also have differing effects. I provide two hypotheses:

H7: Religiosity has a negative effect on public attitudes toward homosexuality;

H8: Those following Buddhist, Taoist and other Chinese popular religious beliefs are more tolerant of homosexuality than are Catholics, Protestants and Muslims;

Moreover, the effect of religious belief potentially differs between Mainland China, Taiwan and Singapore. Personal religious beliefs are found to have different effects on attitudes toward homosexuality in countries with different cultural histories (Adamczyk and Pitt 2009). In recent years, religion in Mainland China has revived despite China's cultural revolution, but legal restrictions on religion have remained stringent (Potter 2003). Nevertheless, Mainland China's tight regulation of religion has been challenged by an increase in Mainland China's religious population and the religious economy, such as religious tourism (Potter 2003; Yang 2012). Religious restrictions in Taiwan and Singapore, however, are much laxer (Eng 2008; Lu et al. 2008).

In 1989, the Taiwanese government enacted the Law on Civic Organization, whereby all religious groups are allowed to exist legally, and disallows the government to impose prohibitions on the establishment of religious groups. Believers of any religion are free to practice religious activities without fear of state suppression (Lu et al. 2008). The Singaporean government generally advocates religious freedom and diversity as a measure of promoting social harmony and diverse cultural identities among Singaporeans (Eng 2008). While Singapore's government plays an active role in regulating domestic religious affairs, it also limits its role to ensure that all citizens can access religious organizations and practice their beliefs (Eng 2008). Given the different religious

environment in these three Chinese societies, religiosity is expected to have less impact in Mainland China than in Taiwan and Singapore.

H9: The effect of religiosity on tolerance of homosexuality is stronger in Taiwan and Singapore, compared with China.

Traditional Value and the Interaction with Country

Amy Adamczyk (2014), one of the few scholars who has researched homosexuality in Asian contexts, argues that Confucian nations are, overall, less tolerant of homosexuality than non-Confucian nations. She finds a unique Confucian cultural effect which concerns itself with keeping family intact and has impacted attitudes toward homosexuality in these nations (Adamczyk 2014). She also concludes that several Confucian values such as obedience, filial piety, and family cohesion have no significant contribution to the social intolerance towards homosexuality, suggesting that a Confucian cultural influence cannot be reduced to an “East Asian regional effect”. Her overall model, however, has not further analyzed the difference between Confucian societies beyond clumping them together.

Other scholars have concluded that Chinese societies seldom recognize homosexuality due to traditional family values, namely, the reproduction of family (Fei 2006). People are usually required to have biological children in order to maintain the family bloodline and thus prosperity; homosexual individuals, on the

other hand, are considered as an impediment to family succession as they are unable to produce biological offspring with a same-sex mate.

In Mainland China, children born in a non-heterosexual or non-traditional family or those who have no biological parent-child relationships are often discriminated. Research has revealed that Chinese people who identify themselves as homosexuals are socially forced into a heterosexual marriage because of expectations of bloodline succession (e.g. Li 2009). A strong societal value for traditional families, based on heterosexuality, has normalized gender roles, sexual morality, and heterosexual marriage in traditional Chinese societies. Individuals who breach these social expectations are viewed as a threat to the reproduction of the family lineage.

Although Adamczyk (2014) demonstrates that Confucian tradition has no significant effect on shaping public attitudes toward homosexuality in “Confucius” nations (Mainland China, Japan, South Korea, and etc.), family values may have different effects within the three Chinese societies I analyze.

A country’s traditional values could relate to the level of social openness. For instance, modern China is based on communist/Marxist atheism and anti-traditionalism. During the Cultural Revolution, traditional Chinese family values and beliefs were regarded as “rotten feudalism” and replaced by Maoist thought, while traditional values underwent the destruction of the “Four Olds” (old customs, culture, habits, and ideas). In Taiwan, traditional Chinese culture and customs were relatively well-preserved since it experienced less extreme anti-traditional movements. Multicultural Singapore, on the other hand, has a more diverse and

mixed culture, where Chinese family values are not the only mainstream cultural practice.

As Taiwan did not experience the same degree of radical Maoist 'reforms' to traditional values when compared to Mainland China, Taiwanese people may be more influenced by traditional Chinese family-values more than those in multicultural Singapore or Mainland China.

Thus, I hypothesize that:

H10: People with traditional belief are likely to be less tolerant of homosexuality;

H11: The effect of traditionalism on public opinion towards homosexuality in Taiwan is stronger than in Singapore and Mainland China.

Importance of Democracy and the Interaction with Country

A country's political orientation (Sherkat et al. 2009) shapes public attitudes toward social issues. People who hold more liberal political opinions tend to be more tolerant of sexual minorities, while more conservative individuals are less tolerant of minorities in general. Singapore and Mainland China's weak democracy, as a critical item in the measurement of political orientation, have been criticized by the Western world. In Mainland China, the spreading concept of democracy is regarded as westernization and eurocentrism, where people who

advocate for this concept are considered xenophiles. In Taiwan, the push for democracy is legally and socially acceptable due to the country's democratic system. In 2011, the UN issued its first report on human rights of same-sex groups, defining homosexuality as basic human rights (UN 2011). Therefore, I consider attitudes toward the importance of democracy an index of people's political standpoint. The hypotheses are:

H12: Respondents who believe democracy is important are more likely to be tolerant of homosexuality,

H13: Respondents who believe democracy is important in Taiwan are more tolerant of homosexuality than in either Singapore or Mainland China.

Data

I use the sixth wave of the World Values Survey, focusing on three countries: Mainland China, Taiwan and Singapore. A total of 5,510 individuals from these three countries have answered the questionnaire. China has 2,300 respondents, Taiwan has 1,238 ones, and Singapore has 1,972 ones.

Dependent Variable: Justification of Homosexuality

The dependent variable in this chapter is the justification of homosexuality as the indicator of social tolerance of homosexuality. In WVS, justification of homosexuality is a discrete variable on a 10-point scale. 0 means "homosexuality

is never justifiable”, while 10 means “homosexuality is always justifiable”. The question is asked as follows:

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									
Never justifiable					Always justifiable				
1	2	3	4	5	6	7	8	9	10

Independent Variables

Table 3 shows the descriptive statistics of observed predictors in detail. The demographic variables are age, income, gender, education, marital status, internet use, religiosity, religious affiliation, and employment status.

Female is the reference group for gender. Education is a 4-point categorical variable, 1 is “no formal education”, 2 is “elementary and junior middle school education”, 3 means “high school”, and 4 means “university education and above”. Age is a continuous variable that ranges from 18 to 89. Marital status is recoded into three categories: married and living together as married, divorced, separated and widowed, and single. Income is a continuous variable on a 10-

point scale. Internet use is a 5-point continuous variable¹²: 5 means respondents use the internet daily, and 1 is they never use the internet.

Table 3 Descriptive Statistics for Multiple Predictors

Variable	Observations	Mean	SD	Min.	Max.
Justification of homosexuality	4,975	3.32	2.60	1	10
Age	5,469	43.55	16.16	18	89
Female	2,902	0.53	0.50	0	1
Male	2,608	0.47	0.50	0	1
Education					
No education	316	0.06	0.23	0	1
Elementary and middle school	2,342	0.43	0.49	0	1
High school	1,375	0.25	0.43	0	1
University and above	1,461	0.27	0.44	0	1
Income	5,197	4.97	1.79	1	10
Marital status					
Married	3,858	0.70	0.46	0	1
Divorced, separated, and widowed	328	0.06	0.24	0	1
Single	1,320	0.24	0.43	0	1
Traditional value	5,336	4.09	1.28	1	6
Religion affiliation					
No religion	504	0.47	0.50	0	1
East Asian religion	1,909	0.36	0.48	0	1
Western religion	335	0.09	0.29	0	1

¹² The frequency of internet use is a conceptually continuous variable but categorized with only five values. Variables with only five values generally are considered as categorical, but here I treat it as a continuous variable as it might be hard to use it as a categorical variable.

Muslim	117	0.06	0.24	0	1
Other religion	2,501	0.03	0.15	0	1
Religiosity	5,434	-0.42	1.19	-1.303	2.670
Frequency of Internet use	5,296	2.74	1.80	1	5
Importance of democracy	5,230	8.25	1.68	1	10
Employment					
Employed	3,575	0.66	0.47	0	1
Retired	634	0.12	0.32	0	1
Student	439	0.08	0.27	0	1
Unemployed	777	0.14	0.35	0	1
Country					
China	2,300	0.42	0.49	0	1
Taiwan	1,238	0.22	0.42	0	1
Singapore	1,972	0.36	0.48	0	1

Religiosity is a composite measure created by using principal component analysis that consists of two religious variables¹³. Higher score of religiosity indicates more frequent religious activity a respondent participates. Religion is recoded into five categories: no religion, East Asian religion (e.g. Buddhism, Taoism and other folk religions), Western religion (e.g. Christianity and Catholic), Islam and other religion. Employment status is recoded into five categories: employed, retired, housewife, students, and unemployed. The explanatory variables are traditional value and civil rights. Tradition is a 6-point continuous

¹³ The first question is “how often do you attend religious services”, and the answer ranges from more than once a week to practically never. The second question of religiosity is “how often do you pray”, and the answer ranges from several times a day to practically never. I did not use “do you believe in God”, as the correlations between this question and the previous two are only 0.29 and 0.32, respectively. Also, in Chinese societies, religious people may pray and attend services in temples but not believe in God.

variable based on the statement of “if tradition is important to this person, and to follow the customs handed down”. 6 is “very much like me” and 1 is “not at all like me”. The importance of democracy is a continuous variable on a 10-point scale: 1 is “democracy is not important at all” and 10 implies the opposite.

Missing Values

Table 4 displays the rate of missing values in variables by country. For the dependent variable, both China and Taiwan have significant missing value rates, 19.40% and 6.90% respectively. It is not appropriate to use multiple imputation on the dependent variable, as “it might lead to bias in estimating the important relationships” between variables (Graham 2009). Hence, listwise deletion is applied here to treat the missingness of the dependent variable. For the independent variables, income, internet use, traditional value and importance of democracy have substantial missing values in China and Taiwan¹⁴. In order to deal with the missing values in those variables optimistically, multiple imputations are employed and iterated for ten times. The result of multiple imputations is displayed in Table 5.

Table 4 Missing Value Rate in Variables by Country

	China	Taiwan	Singapore
Homosexuality	19.40%	6.90%	1.52%
Gender	0%	0%	0%

¹⁴ Notably, religion has 5.83% missing value rate in China. Listwise deletion is employed here instead of multiple imputation, as we cannot impute people’s religious belief based on their demographics.

Education	0%	0.80%	0.70%
Age	0%	0.57%	1.67%
Income	10.65%	5.09%	0.20%
Marital	0%	0.16%	0.05%
Employment	0%	0.08%	0%
Religiosity	2.74%	0.89%	0.05%
Religion	5.83%	0.65%	0.05%
Internet use	8.73%	0.81%	0.10%
Traditional value	6.01%	2.75%	0.05%
Importance of democracy	10.26%	3.31%	1.10%

Table 5 Multiple Imputations in Missing Data

Variable	Complete	Incomplete	Imputed	Total
Income	5197	313	313	5510
Internet use	5296	214	214	5510
Traditional value	5336	174	174	5510
Importance of democracy	5230	280	280	5510

Method

OLS (ordinary least squares) model is applied to the analysis, depending on the nature of the dependent variable. Y is defined as the “justification of homosexuality”, and the model is specified as follows:

$$\begin{aligned} Y (\text{Justification of homosexuality}) = & \beta_0 + \beta_1 \text{Gender} + \beta_2 \text{Education} + \beta_3 \text{Age} \\ & + \beta_4 \text{Income} + \beta_5 \text{Marital} \\ & + \beta_6 \text{Employment} + \beta_7 \text{Religiosity} \\ & + \beta_8 \text{Religion} + \beta_9 \text{Internet} \\ & + \beta_{10} \text{Country} + \varepsilon^{15} \end{aligned}$$

In order to examine the effects of all independent variables, I estimate several models and gradually add more variables¹⁶.

Results

I apply regression models to the “justification of homosexuality” individually in three Chinese contexts; eight statistical models are operated to further understand the effects of the factors that potentially contribute to the social

¹⁵ Traditional value and importance of democracy are both attitudinal variables, that might be another indicators of the same construct of dependent variable. So, they are not included in the full model but ran separately.

¹⁶ Average RVI (relative increase) and largest FMI (fraction of missing information) are listed in the models. They are the indicators of whether multiple imputations are effective for the results or not. For average RVI, the closer this number is to zero, the less effect missing data have on the variance of estimate. For largest FMI, if the result of the number of imputations time the largest FMI is smaller than 100, then the level of reproducibility of MI analysis is adequate.

acceptance towards homosexuality. Model 1 is the full model with the insights of social predictors affecting social tolerance of homosexuality. Model 2 includes traditionalism and the importance of democracy, to examine if both attitudinal variables have effects on the estimates. Model 3, 4 and 5 test the interactions between country and sociodemographic variables, including education, income, and age. Model 6 examines the interaction term between religiosity and country, but religious affiliation is excluded in avoidance of collinearity. Model 7 and Model 8 examine interactions between country and attitudinal factors (traditionalism and the importance of democracy) respectively.

Table 6 OLS Models of Justification of Homosexuality in Three Chinese Societies

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	2.271*** (0.271)	1.980*** (0.337)	2.130*** (0.307)	2.407*** (0.287)	1.801*** (0.296)
Gender (ref: female)					
Male	-0.236** (0.070)	-0.251** (0.071)	-0.243*** (0.070)	-0.233** (0.070)	-0.219*** (0.070)
Education (ref: no education)					
Elementary & middle school	-0.037 (0.167)	-0.093 (0.173)	0.217 (0.230)	-0.011 (0.167)	0.047 (0.166)
High school	-0.064 (0.181)	-0.136 (0.187)	0.155 (0.252)	-0.024 (0.182)	0.141 (0.181)
University & above	0.717*** (0.191)	0.634** (0.197)	1.091*** (0.267)	0.735*** (0.191)	0.830*** (0.190)
Age	-0.018*** (0.003)	-0.019*** (0.004)	-0.019*** (0.003)	-0.018*** (0.003)	-0.008 (0.004)
Income	0.078*** (0.021)	0.073** (0.021)	0.071** (0.021)	0.043 (0.031)	0.069** (0.021)

Marital status (ref: married)					
Divorced, separated and widowed	-0.253	-0.235	-0.224	-0.244	-0.179
	(0.153)	(0.155)	(0.152)	(0.153)	(0.152)
Single	0.333**	0.297**	0.295**	0.318**	0.261*
	(0.105)	(0.105)	(0.104)	(0.105)	(0.105)
Employment (ref: employed)					
Retired	0.011	0.003	-0.086	0.015	-0.003
	(0.131)	(0.133)	(0.132)	(0.131)	(0.130)
Students	0.344*	0.280*	0.344*	0.346*	0.337*
	(0.141)	(0.141)	(0.141)	(0.141)	(0.140)
Unemployed	0.033	0.015	0.037	0.041	0.069
	(0.105)	(0.106)	(0.105)	(0.105)	(0.105)
Religiosity	-0.132**	-0.110***	-0.119**	-0.128**	-0.122**
	(0.042)	(0.042)	(0.042)	(0.042)	(0.042)
Religion (ref: no religion)					
East Asian religion	-0.035	0.013	-0.334	-0.034	-0.002
	(0.107)	(0.108)	(0.107)	(0.107)	(0.106)
Western religion	-0.522**	-0.503**	-0.470**	-0.530**	-0.508**

