



**THE ASSOCIATION BETWEEN OPTIMISM, SELF-ACCEPTANCE, GENDER
ROLE BELIEFS AND MENTAL WELL-BEING AMONG NON-HETEROSEXUAL
MALAYSIANS**

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE BACHELOR OF SOCIAL SCIENCE (HONS)
PSYCHOLOGY FACULTY OF ARTS AND SOCIAL SCIENCE UNIVERSITY TUNKU
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Running Head: MENTAL WELL-BEING AMONG NON-HETEROSEXUALS

NOVEMBER 2022

The Association between Optimism, Self-Acceptance, Gender Role Beliefs and Mental Well-Being among Non-Heterosexual Malaysians

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This research project is submitted in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology, Faculty of Arts and Social Science,

Submitted on November 2022.

ACKNOWLEDGEMENT

We wanted to thank Mr. Tan Soon Aun for his tremendous help and guidance for this final year project. As our project advisor lecturer, he had given endless patience and guidance during the whole process of finishing this final year project, without him, the project will not be as it is.

We also wanted to show appreciation to all the participants that took part in this project. Without their willingness and bravery, it will be impossible to collect information and data about the community that is crucial to the project.

Lastly, we wanted to thank our friends and families who had been supportive and encouragement. With their support and love, we managed to pull through and finish the project. Thank you everyone that have helped, met and joined our journey, your time and assistance are appreciated deeply by all three of us.

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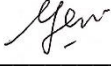
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DECLARATION

We declare that the material contained in this paper is the end result of our own work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronic or personal.

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MENTAL WELL-BEING AMONG NON-HETEROSEXUALS

APPROVAL FORM

This research paper attached hereto, entitled “The association between optimism, self-acceptance, gender role beliefs and mental well-being in non-heterosexual Malaysians” prepared and submitted by “Lai Weng Yen, Tan Zhi Ying, and Tee Li Jia” in partial fulfilment of the requirement for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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Abstract

Past studies about the well-being of non-heterosexuals in Malaysia are rare as most of the studies about the community were related to STIs, heterosexuals' attitudes towards them, and health care barriers. However, according to the minority stress model, non-heterosexuals often face unique stressors, leading to lower mental well-being. As optimism, self-acceptance, and gender role beliefs can be related to the minority stress model, this study aims to determine the relationship between said variables with the mental well-being of Malaysian non-heterosexuals. The study was conducted through a quantitative research method with a cross-sectional survey research design along with a sample of 160 non-heterosexual Malaysians adults recruited through online platforms. The data was collected by distributing a survey that included the Warwick-Edinburgh Mental Well-Being Scale, Revised Life Orientation Test, Self-Acceptance of Sexuality Inventory, and Liberal Feminist Attitude and Ideology Scale: Domains and Items Gender Roles. Results showed that the overall mental well-being of Malaysian non-heterosexuals is moderate. Also, there is significant positive correlation between optimism and mental well-being, and significant negative correlation between gender role beliefs and mental well-being. Theoretically, this study provided statistical proof of the association between the forementioned variables and strengthen the relevance of minority stress model in Malaysian non-heterosexual community. Practically, this study can provide resources when formulating non-heterosexual related psychological intervention, policies and sources for future research.

Keywords: non-heterosexual, mental well-being, optimism, self-acceptance, gender role beliefs

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List of Abbreviations

APA	American Psychology Association
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders
GID	Gender identity disorder
ICD-11	International Statistical Classification of Diseases and Related Health Problems
K-S Test	Kolmogorov Smirnov Test
LFAIS	Liberal Feminist Attitude and Ideology Scale
LGBTQ	Lesbian, Gay, Bisexual, Transgender and Queer
LOT-R	Revised Life Orientation Test
MLR	Multiple Linear Regression
PPMC	Pearson's Product Moment Correlation
SASI	Self-Acceptance of Sexuality Inventory
SPSS	Statistical Package for Social Science
WEMWBS	Warwick-Edinburgh Mental Well-Being Scale

Chapter I

Introduction

Background of study

People that identify as lesbian, gay, bisexual, queer, and/or with other non-heterosexual orientations (LGBTQ+) usually encounter stigma, prejudice, and/or discrimination as a result of their sexual orientation. These experiences may make it more difficult to embrace one's sexuality. Lower levels of self-acceptance were thought to increase the probability of negative mental health consequences (Elizur & Mintzer, 2001). Poorer mental health outcomes, such as increased general distress, depression symptoms, and reduced psychological well-being, were linked to lower levels of self-acceptance of sexuality (Camp et al, 2020a). It was suggested that a crucial component of LGBTQ+ people's positive identity development is self-acceptance of their sexuality (Elizur & Mintzer, 2001). Therefore, having a higher level of self-acceptance of one's sexuality is linked to other crucial positive identity development processes which can improve the mental well-being of an individual.

Sexual minorities frequently face discrimination due to different cultural and religious views. Furthermore, people in Malaysia have a strong sense of gender norms, leading sexual minorities' self-expression to be generalized as cross-dressing, which can attract discrimination and prejudice (Aksoy et al., 2019). Death threats are likely to happen to the sexual minority community, especially in a conservative environment. Therefore, it is crucial to look into the mental health of sexual orientation minorities because it is both psychologically affecting and challenging in terms of physical safety. Gay men had been observed to experience public harassment in Malaysia (Huebner et al., 2004). Under these circumstances, the psychological suffering that gay men endure will eventually result in

mistreatment-related suicide. Being optimistic encourages self-expression and makes disclosure easier, making it crucial for non-heterosexuals to maintain a healthy mental well-being. Upbeat men can accomplish many significant occasions and milestones due to their well-planned professional goals, including landing their dream job (McParland et al., 2016). Therefore, with optimism, the enrichment in affect and cognition can allow non-heterosexuals to have the ability to overcome difficulties and discriminations easier as they have hope that the future will be better.

In addition, one's idea of the appropriate roles and behaviors that men and women should exhibit in society is referred to as gender role belief (Whitley, 2001). According to Nierman et al. (2007), gender role belief may represent societal views on the ideal outcome for sexual behavior. This viewpoint has a significant impact on how people feel about homosexuality. Studies revealed that people who believed in traditional