	(0.158)	(0.159)	(0.157)	(0.158)	(0.156)
Muslim	-0.298	-0.229	-0.366*	-0.313	-0.224
	(0.178)	(0.178)	(0.177)	(0.178)	(0.177)
Other religion	-0.315	-0.265	-0.245	-0.315	-0.223
	(0.183)	(0.184)	(0.182)	(0.183)	(0.182)
Internet use	.111***	0.100***	0.091***	0.108***	0.091***
	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)
Country (ref: China)					
Taiwan	2.209***	2.118***	1.589**	1.502***	4.193***
	(0.118)	(0.120)	(0.499)	(0.270)	(0.272)
Singapore	1.330***	1.364***	2.124***	1.360***	1.319***
	(0.113)	(0.025)	(0.343)	(0.267)	(0.244)
Traditional value		-0.130***			
		(0.028)			
Democracy		0.118***			
		(0.021)			
Education*Country (ref: China and no education)					
Taiwan*Elementary and middle school			0.040		

	(0.515)		
Singapore*Elementary and middle school	-0.601		
	(0.351)		
Taiwan*High school	0.561		
	(0.523)		
Singapore*High school	-0.658		
	(0.370)		
Taiwan*University and above	0.940***		
	(0.157)		
Singapore*University and above	-1.333***		
	(0.375)		
Income*Country (ref: China)			
Taiwan		0.151**	
		(0.052)	
Singapore		0.002	
		(0.047)	
Age*Country (ref: China)			
Taiwan			-0.046***

					(0.006)
Singapore					0.001
					(0.005)
Average RVI	0.0014	0.0012	0.0012	0.0039	0.0014
Largest FMI	0.0191	0.0145	0.0211	0.0464	0.0227
N	4,741	4,656	4,741	4,741	4,741

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Continue

	Model 6	Model 7	Model 8
Intercept	2.552***	2.303***	2.237***
	(0.276)	(0.324)	(0.408)
Gender (ref: female)			
Male	-0.216**	-0.235**	-0.249***
	(0.070)	(0.070)	(0.071)
Education (ref: no education)			
Elementary & middle school	-0.019	-0.024	-0.089
	(0.166)	(0.167)	(0.174)

High school	-0.070	-0.020	-0.139
	(0.180)	(0.181)	(0.188)
University & above	0.682***	0.733***	0.632**
	(0.189)	(0.191)	(0.197)
Age	-0.018***	-0.017***	-0.020***
	(0.003)	(0.003)	(0.004)
Income	0.075***	0.079***	0.071**
	(0.021)	(0.021)	(0.021)
Marital status (ref: married)			
Divorced, separated and widowed	-0.252	-0.235	-0.236
	(0.152)	(0.153)	(0.155)
Single	0.304**	0.275**	0.341**
	(0.104)	(0.105)	(0.105)
Employment (ref: employed)			
Retired	0.002	-0.002	0.001
	(0.130)	(0.131)	(0.133)
Students	0.356*	0.344*	0.306*

	(0.140)	(0.140)	(0.141)
Unemployed	0.008	0.029	0.023
	(0.105)	(0.105)	(0.106)
Religiosity	0.137	-0.099*	-0.129**
	(0.025)	(0.042)	(0.042)
Religion (ref: no religion)			
East Asian religion		0.016	-0.030
		(0.108)	(0.108)
Western religion		-0.527**	-0.523**
		(0.157)	(0.159)
Muslim		-0.234	-0.314
		(0.178)	(0.178)
Other religion		-0.267	-0.321**
		(0.183)	(0.184)
Internet use	0.109***	0.105***	0.101***
	(0.025)	(0.025)	(0.025)
Traditional value		-0.021	
		(0.043)	

Democracy			0.030
			(0.036)
Country (ref: China)			
Taiwan	1.198***	3.163***	0.740
	(0.129)	(0.297)	(0.509)
Singapore	0.978***	1.676***	0.529
	(0.124)	(0.272)	(0.408)
Religiosity*Country (ref: China)			
Taiwan	-0.513***		
	(0.109)		
Singapore	-0.364***		
	(0.093)		
Traditional value*Country			
Taiwan		-0.249***	
		(0.068)	
Singapore		-0.103	
		(0.063)	
Democracy*Country			

Taiwan			0.165**
			(0.057)
Singapore			0.109*
			(0.048)
Average RVI	0.0016	0.0024	0.0009
Largest FMI	0.0207	0.0211	0.0124
N	4,815	4,741	4,656

*Note. *p<.05, **p<.01, ***p<.001*

Table 7 Block Testing for Categorical Variables and Interaction Terms

	<i>F</i> value	<i>P</i> value
Education	F(3,4718.0) = 25.25	0.000
Employment	F(3,4718.9) = 1.98	0.114
Marital status	F(2,4718.9) = 6.72	0.001
Religion	F(4,4719.0) = 3.85	0.003
Education*country	F(6,4713.0) = 11.86	0.000
Income*country	F(2,3560.4) = 4.95	0.007
Age*country	F(2,4716.9) = 44.66	0.000
Religiosity*country	F(2,4795.0) = 11.48	0.000
Traditionalism*country	F(2,4592.9) = 6.58	0.001
Democracy*country	F(2,4630.8) = 4.65	0.009

The results from OLS models are presented in Table 6, indicating the determinants that have significant effects or not on attitudes toward homosexuality. Simultaneously, Table 7 presents the block testing results for categorical variables and interaction terms.

In general, sociodemographic variables, including age, gender, education, income, marital status, religion, religiosity, internet use, traditionalism, and the importance of democracy, are significantly associated with the social justification of homosexuality. The interactions terms also show some interesting findings of the societal difference in three Chinese societies.

Based on the results in Table 6 and Table 7, hypotheses proposed previously are discussed in further detail:

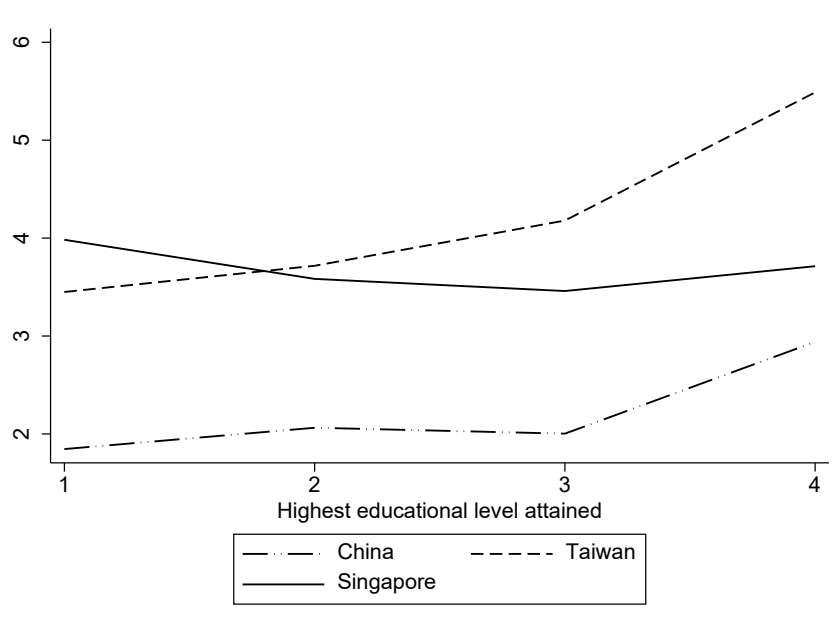
H1 (Education) and H2 (Interaction between country and education)

Overall, education as a group has a significant effect on attitudes toward homosexuality. More explicitly, respondents with university or above education are more tolerant of homosexuality than respondents with no formal education; while respondents with elementary, middle school, or high school education have no significant attitudinal difference compared to those who have no education.

This result has demonstrated that education affects social tolerance of homosexuality in Chinese societies in a similar way it does in Western countries. Both contexts have suggested that people with higher educational level are more tolerant of homosexuality.

Further, the effect of education does vary amongst these three Chinese societies (see Figure 2). Higher education (university or above) has a smaller effect on the tolerance of homosexuality in Singapore than in China.

Figure 2 The effect of education on tolerance of homosexuality in mainland China, Taiwan, and Singapore



However, it is not clear if there is a significant attitudinal difference among people with a different educational background in three societies, just by the result of the interaction term. Therefore, I have executed models for each society to examine the effects of different educational attainments (see Table 8).

According to Table 8, people with university or above education in China and Taiwan are more tolerant of homosexuality than those with no formal education. Also, the same population in China and Taiwan are more tolerant than those with elementary, middle school and high school education. On the other side,

respondents' tolerance of homosexuality in Singapore does not vary by their education.

Another contrast test in Table 8 shows that there are significant differences in tolerance in respondents with university and above education in three societies. University education has the strongest (positive) effect in Taiwan compared to China and Singapore; the effect of university education is also stronger in China than in Singapore. Moreover, block testing shows that there is no education effect in Singapore ($F = 1.85, P = 0.136$) but in China ($F = 17.46, P = 0.000$) and Taiwan ($F = 8.66, P = 0.000$).

Table 8 The coefficients, standard errors and contrast testing of educational attainments in three societies in separate models

	China	Taiwan	Singapore
Education (reference: no education)			
Elementary and middle school	0.368 (0.211)	-0.039 (0.521)	-0.2 (0.282)
High school	0.41 (0.236)	0.329 (0.530)	-0.155 (0.314)
University and above	1.461*** (0.261)	1.093* (0.548)	0.116 (0.319)
Contrast test in education (F and P values)			
University versus elementary and middle school	23.73***	12.49***	2.27
University versus high school	24.25***	7.02**	1.73
Contrast test in university education by			
country	F and P values		
University: China versus Taiwan	35.85***		

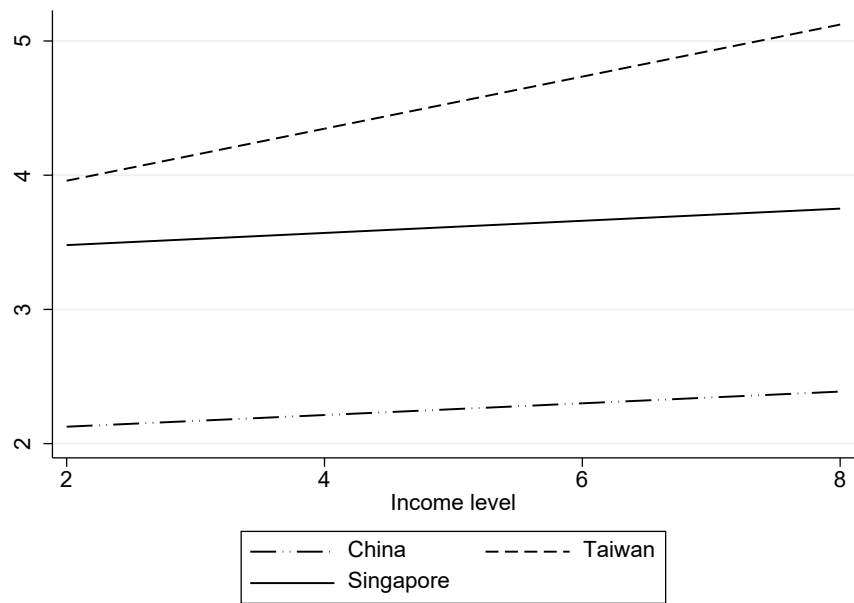
University: China versus Singapore	146.45***
University: Taiwan versus Singapore	129.05***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

H3 (Income) and H4 (Interaction between country and income)

The effect of income reaches statistical significance, where respondents with higher income are more tolerant of homosexuality. Additionally, the interaction between country and income points out that the effect of income is stronger in Taiwan than in China and Singapore (see Figure 3)¹⁷.

Figure 3 The effect of income on tolerance of homosexuality in mainland China, Taiwan, and Singapore



H5 (Age) and H6 (Interaction between country and age)

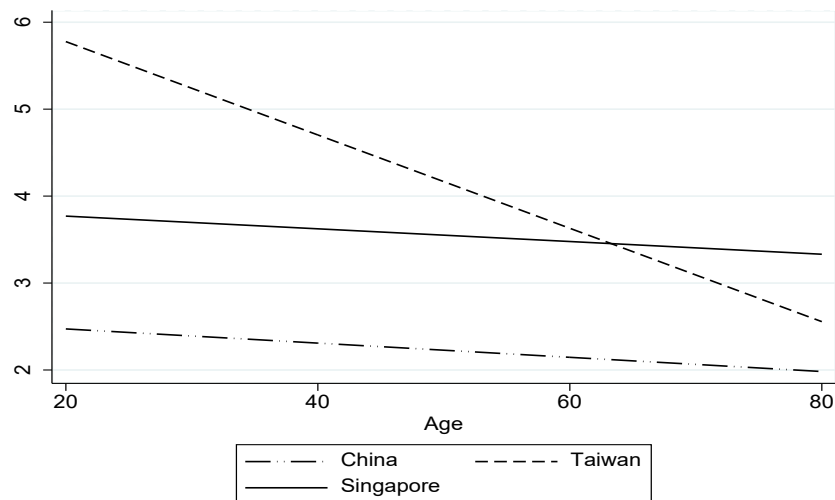
¹⁷ Contrast test shows that income has a greater positive effect in Taiwan than in Singapore and the difference is statistically significant (f value = 7.94 and p value = 0.004).

Age has a significantly negative effect on social tolerance, as expected. More specifically, older respondents are less tolerant of homosexuality than the younger population.

The interaction term between age and country indicates that age has a stronger negative effect in Taiwan than in China (see Figure 4). Contrast test between Taiwan and Singapore in the age effect on social tolerance also reveals such relationship—age in Taiwan has a greater negative effect than in Singapore (f value = 75.21; p -value = 0.00).

This could be interpreted that Taiwan has experienced more drastic social and attitudinal transformation towards the homosexual issue. This transformation could result in a bigger attitudinal difference between young people and elders in Taiwan than in China and Singapore.

Figure 4 The effect of age on tolerance of homosexuality in mainland China, Taiwan, and Singapore



H7 (Religiosity), H8 (Religious affiliation) and H9 (Interaction between

country and religiosity)

In all models, religiosity has a significantly negative effect on social tolerance of homosexuality. In other words, respondents who are more religious than others are less tolerant.

For religious affiliation, I recoded the previous fifteen categories to five, as I described in the previous section (see Table 3). According to Table 6, western religion is less tolerant of homosexuality than people with no religious belief while Muslims, people with western religious, East Asian religious and other religious beliefs have no attitudinal difference compared with people with no religious belief.

To examine if people with western religious beliefs are less tolerant than respondents with East Asian religious belief, Muslims and people with other religious beliefs, I did contrast testing between these religions. The testing shows that people with Western religious beliefs are significantly less tolerant than (a) East Asian religious, (b) other religious and (c) Islamic respondents ($F_a = 7.19$, $P_a = 0.001$; $F_b = 5.48$, $P_b = 0.004$; $F_c = 5.53$, $P_c = 0.004$).

The effect of religion in each society is unknown, as Table 7 only shows models in which three societies are all included. Therefore, Table 9 synthesizes the results of three separate OLS models, with each one presenting the effect of religious affiliation in Mainland China, Taiwan and Singapore, respectively, in a single table.

Block testing of religious affiliation is included as well. For individual comparison, religion as a block is only significant in Taiwan. Western religion, moreover, is significantly less tolerant than no religion only in Taiwan. Neither China nor Singapore has a significantly religious difference in tolerance of homosexuality.

Table 9 The coefficients, standard errors and block testing of religion in three societies in separate models

	China	Taiwan	Singapore
Religion (ref: no religion)			
East Asian religion	-0.151	-0.316	0.052
	0.192	0.202	0.177
Western religion	-0.211	-1.423***	-0.398
	0.369	0.367	0.222
Muslims	-0.077		-0.234
	0.667		0.223
Other religion	0.938	-0.040	-0.155
	0.916	0.676	0.226
Block testing for religion:			
F value	0.44	5.15***	1.99
P value	0.779	0.002	0.093

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

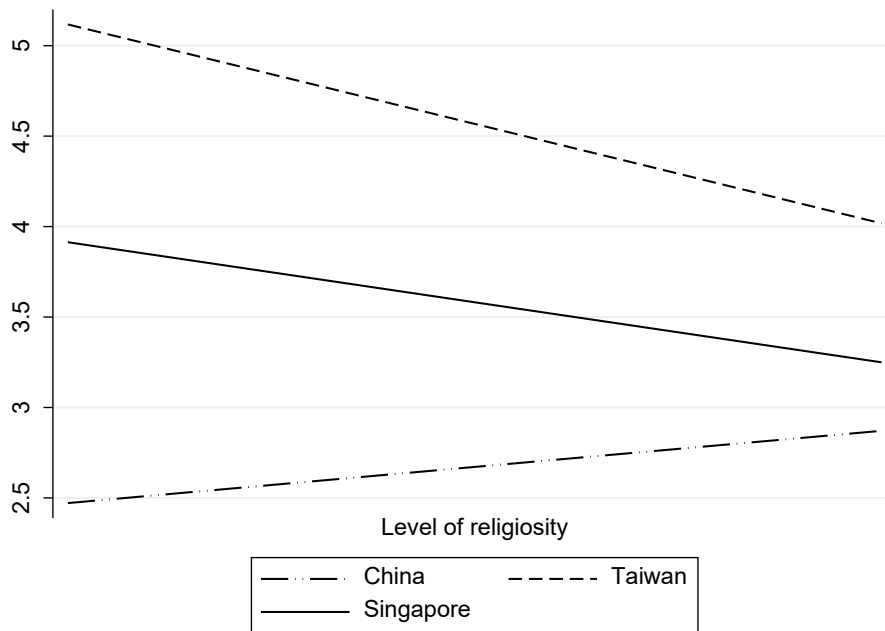
The interaction between country and religiosity in Model 6 shows that the effect of religiosity is stronger in Taiwan and Singapore than in China. Figure 5 estimates the fitted values at varying levels of religiosity in three societies.

Tolerance of homosexuality in Taiwan and Singapore start to fall after the level of religiosity increases, but tolerance in China goes up to an opposite way.

However, the assumption that religiosity has a positive effect on the tolerance of homosexuality in China is not valid without further testing. After running a separate model that only includes China, the result indicates that religiosity does not affect tolerance of homosexuality (Coef. = 0.144, Std. = 0.075 and $P = 0.053$).

Hence, I could only conclude that the negative effect of religiosity is significant on tolerance in Singapore and Taiwan but not in China.

Figure 5 The effect of religiosity on tolerance of homosexuality in mainland China, Taiwan, and Singapore



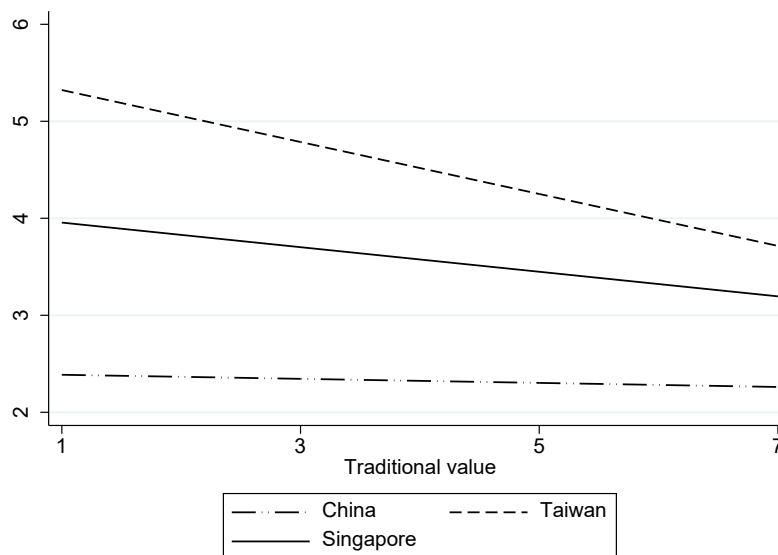
H10 (Traditionalism) and H11 (Interaction between country and traditional value)

In general, traditionalism has a negative effect on attitude toward homosexuality, meaning that respondents who consider themselves traditional are less tolerant. On the other hand, we could also reason that people who are

less tolerant of homosexuality are more traditional per se, especially traditionalism is an attitudinal variable. The correlation between tolerance of homosexuality and traditionalism, however, is -0.13, which is not so high to be a real concern.

Moreover, among these three Chinese societies, the interaction between traditionalism and country indicates that tradition has a stronger negative effect in Taiwan than in China (see Figure 6). Additionally, China, as the reference group, does not have a significant difference with Singapore in this respect. The contrast test also shows that traditional value has a more significant negative effect in Taiwan than in Singapore (f value = 5.80 and p -value = 0.003). The divergent attitude toward tradition more strongly influences the social acceptance of homosexuality in Taiwan than in China and Singapore.

Figure 6 The effect of traditionalism on tolerance of homosexuality in mainland China, Taiwan, and Singapore

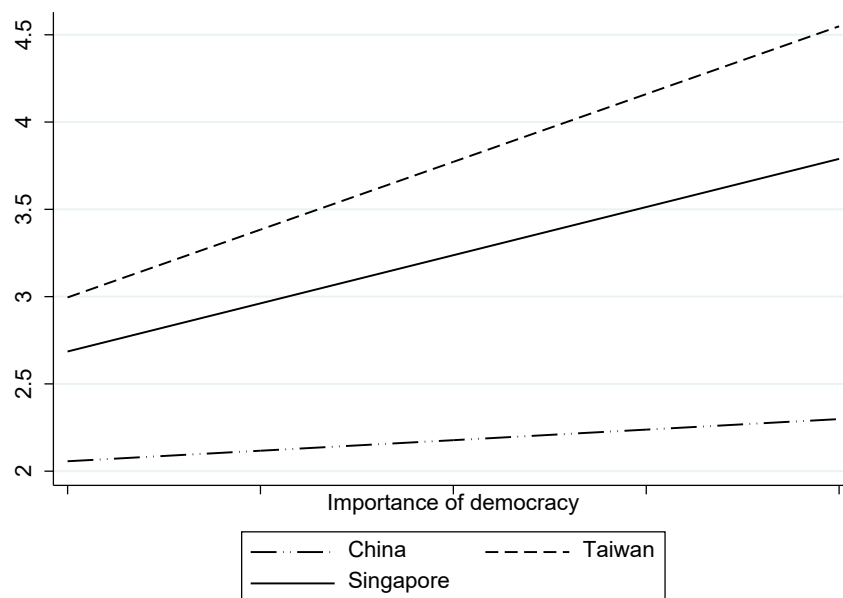


H12 (Democracy) and H13 (Interaction with country)

According to Table 6, the importance of democracy has a significant positive effect on the tolerance of homosexuality. However, as discussed in H12 and H13, the importance of democracy is also an attitudinal variable, where its impact on tolerance of homosexuality can be reversed. The correlation, though, between two variables is 0.09, which is not too problematic.

Also, the interaction between country and the importance of democracy (see Figure 7) indicates that people with a stronger belief of the importance of democracy in Taiwan and Singapore are more tolerant of homosexuality than in China. Besides, the contrast test does not show that there is a significant attitudinal difference between Singapore and Taiwan (f value = 1.23 and p -value = 0.267).

Figure 7 The effect of the importance of democracy on the tolerance of homosexuality in mainland China, Taiwan, and Singapore



In conclusion, all thirteen hypotheses have shown social differences in shaping public opinion toward homosexuality among three Chinese societies.

Discussion and Conclusion

This study contains two main conclusions. First, the effects of primary predictors, including income, education, age, and traditionalism, vary in the three Chinese societies, demonstrating differences in social progress in these societies. Second, the different effects of religious affiliation, religiosity and the importance of democracy reflect the difference in politics in three contexts in tolerance of homosexuality.

Education and education system

University and above education has the greatest positive effect in Taiwan on an individual's opinion towards homosexuality. In early 2011, the Ministry of Education (MOE) in Taiwan officially included education about homosexuality, different gender orientation and a discussion of nature and nurture in the country's sex-education syllabus. This syllabus is designed to help students understand different gender and sexual orientations; this early introduction to concepts regarding gender and sexual orientation is meant to promote gender equity.

In contrast to Taiwan, China has not included any homosexual content in its education system. In a report published in 2014, Alien Cheng (2014), as the director of Gay and Lesbian Campus Association in China (GLCAC), explains that 88.10% of textbooks in China that have homosexual content regard same-sex behaviour as a mental illness. Psychology and psychiatry textbooks in university continue to pathologize homosexuality as “abnormal” behaviour. The general narrative toward homosexuality in Mainland Chinese textbooks is mostly outdated, discriminatory and stigmatizing.

However, in the last two decades, universities in China have gradually increased discussions about homosexuality. Some prestigious Chinese universities are the pioneers of LGBTQ rights. Tsinghua University, Peking University, Fudan University, and Sun-Yat-Sen University, for example, have active LGBTQ student clubs and regular events (Hu and Wang 2013). Those universities also offer courses related to LGBTQ topics and sexual diversity.

In 2016, college student Bai Qiu sued the Ministry of Education in China for the discriminatory and homophobic contents in university textbooks and had fostered broad social repercussions – some LGBTQ professors and college students openly expressed their solidarity with Qiu (BBC 2016).

On the other side, the Singaporean government has detrimental and hostile policies against LGBTQ identifying people. In 2009, the Association of Women for Action and Research (AWARE) in Singapore promoted a series of courses on gender equity and diverse sexual orientation in some of the country’s schools.

However, the MOE in Singapore prohibited these courses due to their “tendency to encourage homosexual behaviour and premarital sex” (AWARE 2009).

As in a so-called “garden-city” state, Singaporean elites are highly dependent on their government’s decisions. In other words, compared with China, where society is much larger and more complicated, Singaporean individuals are less autonomous, which results in the central government playing a decisive role in many social domains. As an authoritarian country, Singapore’s government advocates traditional Confucian family values and sexual morality. Singapore’s fame for its successful national education reinforces the emphasis on family harmony, Confucian values and heterosexuality.

Age, traditionalism, and income: the indicators of social transformation in three societies

Cheng (2016) and her colleagues point out that different age cohorts have significantly different tolerance of homosexuality in Taiwan. Young Taiwanese are more tolerant than older generations. According to the interaction term, the effect of age is stronger in Taiwan than in China and Singapore. In other words, the attitudinal difference in tolerance of homosexuality in people with different age is greater in Taiwan than in China and Singapore.

Perhaps this is due to Taiwanese society’s more drastic social transformation when compared to Mainland Chinese and Singaporean societies. Since the 1990s, the Taiwanese government and society have recognized same-sex

behaviour and been working to destigmatize homosexuality. Therefore, younger respondents might be more exposed to such progress of destigmatization of LGBTQ and relevant contents from education, social and academic discussion, and social media.

In contrast, Mainland China and Singapore have made fewer social and political reforms and have not recognized homosexuality as being acceptable, which results in a smaller generational difference in tolerance of homosexuality.

The interaction terms of traditionalism and income with the country also illustrate the dramatic social transformation in Taiwanese society. The effect of traditionalism is stronger in Taiwan than in China and Singapore. In other words, there is a greater attitudinal difference in tolerance between people who are traditional and who are not in Taiwan than in the other two societies. Furthermore, the effect of income is also greater in Taiwan than in China and Singapore, which corresponds with the notion of the postmaterialist thesis that better financial security leads to higher tolerance of homosexuality.

All three determinants and their interaction terms imply both directly and indirectly that Taiwanese society has experienced a more drastic and fundamental social and political transformation vis-a-vis Chinese and Singaporean societies. As a result, one of the outcomes of the long-term and thorough social and political shift is a more tolerant public opinion toward homosexuality.

Predictors for sociopolitical environments: religious affiliation, religiosity and the importance of democracy

In terms of the number of LGBTQ movements, Taiwan is the most progressive of the three studied Chinese societies in pursuing equal rights for the LGBTQ community. Taiwan is also ranked as the most liberal East Asian society after nearly 15,000 people attended the Taiwan Pride Parade in 2007, making it the largest LGBTQ event in Asia yet (Richard et al. 2019). Unlike China and Singapore, Taiwan enjoys more freedom of speech which enables more social space and discussion for homosexual activism.

In 2003 and 2004, the Taiwanese government announced the Act of Gender Equality in Employment and Education to further ensure the rights for the LGBTQ population (Central Regulation Standard Act 2004). In contrast, China and Singapore have not taken actual actions towards protecting LGBTQ rights or steps to remove systemic barriers and discrimination against those LGBTQ people.

As of the year 2011, the UN has officially recognized equal rights for LGBTQ people. Thus, in a westernized and liberal society like Taiwan, the country's concern for civil rights is more likely to encompass LGBTQ rights as well.

In China and Singapore, where societies are more conservative and controlled by the government, the importance of democracy could conceivably have less of an influence on tolerance towards homosexuality.

Moreover, the interaction between country and religious affiliation demonstrates the different sociopolitical environments in these three Chinese societies. In Taiwan, Protestants and Catholics are the least liberal religious groups among these three societies and five religious affiliations.

One explanation for this finding could be that religious people in Taiwan have less political intervention from the Taiwanese government compared with religious people in China or Singapore.

Rigorous censorship and regulation have oppressed religious activity in China. Since 1949, religion has always been a sensitive topic for the Mainland Chinese government. The authority is afraid that the sprouting of religious organizations would threaten the ruling Communist regime; hence, the state has the supreme power over religion and doctrine. According to Mainland China's law, all religious leaders in the country have to acknowledge the absolute authority of the Chinese government. As a result, religious people cannot practice their beliefs based on what the authentic doctrine requires. Notably, the Chinese government has strictly censored "Western religion", in case that Western ideology 'corrupts' Mainland Chinese people.

While Singapore is famous for its social harmony among different religions, the country's government still restricts and regulates religions. Additionally, nationalistic and patriotic propaganda is widely disseminated to all Singaporean citizens, regardless of individual religious affiliation.

Conversely, religion in Taiwan is not intervened by its government, resulting in a more free atmosphere where religious people can follow the orthodox doctrine. Therefore, the more free practice and authenticity of Western religion in Taiwan may yield more conservative attitudes toward homosexuality as such sexual behaviour is suggested as ungodly, immoral, and unacceptable in the Bible.

In conclusion, results from statistical models have shown that socioeconomic, cultural, and sociopolitical factors certainly have effects on the social acceptance of homosexuality within the three Chinese societies. This study proves that particular demographic and social factors, such as gender, education, income, and marital status, which significantly influence Western countries' tolerance of homosexuality, also significantly influence the three Chinese societies.

This study further demonstrates the differing effects of education, age, income, religious affiliation, religiosity, traditionalism, and importance of democracy in Mainland China, Singapore, and Taiwan due to the three countries' differing sociopolitical environments. Future studies should pay more attention to the social mechanism behind public attitude toward homosexuality to fully understand the social circumstance that shapes more widespread public social acceptance towards homosexuality.

Chapter 4

The Social Tolerance of Homosexuality in China

While quantitative work on homosexuality in China is scarce and still needs more exploration, as mentioned in the previous section, a large amount of relevant work can still be found in Western academia.

Accordingly, there is a large amount of cross-cultural and cross-national research on social tolerance of homosexuality. Many studies have testified individual's educational attainment, gender, age, marital status, income, religion, and other demographic features that all of them have significant effects on attitudes toward homosexuality (e.g. Patterson 2000; Loftus 2001; Burdette *et al.* 2005; Detenber *et al.* 2007; Ohlander *et al.* 2005; Andreson and Fetner 2008; Sherkat *et al.* 2009; Adamczyk and Pitt 2009). Meanwhile, national/macro-level determinants such as GDP, urbanization, Geni coefficient, and post-materialist index are also found to have an impact on public opinion toward homosexuality (e.g. Inglehart 1987, 1990, 1997; Loftus 2001; Brewer 2003; Andreson and Fetner 2008).

In conclusion, by referring to the previous contextualization of homosexuality history in China in Chapter 1, the empirical results from Chapter 2 and Chapter 3, and many studies of attitudinal difference in homosexuality, this chapter aims to explore the unique features that affect the social tolerance of homosexuality in China, including taking into consideration Chinese sociopolitical, social-cultural

and socioeconomic traits. Both external and internal factors that might contribute to tolerance of homosexuality are examined in this chapter.

Economic Development

Economic development has a positive effect on public attitudes toward civil rights and relevant social agenda in general according to postmaterialist studies (e.g. Inglehart 1997; Andreson and Fetner 2008; Adamczyk and Pitt 2009; Štulhofer and Rimac 2009).

Inglehart's (1987, 1990, 1997) post-materialist theory and its successive research from Anderson and Fetner (2008) indicate that economic development and economic inequality have a significant impact on tolerance of homosexuality.

In most research cases, residents from a society with long-standing economic stability and prosperity and equal wealth distribution are likely to be cultivated liberal views toward social issues such as same-sex behaviour and marriage.

However, these studies have a commonly hidden assumption that the economic development that affects social tolerance is mostly taken place within the Western capitalist social and economic system. They fail to discriminate various economic systems that may have different effects on social tolerance.

For instance, the state-dominant economic system under an authoritarian political structure in China may have the opposite impact compared with Western democratic countries.

In particular, the Chinese economy is intricately intertwined with and intervened by its politics. More developed areas in China might receive more financial and political support from the Chinese Central Government; they might also have more state-owned industries in the composition of their local economy.

In other words, cities and provinces that have better economic performance in China may have more robust state-dominant political and economic forces and a higher number of government employees in the population.

As a result, people who locate in more developed areas might be more likely to follow the mainstream political ideology that government advocates, including “socialist” sexual morality (e.g. heterosexuality and monogamy). Despite this systemic difference between China and the West, we cannot merely predict that wealth has a negative or positive effect in China and Chinese province. Hence, the hypothesis here rests on a neutral assumption without indicating its direction:

H1: The effect of economic development in China is statistically related to the tolerance of homosexuality. (The predictor of economic development here is GDP per capita by province)

Urbanization

Conceptually, urbanization is a population shift from rural areas to cities. The social phenomenon of urbanization is generally related to social infrastructure, occupation, lifestyle, industrial structure and globalization (Satterthwaite *et al.*

2010). On the other side, the progress of urbanization can provide more social space and job opportunity for minority people such as LGBTQ people, sex workers, racial minorities and foreigners due to the considerable heterogeneity and cultural fusion of urban space.

Ruan (1991) and Kong (2016) both point out that big Chinese cities usually have more visible LGBTQ groups and communities, which might cultivate a more tolerant social environment for sex minorities. The second hypothesis is:

H2: The effect of urbanization in China is positive on the tolerance of homosexuality. (The predictor is Chinese urbanization rate by province)

Residential Areas and Geographic Regions

A city's size and the type of residential area, in general, are associated with an individual's social and economic status and how people perceive social issues (e.g. Bibby 2004; Andreson and Fetner 2008; Sherkat *et al.* 2011; Adamczyk and Hayes 2012). Commonly speaking, cities have more cultural diversity and provide more space for people with diverse social, political, cultural, and religious backgrounds. Therefore, urban residents from more developed cities are likely to be more tolerant of homosexuality than rural and small-town residents.

However, we do not know how tolerance of homosexuality varies in different residential areas. Few studies have differentiated the type of residential area. Countries like China and the former Soviet Union have a binary rural-urban

household registration system that divides citizens geographically, socially and politically into two categories.

In such a binary system, not only can the government regulate and monitor the population and social mobility more directly, but it can also determine who has the privilege to establish their lives in more developed areas.

Also, there are different residential areas in urban China that represent the different sociopolitical and socioeconomic status of urban residents. They are classified as CBD (central business district; e.g. Chaoyang district in Beijing), old residential areas (*lao cheng qu*), suburb (*cheng xiang jie he bu*, i.e., fringe areas between urban and rural space) and the peripheral areas. People who reside in the CBD and downtown areas usually possess “urban” household status, while those who live in the fringe of the city have “rural” household status.

On the other side, tolerance of homosexuality may vary by geographic region as well (e.g. Bibby 2004; Grabb and Curtis 2005; Sherkat *et al.* 2011). Coastal areas such as the East and West coast in the US and Canada, for instance, are more tolerant of homosexuality due to the frequent information exchange, large immigrant and diverse population, and economic trade with other countries and their economic performance (Bibby 2004; Grabb and Curtis 2005).

In China, Southern and Eastern China such as Shanghai, Canton, and Fujian are the earliest harbours opened up to foreign trade in the 1980s and famous for their international and diverse atmosphere. Residents from that part of China might be more likely to be tolerant of homosexuality.

I explore the attitudinal difference in residential areas and geographic regions:

H3: People who live in different residential areas might have different tolerance for homosexuality. In urban areas, people are more likely to be tolerant;

H4: Residents who are from east and south China are more likely to be tolerant of homosexuality.

Age Difference

It is broadly believed that long-standing social transformation significantly shows some age and generational shift in social tolerance —younger generations are more tolerant of social issues that were once not tolerated (*e.g.* Inglehart 1977).

Increased social exposure of LGBTQ content in recent thirty years has cultivated a more tolerant social environment for young generations. Evidence from studies has shown that younger generations hold more liberal belief toward homosexuality (*e.g.* Bibby 1983; Yang 1997; Andreson and Fetner 2008b; Cheng *et al.* 2016).

In China, people who were born after the Reforming and Opening-up policy in 1979 are believed to be more liberal since they have more access to the Western world and the internet during their upbringing (Li 2016). Homosexuality might be a strange and unfamiliar concept for the 1950s and 1960s generations but a fairly common idea for the 1980s, 1990s and 2000s generations in China (Li 2016).

Cheng and her colleagues' (2016) work about homosexuality in Taiwan shows the significant attitudinal difference among different generations. To a certain extent, China and Taiwan have a similar westernized path—both of them started reforming and adopting the Western economic system in the 1980s. Therefore, the hypothesis here is:

H5: Younger people are more likely to be tolerant of homosexuality.

Globalization: Internet use and English Proficiency

Globalization plays an irreplaceable role in transferring ideas from the West to the East, which enables Western social agendas toward civil rights more visible and available in non-Western countries. The popularization of the internet and the universalization of English education in China might provide more accessibility for people to obtain and understand the global culture. Although Western cultural and political hegemony over the world has received severe criticism, it does help raise the public awareness of civil rights in countries like China. Here, two hypotheses about internet use and English proficiency are tentatively provided:

H6: People who use the internet more often are more likely to be tolerant of homosexuality (this hypothesis is by no means self-evident);

H7: People who have higher English proficiency are more likely to be tolerant of homosexuality.

Perception of the Chinese Government and Democracy

Political orientation plays an essential role in shaping individual attitudes toward homosexuality according to many studies conducted in the United States, Canada and other countries (e.g. Fetner 2001, 2008; Hill *et al.* 2004; Sherkat *et al.* 2011).

Conservative political orientations and campaigns typically have negative views on tolerance of homosexuality, given their harsh criticism against same-sex behaviour; while political liberalism leads to a higher level of tolerance (Sherkat *et al.* 2011).

On the other hand, the relevant research about how Chinese politics and political orientation influences people's attitudes toward LGBTQ issue is lacking, mainly due to political sensitivity and censorship in China.

The Chinese government has a pertinent indoctrination of state-dominant ideology over people, where family harmony, heterosexuality, nationalism, and socialist morality are much advocated. Since civil rights and democracy are typically associated together, the Chinese government regards them as Western liberal ideology and is sensitive towards the infiltration of any Western values (Zhao 2000).

Therefore, people who are Chinese government advocates or believers may hold less tolerant view toward homosexuality. The hypotheses here are exploratory within the Chinese political context:

H8: People who support the government and its ideology are more likely to be intolerant of homosexuality;

H9: People who do not believe in democracy are more likely to be intolerant of homosexuality.

The Effects of Income, Education, and Age in Residential Areas

As previously discussed, Chinese economic development varies in different residential areas, which has created a binary urban-rural disparity economically and politically. Societally, different residential areas have divergent conditions in social infrastructure, quality of education, and type of common occupation in China (Wang 2008). These differences, as a result, lead to a great socioeconomic heterogeneity among residents—people who live in urban areas have higher social and economic status than in rural areas (Wu 2013).

For instance, residents in shantytowns or slums are most likely working class who do not receive the benefit provided by local cities, such as medical care, education welfare, and income assistance. The majority of those residents are migrant workers from rural areas and have low social and political capital (Wu 2013). On the other hand, residents in urban areas, especially in downtown areas, have much higher sociopolitical and economic capital and social status.

Because of the developmental disparity and unequal distribution of public resource between urban and rural, urban residents might be more likely to be influenced by postmaterialist values rather than survival values than rural people.

H10: The effect of income is stronger on tolerance in urban areas, compared to rural and other areas;

H11: The effect of education is stronger on tolerance in urban areas, compared to rural and other areas.

Moreover, due to the socioeconomic advantage in urban areas, younger people might be more able to access information regarding LGBTQ. In some Chinese cities, LGBTQ communities are active and operated by younger populations (Li 2015). Hence, the generational shift is expected to be advancing at a greater rate in urban areas, compared to rural and other areas.

H12: The effect of age is stronger on tolerance in urban areas, compared to rural and other areas.

The Effects of Income, Education, and Age in Geographical Regions

As discussed previously, social and economic inequality among provinces is another essential and well-known contributor to general inequality in China. More specifically, socioeconomic inequality by geography mainly embodies between inland and coastal provinces. In the past thirty years since Reforming and

Opening-up policy, the economic growth in coastal provinces is tripled than in inland provinces, which results in significant inequalities in wealth, education, health care, social infrastructure, social openness, and internationalization (Jian *et al.* 1996; Kanbur and Zhang 1999; Goh *et al.* 2009).

Hence, coastal provinces (East and South China) might be more influenced by postmaterialist values as they have better economic development and a higher level of social openness and internationalization.

H13: The effect of income on tolerance of homosexuality is stronger in East and South China (coastal regions) than inland regions;

H14: The effect of education is stronger on the tolerance of homosexuality in East and South China (coastal regions) than inland regions.

Besides, younger generations in South and East China might be more likely to be tolerant of homosexuality due to the better socioeconomic condition, more open social environment and more frequent cultural exchange (internationalization).

H15: Younger people are more likely to be tolerant of homosexuality in South and East China (coastal regions), compared to inland regions.

Data and Methods

Individual-level data collected in 2013 from the Chinese General Social Survey (CGSS) is combined with provincial-level data acquired from multiple official sources from the National Bureau of Statistics (NBS) in this chapter. The CGSS is an annual national survey conducted by NBS, aiming to study social and political values in China.

The CGSS 2013 has collected data from 28 Chinese provinces, with a sample size of 11, 438 respondents. The provincial-level data, including GDP per capita and urbanization, is extracted from the *2013 China Statistical Yearbook* compiled by NBS. Considering the features of the data, I use multilevel models to conduct the analysis. Descriptive statistics of all variables are presented as well (see Table 10).

Variables and Measurements

Dependent Variable

In this study, the dependent variable is a single item in the CGSS 2013 questionnaire, measuring attitudes toward homosexuality. The question is measured on a 5-point scale that ranges from “always wrong” (coded 1) to “always right” (coded 5). The question of attitude towards homosexuality in the questionnaire is as follows:

What do you think about sexual intercourse between persons of the same sex?

	Always wrong	Mostly wrong	Hard to say wrong or right	Sometimes right	Always right
	1	2	3	4	5
Frequency of each value	78.53% ¹⁸	6.35%	12.79%	1.74%	0.59%

Individual-level Variables

Individual-level variables consist of two parts. One is explanatory variables that include residential area, internet use, English proficiency, attitude toward the government, and attitude toward democracy.

The measurement of the *residential area* in the original data has five categories: (1) downtown areas in cities, (2) peripheral areas in cities, (3) suburban areas in cities, (4) towns, and (5) countryside. According to the nature of Chinese residential area, I merged suburban areas into peripheral areas in cities, as both areas are the city fringe, and small-town into countryside area

¹⁸ As we can see from the distribution of answers in the dependent variable, a large proportion of respondents (78%) are at the floor. It is floor effects, which occur at the bottom end of the scale range. When floor effects happen, information regarding true differences between respondents scoring at the lowest possible value is lost (Mcbee 2010). In other words, these effects result in the loss of partial information. Although floor effects are not fatal to the modeling here, they can affect the interpretations of the results. However, due to the unavailability of a better-measured question in the survey, it is impossible to change the dependent variable.

since small town in China is generally considered as a part of *Xiangzheng* (countryside-town area).

Attitude toward the Chinese government is derived from the question — “if someone criticizes the Chinese government in public, do you agree that the government should not interfere?” — and its measurement is on a five-point scale: (1) “absolutely disagree”, (2) “mostly disagree”, (3) “indifference”, (4) “mostly agree”, and (5) “absolutely agree”. It is re-coded into three categories: disagree, neutral, and agree. The attitude towards democracy is derived from the question – “do you agree that democracy is when the government takes all responsibilities and decides for people” – and its measure is divided into two categories: (1) “disagree or indifferent” and (2) “agree”.

Internet use is a question based on how often respondents use the internet. The measure is: (1) “never”, (2) “seldom”, (3) “sometimes”, (4) “fairly often”, and (5) “quite frequently”¹⁹. English proficiency is measured on a 9-point scale of respondents’ fluency in English writing, speaking, and listening. It ranges from “do not understand English” (coded 1) to “fluent in English” (coded 9).

Besides, the empirical models also include demographic variables, including gender²⁰, age, income²¹, education²², ethnicity²³, Communist party membership²⁴, marital status²⁵, religion²⁶, and religiosity²⁷.

¹⁹ Internet use is treated as a conceptually continuous variable here. A continuous variable with only five categories can be problematic, but internet use is not nominal either. This is a limitation of the survey.

²⁰ Gender is coded as a dummy variable where the reference group is female (coded 0).

²¹ Income here has ten different levels which a higher level represents a higher number of annual income .

²² Education is coded as a continuous variable by levels of education respondents received.

Provincial-level Variables

Three provincial-level variables are economic development (measured in GDP per capita), urbanization (measured in urbanization rate) and region. GDP per capita is to measure the provincial level of economic development in China. The values are in U.S. dollars in 2013. The urbanization is measured by the percentage of the urbanization rate by province. Both variables are extracted from NBS's statistical yearbook in 2013²⁸. The region is a binary variable that the reference group is inland regions. According to Chinese official definition of geographic area, East and South China represent coastal regions while the rest of regions are inland (NBS 2013).

²³ Most of the respondents are Han Chinese, only 8.47% of respondents are ethnic minorities. The ethnicity variable here is a dummy variable where Han Chinese is the reference group (coded 0).

²⁴ Party membership is a dummy variable measuring if the respondent is Communist party member (coded as 0) or not (coded as 1).

²⁵ The marital status here is divided into three categories: (1) never married, (2) married or cohabitation, and (3) divorced, separated or widowed.

²⁶ Religion is coded into four categories: (0) no religion, (1) Chinese religions (Buddhism, Taoism, and popular religion), (2) Islam, and (3) Western religions (Christianity, Catholics, and Orthodox).

²⁷ Religiosity is a continuous variable based on the question of "how often do you attend religious activities" and ranges from 1 "never" to 7 "several times a week".

²⁸ The resources are stemmed from <http://www.stats.gov.cn/tjsj/ndsj/2013/indexeh.htm>

Table 10 Descriptive statistics of variables included in the analysis (Province N= 28; Individual N= 11,438)

	Observations	Mean	SD	Minimum	Maximum
<i>Individual-level variables</i>					
Approval of homosexuality	11,438	1.0	0.82	1	5
Gender (male)	5,756	0.50	0.50	0	1
Age	11,437	52.60	16.39	21	101
Ethnicity (non-Han Chinese)	11,436	0.08	0.28	0	1
Religion					
No religion	10,159	0.89	0.31	0	1
Chinese religion	796	0.07	0.25	0	1
Muslim	240	0.02	0.14	0	1
Western religion	236	0.02	0.14	0	1
Religiosity	11,376	1.48	1.41	1	9

Education	11,435	4.90	3.06	1	14
Income	11,438	3.04	2.54	1	10
Communist Party membership (non-party member)	10,211	0.90	0.30	0	1
Marital status					
Never married	1,165	0.10	0.30	0	1
Married or cohabitation	9,028	0.79	0.41	0	1
Divorced, separated, or widowed	1,222	0.11	0.31	0	1
Residential area					
Downtown	4,213	0.37	0.48	0	1
Peripheral-suburban	2,172	0.19	0.39	0	1
Countryside and small towns	5,053	0.44	0.50	0	1
English proficiency	11,426	1.90	1.56	1	9
Internet use	11,415	2.20	1.55	1	5

Criticism toward government

Disagree	4,919	0.43	0.50	0	1
Neutral	3,012	0.27	0.44	0	1
Agree	3,383	0.30	0.46	0	1
Democracy (agree)	9,056	0.79	0.41	0	1
<i>Country-level variables</i>					
GDP per capita (<i>log.</i>)	11,438	8.99	0.41	8.37	9.75
Urbanization	11,438	0.57	0.14	0.38	0.88
Region-partition					
Inland regions	7,300	0.64	0.48	0	1
Coastal regions	4,138	0.36	0.48	0	1

Missing Data

Table 11 displays the missing rate by variable in the data. Almost all the variables do not have substantial missing data. Income and approval of homosexuality have 3.44% and 2.05% missing rate respectively, which is not a serious concern. Therefore, listwise deletion is applied to deal with a small number of missing data in variables.

Table 11 The Missing Rate by Variable

	Missing rate
Approval of homosexuality	2.05%
Gender	0.00%
Age	0.01%
Ethnicity	0.10%
Religion	0.06%
Religiosity	0.54%
Education	0.03%
Income	3.44%
Party membership	0.58%
Marital status	0.20%
Residential area	0.00%
English proficiency	0.10%
Internet use	0.20%
Criticism toward government	1.08%
Democracy	0.08%
GDP per capita	0.00%
Urbanization	0.00%

Statistical Models

The primary statistical analysis in this research employs a series of multilevel linear models²⁹ to predict the social tolerance of homosexuality in China, given the nature of the dependent variable and both provincial-level and individual-level independent variables³⁰.

Both dependent and independent variables are centred in the models. REML is used in the multilevel models as the estimator.

The full model is specified as follows (γ_{00} is the intercept, which is allowed to vary across provinces. u_{0j} estimates this random effect. ε_{ij} is the error term.):

$$\begin{aligned}
 Y \text{ (Justification of homosexuality)} &= \gamma_{00} + \gamma_{01} \text{ GDP per capita} + \gamma_{02} \text{ Urbanization} \\
 &+ \gamma_{03} \text{ Region} + \beta_{1j} \text{Age}_{1j} + \beta_{2j} \text{Education}_{2j} \\
 &+ \beta_{3j} \text{Income}_{3j} + \beta_{4j} \text{Gender}_{4j} + \beta_{5j} \text{Ethnicity}_{5j}
 \end{aligned}$$

²⁹ The units of the provincial-level data are 28, not ideal for multilevel modeling. Generally, a sample size of 30 or above in level 2 data is better for this type of statistical modeling. Hence, the results may be affected by a small level 2 sample size. This is one limitation of this research.

³⁰ The justification of homosexuality is a conceptually continuous but roughly categorized variable with only five discrete variable. The mean on this variable is 1.40, which is highly skewed. Given the nature of the dependent variable, order logit models should be employed. However, it is quite complicated to estimate multilevel order logit models here, especially for an MA thesis. I have to make a compromise and continue to employ liner models. This is a limitation of the research.

$$\begin{aligned}
& + \beta_{6j}\text{Religion}_{6j} + \beta_{7j}\text{Religiosity}_{7j} \\
& + \beta_{8j}\text{Party membership}_{8j} + \beta_{9j}\text{Marital status}_{9j} \\
& + \beta_{10j}\text{Residential area}_{10j} + \beta_{11j}\text{Internet use}_{11j} \\
& + \beta_{12j}\text{English proficiency}_{12j} + u_{0j} + \varepsilon_{ij}
\end{aligned}$$

All models have included the provincial-level and individual-level variables and a random intercept that accounts for overall mean differences in attitudes across two-level variables. The findings from 11 models are presented in the primary statistical analysis(see Table 12 and Table 13).

All the models are reported with the indicators of the goodness of model fit. They are the Bayesian information criterion (BIC) and the Akaike information criterion (AIC). The smaller values of the information criterion denote a better model fit according to the definitions of BIC and AIC.

The models have three types: null model, regular models, and cross-level interactions models. Specifically, in the null model, the p-value is less than 0.05. Thus, the null hypothesis is rejected, which means there is a difference in attitude toward homosexuality in the sample.

Model 1 and Model 2 only examine the effects of GDP per capita and the urbanization rate, respectively. Model 3 is the base model that only contains

provincial-level variables. The model estimates how economic development (GDP), urbanization and region are related to tolerance of homosexuality. Model 4 is the full model, including provincial-level estimators and major independent variables. Model 5 is the exploratory model built on Model 4 and has included two attitudinal variables (attitudes toward government and democracy).

Model 6 to Model 8 include the cross-level interactions between the region and three estimators that are income, age and education. Model 9 to Model 11 examine the interactions between residential area and income, education and age.

Results

Table 12 presents the results from the null model and Model 2 to Model 5. It shows an unusual pattern of the effect of economic development. The post-materialist thesis suggests that economic development, in general, has a positive effect on social liberalism; however, the result in Table 12 illustrates that economic development has either no effect (in Model 1) or even a significantly negative effect (in the later models).

More specifically speaking, in Model 1 and 2, economic development and urbanization rate have no effect on the tolerance of homosexuality. The results from Model 3 to Model 11 indicate that after adding region and other variables, respondents from provinces with higher levels of economic development are less

tolerant of homosexuality, and urbanization has a positive effect. This result will be discussed and theorized in detail in the discussion part.³¹

Besides, the empirical analysis indicates that respondents who live in peripheral and suburban areas are more tolerant of homosexuality than people in other areas, including downtown urban areas and countryside and small-town areas.

To further examine the attitudinal difference among different residential areas, *wald test* is applied to do a contrast test between peripheral-suburban areas and other areas. The residential area as a block is statistically significant (see Table 14) as well as the attitudinal difference between peripheral and suburban areas and other countryside areas ($\chi^2 = 31.10$ and $p = 0$).

Geographically, people residing in coastal regions are found to be more tolerant. It proves the previous conjecture about China's regional difference.

Moreover, variables such as attitudes toward democracy and criticism against the government, internet use, and English proficiency have significant effects on the social tolerance of homosexuality. The effects of demographic variables, including age, education, ethnicity, religion, religiosity and marital status, are also significant according to Table 12. On the other side, the effects of income, gender, and political membership are insignificant.

³¹ Notably, the correlation between urbanization and GDP per capita is 0.91, which is very high. The variance inflation factors for urbanization and GDP per capita are 6.4328, the Farrar-Glauber Multicollinearity test chi-square is 47.4660, $df=1$ ($p<.0001$, signifying collinearity), and the individual variable F-tests for multicollinearity yield values in excess of 140 ($df1=26$, $df2=2$, $p<.007$). Obviously, the effects of urbanization and GDP per capita have some multicollinearity, which may influence the stability and accuracy of the results.

Table 13 provides the results of cross-level and individual-level interactions. Model 6, 7 and 8 examine the interactions between region and income, education and age. Model 6 shows that there is no regional difference in the effect of income on social tolerance of homosexuality. Model 7 and 8 suggest that the effects of education and age are stronger in coastal regions than inland provinces.

Model 9, 10 and 11 examine the interactions between residential area and income, education and age. Explicitly speaking, Model 9 and 10 show that the effects of income and education are stronger in peripheral-suburban areas, compared to downtown areas. Model 10 also indicates that the effect of education is weaker in countryside areas than in downtown areas.

Model 11 illustrates that the effect of age is stronger in the countryside and small-town areas than in downtown areas. The contrast test between countryside and small-town areas and peripheral-suburban areas shows that there is a difference between two geographical regions ($\chi^2 = 14.58$ and $p = 0.001$).

Table 12 Estimates for Multilevel Linear Models Predicting Tolerance toward Homosexuality in China

Variable	Null model	Model 1	Model 2	Model 3	Model 4	Model 5
<i>Province-level variables</i>						
GDP per capita (<i>log</i>)		0.033 (0.911)		-0.483* (0.187)	-0.428* (0.171)	-0.432* (0.172)
Urbanization			0.304 (0.279)	1.508** (0.574)	0.937* (0.528)	0.963* (0.531)
Region (<i>ref.</i> inland regions)						
Coastal regions				0.223*** (0.064)	0.205*** (0.059)	0.189** (0.059)
<i>Individual-level variables</i>						
Age					-0.003*** (0.001)	-0.003*** (0.001)
Education					0.012**	0.013**

	(0.004)	(0.004)
Income	0.004	0.005
	(0.004)	(0.004)
Gender (<i>ref: female</i>)		
Male	0.009	0.015
	(0.016)	(0.017)
Ethnicity (<i>ref: Han Chinese</i>)		
Non-Han Chinese	-0.089*	-0.059
	(0.035)	(0.038)
Religiosity	0.020*	0.017*
	(0.008)	(0.008)
Religion (<i>ref: no religion</i>)		
Chinese religion	-0.005	-0.022

	(0.035)	(0.037)
Muslim	-0.168*	-0.158*
	(0.074)	(0.079)
Western religion	-0.065	-0.041
	(0.064)	(0.068)
Communist party membership (<i>ref.</i> party member)		
Non-party member	0.030	0.027
	(0.026)	(0.027)
Marital status (<i>ref.</i> single)		
Married or cohabitation	-0.232***	-0.229***
	(0.029)	(0.031)
Divorced, separated or widowed	-0.160***	-0.165***

		(0.040)	(0.043)
Residential area (<i>ref.</i> : downtown)			
Peripheral and suburban		0.107***	0.121***
		(0.023)	(0.024)
Countryside and small towns		-0.010	-0.002
		(0.021)	(0.022)
Internet use		0.024***	0.026***
		(0.007)	(0.007)
English proficiency		0.047***	0.448***
		(0.007)	(0.007)
Democracy (<i>ref.</i> : disagree or indifferent)			
Agree			0.006
			(0.019)

Criticism toward government (*ref.* disagree)

Neutral						0.060**
						(0.020)
Agree						0.078***
						(0.019)
<i>Random effects</i>						
Intercept	1.380***	1.381***	1.383***	1.309***	1.341***	1.279***
	(0.036)	(0.036)	(0.036)	(0.036)	(0.057)	(0.062)
AIC	26911.36	26916.19	26912.89	26908.76	25873.32	22464.85
BIC	26933.33	26945.49	26942.19	26952.71	26034.07	22644.06

Notes: (1) numbers in parentheses are standard errors; (2) from 2-tailed tests, * P<.05; ** P<.01; *** P<.001.

Table 13 Estimates for Multilevel Linear Models Predicting Tolerance toward Homosexuality in China: Interactions

Variable	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
<i>Province-level variables</i>						
GDP per capita (<i>log</i>)	-0.425*	-0.421*	-0.434*	-0.425*	-0.430*	-0.429*
	(0.170)	(0.170)	(0.169)	(0.172)	(0.172)	(0.171)
Urbanization	0.927*	0.922*	0.958*	0.920*	0.933*	0.970*
	(0.524)	(0.521)	(0.520)	(0.529)	(0.529)	(0.527)
Region (<i>ref.</i> inland regions)						
Coastal regions	0.204***	0.203***	0.205***	0.204**	0.207***	0.207***
	(0.058)	(0.058)	(0.058)	(0.059)	(0.059)	(0.058)
<i>Individual-level variables</i>						
Age	-0.004***	-0.004***	-0.002**	-0.004***	-0.004***	-0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

Education	0.012**	0.003	0.012**	0.012**	0.012*	0.012**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)
Income	-0.001	0.003	0.004	0.004	0.004	0.005
	(0.005)	(0.004)	(0.004)	(0.005)	(0.004)	(0.004)
Gender (<i>ref.</i> female)						
Male	0.009	0.008	0.009	0.009	0.011	0.006
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
Ethnicity (<i>ref.</i> Han Chinese)						
Non-Han Chinese	-0.088*	-0.084*	-0.087*	-0.092**	-0.090*	-0.089*
	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)
Religiosity	0.020*	0.020*	0.020**	0.020*	0.020*	0.021**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Religion						

Chinese religion	-0.004	-0.001	-0.001	-0.003	-0.002	-0.002
	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)
Muslim	-0.168*	-0.175*	-0.169*	-0.164*	-0.165*	-0.171*
	(0.074)	(0.074)	(0.074)	(0.074)	(0.074)	(0.074)
Western religion	-0.066	-0.069	-0.066	-0.065	-0.063	-0.069
	(0.064)	(0.064)	(0.064)	(0.064)	(0.064)	(0.064)
Communist party membership (<i>ref.</i> party member)						
Non-party member	0.029	0.028	0.029	0.030	0.031	0.023
	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)
Marital status (<i>ref.</i> single)						
Married or cohabitation	-0.232***	-0.234***	-0.233***	-0.100***	-0.233***	-0.226***
	(0.029)	(0.029)	(0.029)	(0.023)	(0.029)	(0.029)
Divorced, separated or widowed	0.160***	-0.162***	-0.161***	-0.241***	-0.161***	-0.155***

	(0.040)	(0.040)	(0.040)	(0.022)	(0.040)	(0.040)
Residential area (<i>ref:</i> downtown)						
Peripheral and suburban	0.106***	0.107***	0.107***	0.100***	0.101***	0.105***
	(0.023)	(0.023)	(0.023)	(0.023)	(0.024)	(0.023)
Countryside and small towns	-0.011	-0.012	-0.010	-0.024	-0.032	-0.014
	(0.021)	(0.021)	(0.021)	(0.022)	(0.022)	(0.021)
Internet use	0.024***	0.024***	0.028***	0.023**	0.023**	0.021**
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
English proficiency	0.047***	0.045***	0.045***	0.047***	0.046***	0.044***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Region*income						
Coastal regions	0.008					
	(0.006)					

Region*education

Coastal regions

0.022***

(0.005)

Region*age

Coastal regions

-0.004*

(0.001)

Residential area*income

Peripheral and suburban

0.017*

(0.008)

Countryside and small towns

-0.010

(0.008)

Residential area*education

Peripheral and suburban

0.015*

					(0.007)	
					-0.014*	
					(0.007)	
Residential area*age						
Peripheral and suburban						-0.001
						(0.001)
Countryside and small towns						0.003**
						(0.001)
<i>Random effects</i>						
Intercept	1.340***	1.345***	1.345***	1.347***	1.345***	1.352***
	(0.057)	(0.057)	(0.057)	(0.057)	(0.057)	(0.057)
AIC	25882.15	25866.83	25869.72	25866.83	25880.82	25886.30
BIC	26050.21	26034.90	26037.78	26034.90	26056.19	26061.67

Notes: (1) numbers in parentheses are standard errors; (2) from 2-tailed tests, * P<.05; ** P<.01; *** P<.001.

Table 14 Block Testing for Categorical Variables and Interaction Terms

	χ^2	P value
Religion	5.73	0.125
Marital status	73.13	0.000
Residential area	31.1	0.000
Criticism toward government	32.18	0.000
Region*income	1.43	0.232
Region*education	17.15	0.000
Region*age	17.7	0.000
Residential area*income	9.37	0.009
Residential area*education	12.89	0.002
Residential area*age	14.58	0.001

Discussion

Most of the hypotheses are validated from the empirical research, but the specific effects of key predictors vary in actual results, compared to what hypotheses predict. Some hypotheses fail to scrutinize the effects of categorical variables. The verification, contradiction and falsification of the hypotheses in empirical findings will be discussed in the following segment.

H1 (economic development): The post-materialist thesis and its studies indicate that affluence has a positive effect on the social tolerance of homosexuality. However, the evidence from mainland Chinese society comes up

with a surprisingly different conclusion – the effect of economic development is either null or negative on tolerance of homosexuality.

Since Hypothesis 1 only predicts that there is a statistical relationship between the social tolerance of homosexuality and economic development, the empirical result does not fully support the prediction.

It is worth mentioning that the post-materialist thesis has not elucidated or differentiated the diversity of economic and political systems across the world. Due to the vestigial traces and legacy of planned economy and underdeveloped market economy, Chinese economic system densely intertwines with its political structure, in which the central government has invincible power over the market and socioeconomic policies.

The central government determines the distribution of public resource, funding and social-development-related policies. As a result, the hegemonic political propaganda can be more widespread, pervasive, supported and endorsed in areas with better economic development. Vice versa, those wealthy areas may also have higher numbers of government employees in their population and more state-owned companies and organizations. Thus, political ideologies advocated by the central government such as family and social harmony, heteronormativity, and patriarchy can be pushed through and influential in rich provinces.

H2 (urbanization): Urbanization has a significantly positive effect from Model 3 to Model 11, while having no effect in Model 2. The empirical result largely demonstrates that people from more urbanized areas are more tolerant of

homosexuality. This effect, however, could be mixed with other factors, since the urbanization does not have any effect until adding the region into the model.

Although urbanization is often tied up with economic development, Chinese urbanization and economic development have to be analyzed separately due to the uniqueness of Chinese economic and political structure.

H3 (residential area): Hypothesis 4 predicts that people who live in urban areas are more likely to be tolerant of homosexuality. However, the empirical findings reveal that residents who live in peripheral-suburban areas have significantly different attitudes toward homosexuality compared to people who live in other residential areas.

This result leaves us a great space for the discussion of the demographical composition of the residential area and why peripheral-suburban residents are more tolerant than the others.

H4 (coastal region): The geographic region in the analysis is divided into a coast-inland dichotomy. East and South China are considered as coastal regions; while the rest provinces of China are defined as the inland regions and treated as the reference group in the analysis.

The empirical evidence shows that respondents who live in coastal regions are more tolerant of homosexuality. This attitudinal difference between coastal and inland regions reach statistical significance.

H5 (age): The results show that younger people are more tolerant of homosexuality than older respondents in China. The conclusion supports the prediction in Hypothesis 5.

H6 (internet use) and H7 (English proficiency): Internet use and English proficiency are considered as the predictors for information accessibility and the ability to access information.

The evidence shows that both the effects of the frequency of internet use and English proficiency are significantly positive on tolerance of homosexuality. In other words, respondents who utilize the internet more often and have a higher level of English proficiency are more tolerant.

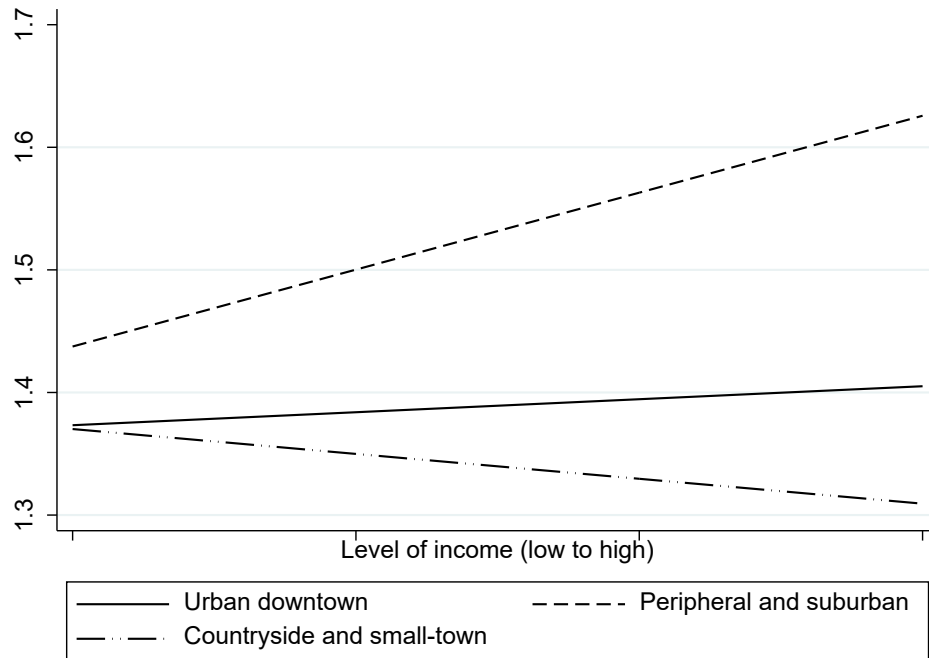
H8 (criticism toward government) and H9 (democracy): Attitude toward criticism against the government has a significant effect on tolerance of homosexuality. Specifically, people who agree or have a neutral attitude that government should not interfere if someone criticizes the government in public are more tolerant.

An affirmative or neutral attitude toward criticism against the government can represent a less collective but more liberal and individualistic leaning a respondent has. In other words, political liberalism is related to tolerance of homosexuality in China. Moreover, the different attitudes toward democracy have no significantly attitudinal difference in social tolerance.

One limitation about these two predictors is that both of them are attitudinal variables, which can skew the statistics. Since the dependent variable is also attitudinal and highly related to one's cultural and political belief, the statistical relationship between these attitudinal variables might be bidirectional.

Given that, only Model 5 includes these two predictors. The statistical results, yet, have not changed drastically after the addition. Besides, the correlation between these two variables and the dependent variable is not high (0.09 with criticism toward government and -0.05 with democracy). Therefore, the limitation is still existent but not a big concern.

Figure 8 The effect of income on tolerance by residential areas



H10-12 (interactions between residential area and income, education, and age):

Table 12 shows the interactions between residential area and income, education, and age. Income has no effect in the models, indicating that people's income is not related to how they perceive homosexual behaviour in China. However, the interaction term (see Figure 8) shows that the effect of income is bigger in peripheral-suburban areas, compared to other areas³².

Education has a positive effect in general. The interaction term of education by residential areas points out that the effect of education is greater in peripheral-suburban areas but smaller in the countryside and small-town areas, compared to downtown areas (see Figure 9). Besides, the contrast test of education

³² The contrast test of income between peripheral-suburban and countryside areas shows that $\chi^2 = 9.37$ and $p = 0.009$.

between peripheral-suburban and countryside areas shows that there is a significantly attitudinal difference ($\chi^2 = 12.89$ and $p = 0.002$).

Generally, in all types of residential areas, older people are less tolerant of homosexuality (see Table 14). The interaction term of age indicates that the effect of age in the countryside and small-town areas is stronger than in downtown areas³³ (see Graph 10). Table 14 illustrates that the slope in downtown and peripheral-suburban areas is steeper than in the country and small towns.

On the other side, the tolerance of homosexuality in the country and small towns does not decrease as dramatic as downtown and peripheral-suburban areas. This means that the countryside and small-town areas have experienced a less attitudinal shift in acceptance of homosexuality than urban downtown and peripheral-suburban areas. Dwellers at different ages who live in the latter two residential types have a greater difference in their attitudes toward homosexuality.

Figure 9 The effect of education on tolerance by residential areas

³³ The contrast test of age between peripheral-suburban areas and country and small-towns shows that $\chi^2 = 14.58$ and $p = 0.001$, meaning that there is a significant difference in the effect of age between two residential types.

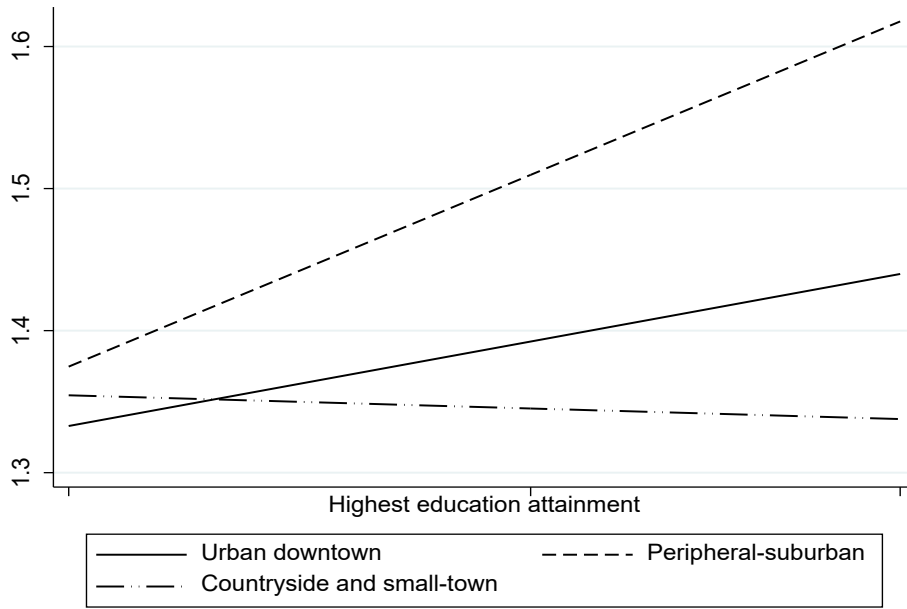
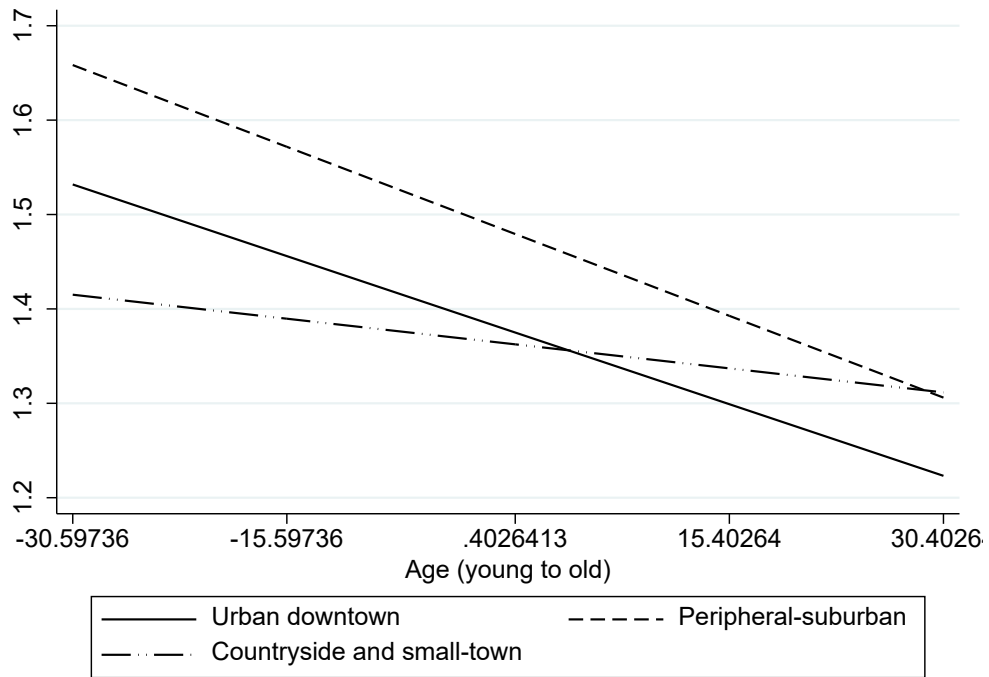


Figure 10 The effect of age on tolerance by residential areas



H13-15 (interactions between region and income, education, and age):

Table 13 displays the cross-level interactions. More specifically, there is no significant income difference in social tolerance of homosexuality between inland and coastal regions.

Nevertheless, the effect of education is stronger in coastal regions, compared to inland provinces (see Graph 11).

Further, the interaction of age (see Graph 12) shows that the effect of age is smaller in inland regions than its counterparts. In other words, there is a more dramatic attitudinal change at different ages in approval of homosexuality in coastal regions than inland areas.

Figure 11 The effect of education on tolerance by regions

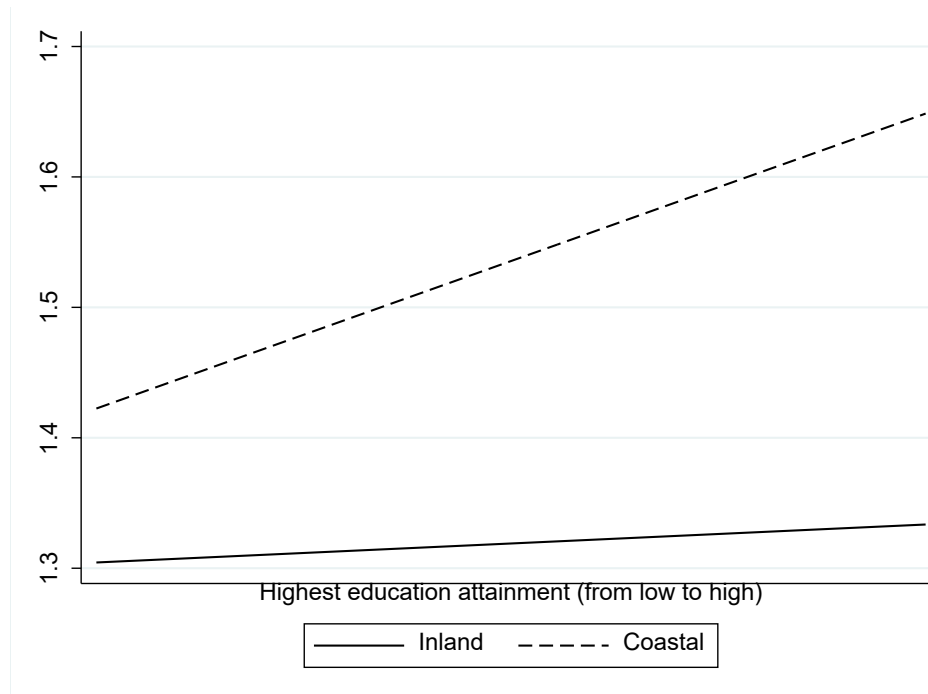
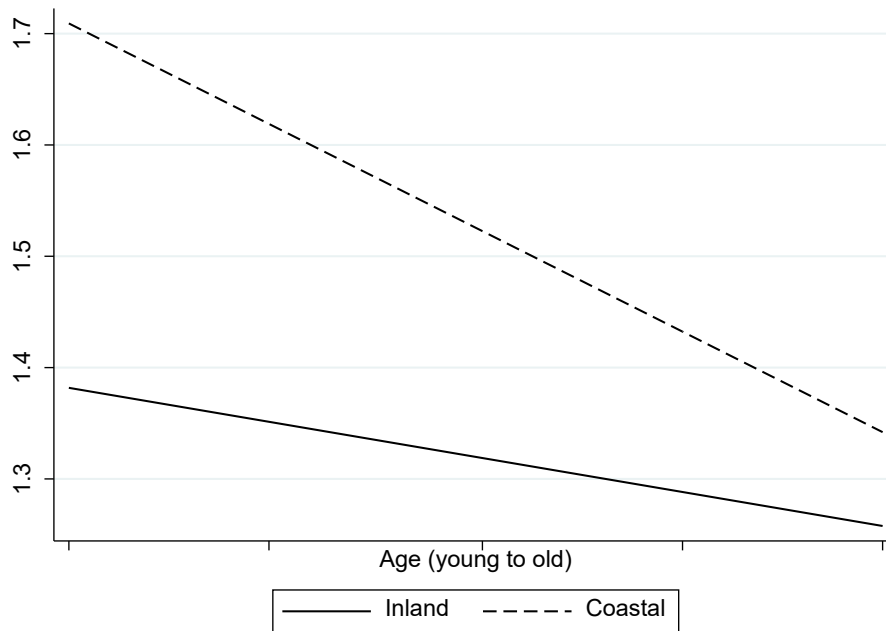


Figure 12 The effect of age on tolerance by regions³⁴



Conclusion

The empirical findings in this study lead us to three important conclusions. First, economic development and urbanization do not have any effect until I included more variables, but the directions of their significant effects are opposite in the full model. Second, the study reveals that people who live in different residential areas have different levels of tolerance and those who live in peripheral-suburban areas are generally more tolerant. Third, coastal regions are more tolerant of homosexuality than inland regions in China.

³⁴ The fitted values for age are 10, 30, 50, 70, and 90.

In addition, the cross-level interactions and individual-level interactions provide more details about how the effects of income, education and age vary in different residential areas and regions.

The results in this chapter have also responded to the question of how external and internal factors influence social tolerance of homosexuality in China. The following section will elaborate on these conclusions.

Economic Development and Urbanization: the Pattern of Chinese Development

The post-materialist thesis has demonstrated that economic development has a positive effect on public awareness toward topics related to civil rights such as environmentalism, human rights, gender equality, and LGBTQ issues (e.g. Inglehart 1987, 1990, 1995, 1997; Andreson and Fetner 2008). However, the hypotheses tested in this study elucidate that the effect of economic prosperity in China is either null or negative on the tolerance of homosexuality.

This anomaly has drawn our attention to political and economic systems in different societies when employing the post-materialist theory.

Unlike the Western market economy and the relative independence of the market, the state power in China controls the economy and determines the trajectory of economic development. This omnipresent political intervention over the economy has blurred the fine line between the two different social domains (politics and economy).

State-owned companies and factories are the main components of the Chinese economy and monopolize most of the industries, even though the Chinese government has adopted the Western economic system in the 1980s (e.g. Breznitz and Murphree 2012; Brødsgaard 2012; Guthrie 2012; Lin 2013). Even for the private sectors, the central government still holds supreme power over their business (Brødsgaard 2012). The nature of state-dominant economy may result in a scenario that areas with higher economic development are more likely to have a more state-owned economy, a larger population of government employees and hence receive more government support.

Correspondingly, the Chinese government has been advocating a series of social narratives on traditional Chinese culture and values, including heterosexuality, social and family harmony, which is considered as cultural governance (Perry 2013). The intertwinement between the political system and economic system in China, therefore, might have a collaborative and collusive impact on permeating the political ideologies across the whole nation.

The economic decision-making process is controlled by the state, where regions with high economic development usually have received more financial and political support from the central government. In this case, wealthy regions may also have been affected by state-dominant ideologies at a higher level than other regions.

Moreover, as mentioned in the previous literature review, the Chinese government only started to acknowledge the existence of homosexual population due to the HIV infectious risks and increasing numbers of AIDS patients among

male homosexuals. Given that, the state-dominant research of homosexuality is mostly medical and epidemiological. The coverage of official social media about homosexuality often rests on a narrative that homosexual behaviour is abnormal, immoral, and morbid (Kong 2013). Such a situation reflects on how the Chinese government looks upon and deals with homosexuality.

On the other side, urbanization either has a positive effect or no effect on tolerance of homosexuality according to the statistical results. A discussion on differentiating the effects of economic development and urbanization is needed. The definitions of urbanization and economic development are different as well as the measurement of their predictors, though urbanization is inevitably related to economic development.

The measurement of economic development in this study is GDP per capita while urbanization is the ratio that divides the permanent urban population by the whole population in a province. Urbanization is related to the permanent urban population, which means that more urbanized areas can attract more migrants and increase their urban population due to the better qualities of infrastructure, education, job opportunity, information accessibility, and social diversity.

Unlike GDP per capita, the factors that affect regional urbanization are more socially multifaceted. The transportation system, employment rate, social service, infrastructure, tertiary sector, and cultural and educational institution are forces that can determine the urbanization rate. More urbanized areas, hence, may provide more space for the LGBTQ population and community and heterosexual people might be more exposed to the idea of homosexuality and be more tolerant.

Coastal Regions

The results indicate that respondents from coastal regions are more tolerant than those who live in inland regions.

Coastal regions in China usually have more frequent information exchange and diverse culture, due to their favourable policy and central government support.

Since 1980, China has established more than 20 special economic zones (SEZs), and 16 SEZs locate in coastal regions (Vogel 2011). SEZs are in the special list of national planning (including government budget planning), which helps SEZs attract foreign investment, speed up local economic growth and the construction of social infrastructure. The favouritism in the state policy-making process in coastal regions has hence created a great economic and development inequality between coastal and inland regions. Such uneven distribution is still increasing.

On the other hand, with better economic performance, higher numbers of private state sectors, and a higher level of globalization, people from coastal regions are more likely to cultivate liberal beliefs. In fact, Chinese coastlines have always been considered the most liberal region across the country.

Before Xi's conservative political campaigns and anti-free-speech censorships, coastal regions were famous for their radical social thoughts and liberal social media such as Southern Weekly and South Reviews. The coasts were rated as the centre of Chinese liberalism (Tang and McConaghy 2018). Therefore, in such an open and liberal social atmosphere, people in coastal areas could comprehend social topics such as democracy and LGBTQ rights that are outside of the mainstream Chinese society.

It is not unusual to see that economic inequality between coastal and inland regions can lead to different political and social beliefs, as it has been found and recognized as a pronounced social phenomenon in many parts of the world such as Europe and North America (e.g. Bibby 2004; Grabb and Curtis 2005). China is not an exception either. The coastal regions in China are not only SEZs but also become special social zones that are more liberal to and tolerant of the diversity of people, compared to the rest of inland regions.

Residential Areas

Respondents from peripheral-suburban areas are more tolerant of homosexuality, compared to other areas in this research. It falsifies the assumption that downtown residents have a higher level of tolerance. This conclusion leads to the question of why people who live in peripheral-suburban areas are more tolerant of homosexuality.

The average homosexuality approval score for downtown urban areas, peripheral-suburban areas, and the countryside and small-town areas is 1.46, 1.49, and 1.32, respectively.

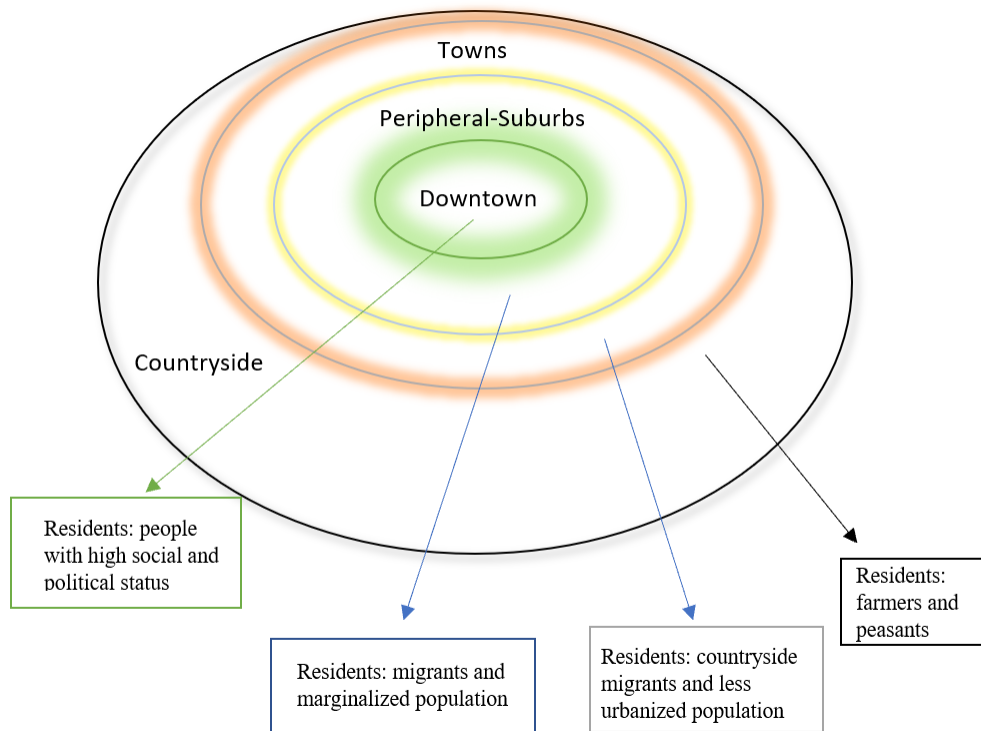
Figure 13 shows the contour line of spatial structure and the composition of residents in Chinese residential areas. Downtown dwellers are usually those who have higher socioeconomic and sociopolitical status and have received more government's welfare. In peripheral-suburban areas, residents are usually marginalized population and city migrants. They are incited to inhabit there for the cheaper living expense and rent, but also better education and social infrastructure. Small town and countryside populations are usually small business people, farmers, grassroots-government employees and peasants.

Specifically, the marginalized population from peripheral-suburban areas can access the good qualities of social service, information accessibility, education, and other soft infrastructure provided by cities and also have fewer connections with political control and governance. In Chinese cities, prostitution, drug dealing, and gangsterdom usually can be found in peripheral-suburbs due to its huge population mobility and diversity. The illegal red-light districts in Dongguan, for instance, mostly located in peripheral-suburbs between downtown areas and industrial areas, where many of the residents are mobile and marginalized population. This marginalized nature of peripheral-suburbs may contribute to tolerance of homosexuality.

The vacancy between political governance and its ideology and personal belief might emerge in peripheral-suburban areas since they are located into the middle

space geographically and politically between urban and rural areas. In other words, peripheral-suburban residents might not be highly indoctrinated by political ideology as those who live in urban areas. It has a weaker political intervention and regulation. Also, they are less traditional and conservative, compared to the residents in small towns and rural areas because of their geographic proximity to the cities—they are more exposed to social diversity than rural residents.

Figure 13 The spatial structure and the resident types of residential areas



Age Difference

Another important conclusion in this study is the age difference in social tolerance of homosexuality. According to the post-materialist theories and studies on homosexuality, younger generations tend to be more liberal towards civil rights issues (e.g. Inglehart and Baker 2000; Andreson and Fetner 2008b; Cheng *et al.* 2016).

Since China implemented the Reform and Opening-up policy in the 1980s, post-1979 generations mostly grew up in a more globalized society and may have more opportunity to access information from the world.

Since the 1990s, homosexuality-related novels, animes and movies became viral among young Chinese generations. Many young people start to understand and learn about the concept of homosexuality. Novels such as Yukio Mishima's *Confessions of a Mask* and *Forbidden Colors*, Xianyong Bai's *Nie Zi* and *Tea for Two*, and Jingming Guo's *Tiny Times*, movies such as *Happy Together*, *Farewell My Concubine*, and *East Palace, West Palace*, and *BL* (boy's love) animes have received great popularity among young generations.

Moreover, in 2005 and 2008, Phoenix Television produced two popular online talk shows —*Luyu You Yue* (A Date with Luyu) and *Leng Nuan Ren Sheng* (C'est La Vie). Several episodes of the shows have done a series of interviews with LGBTQ people, wanting to have an in-depth discussion about homosexuality in China. Both talk shows have aroused substantial repercussions and public debates.

The age difference in people's tolerance of homosexuality also portrays a bigger image of China's social transformation. It points out that there is a relatively dramatic social and cultural transformation happening in China. Not only do the economic system and social structure have shifted Chinese society, but also the social attitudes and cultural values after the Reform and Opening-up Policy.

Lastly, several demographic predictors in this study are worth noting, in order to dig into more details of homosexuality in China. The statistical results show that demographic variables such as ethnicity, marital status, religiosity and religion have significant effects on attitudes toward homosexuality.

Specifically, non-Han Chinese people are less tolerant than Han Chinese. It might be due to the different cultures and also the fact that the Han Chinese are more culturally secularized and westernized.

Regarding people's marital status, single people are more tolerant than married, cohabited, divorced, separated, or widowed people. Moreover, religion and religiosity have significant effects on attitudes, though China is officially an atheist nation. Chinese religions and Western religions have no significant attitudinal difference, while Muslims are less tolerant than people without any religious beliefs.

In a nutshell, this chapter provides a specific analysis in the mainland Chinese context and depicts the unique political, economic, and social pattern that affects how Chinese people perceive homosexuality. Both external and internal social

environments and the drastic social transformation have contributed to public tolerance of homosexuality in China.

However, this study also has several limits regarding the data collection, questionnaire, and provincial-level data source. The measurement of attitude toward homosexuality is only a five-point scale and fails to differentiate male and female homosexuality. Some demographic variables, such as social class and occupation in the questionnaire, are not designed scientifically, which makes it impossible to apply them in this study.

Also, the provincial-level data source is limited. The provincial-level data is collected by NBS and is highly censored by the government (data of provinces like Xinjiang, Tibet, and Hainan are unpublished). The data only has 28 units at the provincial level, which can skew the results of the provincial-level variables in multilevel modelling.

Some data, such as the number of NGOs, could not be accessed due to the censorship in China. Future research should focus on a mixed methodology that takes both quantitative and qualitative data into account to fully understand the homosexual issue in the Chinese context and explore more potential factors that affect people's attitudes toward homosexuality.

Chapter 5 Conclusion and Discussion

In the final chapter, the results and findings drawn from the empirical chapters will be reviewed and discussed, along with the theories applied in the research. Besides, further discussion of Chinese sociopolitical contexts will hopefully provide some insights into the social recognition of homosexuality in Chinese societies.

A critical review of post-materialist thesis and world society theory

According to post-materialist thesis, residents from an economically and politically unstable and insecure society are likely to pay attention to materialistic and survival values and to adopt collectivistic values advocated by the society and government. As economic development and political stability increase, society tends to shift into more liberal, self-expressive, and creative values (Adamczyk 2017; Inglehart and Baker 2000; Schwartz 1999, 2006, 2014).

Indeed, most of the social scientists believe that as the level of modernization and economic development goes up, a country's values start to shift to the individual rather than the collective (Adamczyk 2017; Hofstede 2001; Inglehart and Baker 2000; Inglehart and Oyserman 2004; Schwartz 2006).

As a result, long-term economic development can lead a shift in value orientations in a society, which helps explain why residents living in countries with better economic performance and higher levels of economic development

are more likely to be tolerant of homosexuality (Adamczyk 2017). Besides, democracy, economic inequality, the religious context of a nation, and the overall quality of education may also contribute to the value orientations.

In conclusion, post-materialist thesis indicates how economic development shapes and shifts value orientations in a nation. It is about how values are shaped and affected.

A question, then, arises here, that is, what nations/regions have more power or initiative in terms of value creation? The answer, by all means, is Western developed countries, given the history of European colonization and cultural hegemony over the world.

Indeed, the post-materialist thesis assumes that most nations either are experiencing or have accomplished primary stages of capitalist economic development and globalization. Undoubtedly, the polarization of the liberalizing framework is occurring globally under the Western cultural hegemony (e.g. Frank et al. 2009; Hadler and Symons 2018; Pierotti 2013; Velitchkova 2015).

However, the polarization and homogenization of this Western-led liberalizing trend do not always have a similar effect in every society. Some scholars have revealed how different regions cope with the global liberalization and localization in different ways, which results in diverse political and cultural praxis and social norms (Ayoub 2016; Baldassarri and Bearman 2007; Hadler and Symons 2018; Beckfield 2010).

The diffusion of LGBTQ rights norms across the world is one segment of the international liberalizing trend, especially after the majority of Western countries have recognized or legalized same-sex relationship/marriage. While more and more societies and individuals are exposed to and adopting such sexual norms via globalization, the number of countries that criminalize LGBTQ relationship or have not promulgated any favourable policy to LGBTQ population is still in quantity (Adamczyk 2017; Hadler and Symons 2018). The convergence and divergence in recognizing homosexuality across the world have shed some light on the cultural, political and economic heterogeneity in different regions. The confirmation of applicability and inapplicability of post-materialist theories in Chinese societies in this thesis can be an example of how non-Western nations and their political and economic systems respond to and adjust the diffusion of the international liberalizing framework.

As shown in chapter 4, the level of economic development (measured in GDP per capita) in China has a negative effect on social tolerance, which differs from what most post-materialist studies have found.

Chapter 3 discovers more nuance about the sociopolitical and socioeconomic differences among three Chinese societies and how these societies receive and respond differently to the global liberalizing trend, through the lens of social tolerance of homosexuality.

These findings will be further discussed in this chapter to understand the societal difference among three Chinese nations and how the effects of

international liberalizing trend and diffusion vary in different social and political systems.

Why can Taiwan become the most tolerant Chinese society to homosexuality?

The comparative empirical research in Chapter 3 indicates that Taiwan is the most tolerant society to homosexuality compared to its counterparts. More specifically, the micro-level predictors of post-materialist theory, including education and income as well as the political indicator (attitudes toward democracy) have the strongest effects in Taiwan than in China and Singapore.

This indicates that Taiwan is generally more LGBTQ-friendly and has passed through more considerable social transformations, especially under the global diffusion of liberalizing framework.

As previously discussed in the conclusion part of Chapter 3, the democratic political system, as well as the market economy, have contributed to the openness of Taiwanese society and its social tolerance to homosexuality.

From incorporating contents related to gender equality, diverse sexual orientation and homosexuality into the textbook and implementing anti-discrimination policies to the legalization of same-sex marriage in 2019, years of social movements and advocacy works under the protection of Taiwanese democratic politics and liberal economy have eventually led Taiwan to become

the most gay-friendly nation and the first one that legalizes same-sex relationship in Asia.

Unlike Taiwan and its outstanding democracy, China and Singapore are still in a conservative position in terms of social tolerance of homosexuality. As we can see from Chapter 3, Singapore is slightly more tolerant than China. However, the effects of education, income, traditionalism, and attitude toward the importance of democracy do not have a significant difference between these two societies.

Both China and Singapore are totalitarian regimes that advocate family harmony and reproduction under the dominance of Confucius patriarchal narrative and oppress freedom of speech. Contents related to LGBTQ in both countries are usually highly censored and sometimes gagged. Not only does the lack of democracy and free speech restrict the space for civil society, social movement and social awareness in LGBTQ rights, it also constitutionally and systemically sets up social barriers to the sexual minority.

The main reason that Taiwan can be the most tolerant one of homosexuality among three Chinese societies is its democratic political system. Taiwan's case is a typical example of how modern identity politics intertwine with and rely on democracy and civil society.

The anomaly of post-materialist theory in China

The most prominent finding in Chapter 4 is that the level of economic development in China has a negative or no impact on social tolerance of

homosexuality. Such anomalous relation between economic development and social tolerance has not yet been broadly found in the existing literature, which demands further scrutiny of the economic structure in China and the interweaving of political force in its economic domain.

A brief inspection of the relation between the economy and politics in China is included in the conclusion part of Chapter 4. It indicates that more prosperous provinces have engaged with more political power from the central government and have more government or state-owned sector employees in their population composition. Therefore, they have been affected more by state-dominant heterosexual and patriarchal ideologies.

However, such brief examination cannot fully explain why the effect of GDP per capita differs from urbanization rate and the difference between GDP per capita and GDP in the mainland Chinese context.

In this section, I tentatively answer three questions in order to explain the negative effect of economic development on social tolerance.

First, how are GDP per capita and urbanization measured in China? The measurement of two indices is vital to scrutinize their opposite effects. Second, what is the main difference between GDP per capita and urbanization rate? In other words, do provinces that have high GDP per capita also happen to have high urbanization rate? Last, what is the difference between GDP and GDP per capita in the Chinese context? Does their difference reflect a bigger picture of Chinese economic inequality? Does inequality influence people's values?

The first question is relatively straightforward, given that the measurement has already been explained previously. GDP per capita by province is measured in U.S. dollars in 2013 by Chinese NBS. It is the quotient of total GDP in a province divided by the whole provincial population. Urbanization rate by province is measured by the percentage of urban residents in the whole provincial population. The measurements, as well as the definitions of GDP per capita and urbanization rate, are different.

Table 15 shows GDP per capita, urbanization rate, mean of tolerance of homosexuality, GDP, and population by the province in China. Clearly, both provincial GDP per capita and urbanization rate are partially overlapped but not all equal. For example, Guangdong ranks ninth in GDP per capita while fourth in urbanization rate; Shanghai ranks third in GDP per capita and first in urbanization; Shanxi ranks twenty-first in GDP per capita but fourteenth in urbanization. Besides, Guangdong, Shanghai and Shanxi rank 1st, 2nd and 3rd in the mean of tolerance of homosexuality.

These three provinces have better performance in urbanization rate than GDP per capita, and they are also the most tolerant among all provinces. This conclusion leads to another question. What social, political, and economic factors can determine GDP per capita and urbanization rate and result in their different effects on tolerance, especially considering that the two indices have different definitions and measurements?

According to Table 15, provinces with higher GDP also are more likely to have greater population size. However, the provincial GDP does not necessarily relate

to GDP per capita. For instance, Guangdong has the highest GDP and the greatest population across the country; but its GDP per capita only ranks ninth.

GDP, urbanization rate, and GDP per capita have different social determinants, which result in their different effects on social tolerance.

In general, economists believe that both GDP and GDP per capita are mainly affected by population, land area, natural resources, government transparency (including law and policies), physical capital, and compulsory education (e.g. Ilter 2017).

However, population size has an inverse relationship with GDP per capita. When other things are being equal, the lower the population, the higher the GDP per capita.

As known to all, China has the second-largest GDP and the largest population size in the world, but its GDP per capita only ranks 72nd (World Bank 2017). Not only does the great population size might affect the low level of GDP per capita in China, the vast wealth gap among social classes and regions has also contributed.

According to a research report by the World Bank (Brueckner and Lederman 2017), the relationship between GDP per capita and inequality depends on countries' initial incomes. Countries with low initial incomes generally benefit from transitional economic growth due to the systemically uneven distribution of wealth. In other words, transitional growth in low-income countries is boosted by

greater economic inequality; but in high-income countries, inequality has a significant negative effect on transitional growth (Brueckner and Lederman 2017).

This could apply to the Chinese context, given its well-known social and economic inequality as well as transitional economic growth. Especially provinces and municipalities in China with high GDP per capita such as Beijing, Shanghai, Zhejiang, and Jiangsu do have high Gini coefficient (Bhattacharya 2018 et al.)³⁵.

Based on this relationship between GDP per capita and economic inequality in countries like China, I could assume that the GDP per capita used in this research is a lens of inequality and wealth gap. This may explain why GDP per capita has a negative or no effect on social tolerance of homosexuality in China, as lots of sociological research has pointed that economic inequality or high Gini coefficient leads to more or has no impact on social intolerance of civil rights issues (Adamczyk 2017).

In addition, I have discussed the economic structure in China and how political power determines and permeates economic development. Chinese regions with high GDP per capita may have more state-owned sectors in their economic composition and higher numbers of government/public employees in the population; hence are more affected by state-dominant ideologies with an emphasis on family and social harmony, reproduction, heterosexuality, and patriarchy.

³⁵ The Gini coefficients for Beijing, Shanghai, Zhejiang, and Jiangsu respectively are 0.97, 0.98, 0.97 and 0.92.

On the other side, urbanization is determined by several primary factors, including industrialization, modernization, economic growth, and education (Hofmann and Wan 2013). In their longitudinal research of Chinese urbanization from 1981-2006, Cheng and his colleagues (2009) indicate that the main drives for urbanization are marketization, industrialization, and good standard of living (or modernization). Notably, drastic marketization and industrialization have attracted hundreds of millions of peasants to cities for more job opportunities and better life quality.

Regions like Beijing, Shanghai, Tianjin, and Guangdong have an incredible amount of migrant workers. Such high social mobility could result in ethnocultural diversity, which might explain why urbanization has a positive effect.

In Chapter 4, for example, the most tolerant residential areas are outskirts, also known as *cheng xiang jie he zhong xin* in Chinese (the junction between the city and rural area), where residents there usually have considerable heterogeneity due to rapid urbanization and social mobility.

In Table 15, not all provinces with high GDP per capita have the highest urbanization rate and vice versa. Because of the difference between GDP per capita and urbanization in their definitions, measurements, and social determinants, they have opposite effects on social tolerance of homosexuality. Such an unusual relationship between economic development and social tolerance in China might provide some insights for the post-materialist thesis, especially when future research applies this theoretical framework into a non-Western context.

In conclusion, this research has three main findings. First, Chinese societies are inevitably influenced by globalization and Westernized liberalism, even though they are well-known for traditional Confucius values that emphasize on bloodline, patriarchy and family reproduction. Homosexuality in Chinese societies is still a form of identity politics. However, the level of how much three Chinese societies accept and embrace Western liberal values and norms varies, mainly by their different political and economic systems.

Specifically, Taiwan's tolerance to homosexuality is inseparably favoured by its civil society and democracy in policymaking as well as the outgrowth of years of social movements. The relative intolerance in China and Singapore, on the other side, is most likely related to the lack of democratic political system and their cultural propaganda.

Culturally, Taiwan might represent the most authentic traditional Chinese culture, given that it did not experience extreme cultural genocide like what their neighbour across the Strait did, and also given that it relatively remains as a mono-Chinese-cultural entity rather than Singaporean's multiculturalism. In this case, Taiwan is supposed to be the least tolerant of homosexuality; yet, it is the most tolerant and open society in Asia. This strongly suggests that homosexuality has already been a part of identity politics and intertwined with the political system in Chinese societies.

Secondly, the effect of economic development is either null or negative on the tolerance of homosexuality in China. As discussed previously, the state-owned economic structure and the intricate entanglement between politics and economy

in China might be one of the main contributors that lead to this relationship between affluence and tolerance of homosexuality. This finding challenges the common notion from post-materialist theory and its related studies that economic development always has a positive linear relationship with social liberalism and the effect of economic development is direct and strong on value formation and shift. Such an assumption may be only valid in a democratic society. In China, for example, despite growing affluence in some regions, economic development does not have a positive effect on tolerance of homosexuality. Politics, instead, plays a bigger role in value formation.

Thirdly, residents from the outskirts of the cities are the most tolerant in China. The intermediate state between the highly politically censored and controlled cities and relatively conservative and uninformed rural areas enables city outskirts to have more diversity, freedom and also tolerance of the difference among people. This finding offers a glimpse of the nature of city peripheral area and how a social atmosphere with cultural diversity and lesser political intervention can cultivate social tolerance of homosexuality, even in a totalitarian nation like China.

Limitations

This research, hopefully, provides some insights into Chinese societies and their LGBTQ issue for future studies as well as for building a more LGBTQ-friendly social environment in three societies.

However, this research still has several limitations that may impede a more thorough analysis of homosexuality in Chinese nations. The questionnaires fail to discriminate the difference between male and female homosexuality and do not include people's sexual orientation. The provincial data used in Chapter 4 does not have certain potential indices that might contribute to social tolerance of homosexuality, such as for globalization, internationalization, and economic inequality.

Moreover, this research does not use qualitative data, which could have offered a more in-depth view of homosexuality in three societies. Future research should focus on designing a better-measured survey, discovering more available data, and utilizing qualitative methodology to fully scope how politics and economy influence people's perception of homosexuality in the Chinese context.

Table 15 GDP per capita, GDP, Urbanization and Mean of tolerance of homosexuality in China by Province

Province	GDP per capita (US dollars)	Urbanization rate	Mean of tolerance of homosexuality	Nominal GDP in 2013 (billions of US dollars)	Population
Anhui	5,604	48%	1.52	310.49	59,500,510
Beijing	16,278	86%	1.23	319.72	19,612,368
Chongqing	7,791	58%	1.38	206.41	28,846,170
Fujian	10,333	61%	1.33	353.11	36,894,216
Gansu	4,302	40%	1.14	102.22	25,575,254
Guangdong	10,330	68%	1.9	1,008.76	104,303,132
Guangxi	5,387	45%	1.51	233.32	46,026,629
Guizhou	4,297	38%	1.45	130.58	34,746,468
Hebei	6,509	47%	1.24	459.26	71,854,202
Heilongjiang	6,368	57%	1.22	233.4	38,312,224
Henan	5,667	42%	1.31	519.78	94,023,567
Hubei	7,671	55%	1.52	400.31	57,237,740
Hunan	6,558	48%	1.3	397.56	65,683,722
Inner Mongolia	11,565	59%	1.08	273.15	24,706,321
Jiangsu	13,329	63%	1.48	964.82	78,659,903

Jiangxi	5,642	49%	1.57	232.68	44,567,475
Jilin	8,166	54%	1.44	210.66	27,462,297
Liaoning	10,614	66%	1.49	439.4	43,746,323
Ningxia	6,810	52%	1.03	41.62	6,301,350
Qinghai	6,452	49%	1.31	34.27	5,626,722
Shaanxi	7,640	51%	1.24	261.67	37,327,378
Shandong	9,911	52%	1.26	891.79	95,793,065
Shanghai	15,847	88%	1.67	352.29	23,019,148
Shanxi	5,708	53%	1.66	204.5	35,712,111
Sichuan	5,719	45%	1.22	426.15	80,418,200
Tianjin	17,126	78%	1.25	233.19	12,938,224
Yunnan	4,438	39%	1.38	191.05	45,966,239
Zhejiang	11,878	63%	1.4	609.65	54,426,891

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Appendix

Table 16 and Table 17 present the descriptive statistics and the results of the OLS model in Hong Kong. Chapter 3 does not include Hong Kong in Chinese societies, as it is a Cantonese-speaking society and has a different culture, compared to those three Mandarin-speaking Chinese societies. Besides, the variable of internet use is not asked in the survey in Hong Kong.

Table 17 shows a similar but also different pattern of tolerance of homosexuality in Hong Kong, compared to China, Taiwan and Singapore. The effect of income is positive, while age has a negative impact on tolerance. University education has a stronger effect than no formal education. On the other side, divorced, separated and widowed people are more tolerant than married respondents. East Asian and Western religious beliefs are less tolerant of homosexuality than no religious belief.

Table 16 Descriptive Statistics for Multiple Predictors in Hong Kong

Variable	Observations	Mean	SD	Min.	Max.
Justification of homosexuality	996	4.21	2.69	1	10
Age	985	44.67	16.43	18	85

Female	545	0.55	0.50	0	1
Male	455	0.44	0.50	0	1
Education					
No education	22	0.02	0.15	0	1
Elementary and middle school	499	0.50	0.50	0	1
High school	184	0.18	0.39	0	1
University and above	293	0.29	0.46	0	1
Income	989	4.72	1.91	1	10
Marital status					
Married	622	0.62	0.48	0	1
Divorced, separated, and widowed	77	0.08	0.27	0	1
Single	299	0.30	0.46	0	1
Religion affiliation					
No religion	685	0.69	0.50	0	1
East Asian religion	113	0.11	0.32	0	1
Western religion	188	0.19	0.39	0	1
Muslim	1	0.001	0.03	0	1
Other religion	12	0.01	0.11	0	1

Religiosity	999	-1.01	0.85	-1.58	1.02
Employment					
Employed	551	0.55	0.50	0	1
Retired	167	0.17	0.37	0	1
Student	69	0.07	0.25	0	1
Unemployed	208	0.21	0.41	0	1

Table 17 OLS Model of Justification of Homosexuality in Hong Kong

Hong Kong Model	
Intercept	5.291*** (0.749)
Gender (ref: female)	
Male	-0.065 (0.166)
Education (ref: no education)	
Elementary & middle school	0.510

	(0.525)
High school	0.676
	(0.551)
University & above	1.560***
	(0.556)
Age	-0.050***
	(0.008)
Income	0.133**
	(0.043)
Marital status (ref: married)	
Divorced, separated and widowed	1.197***
	(0.309)
Single	-0.281
	(0.221)
Employment (ref: employed)	

Retired	-0.217
	(0.283)
Students	0.272
	(0.348)
Unemployed	-0.422
	(0.220)
Religiosity	-0.028
	(0.133)
Religion (ref: no religion)	
East Asian religion	-0.523*
	(0.261)
Western religion	-0.669*
	(0.290)
Muslim	-3.238
	(2.441)
Other religion	0.672
	(0.713)

N

965

Notes: (1) numbers in parentheses are standard errors; (2) from 2-tailed tests, * $P < .05$; ** $P < .01$; *** $P < .001$.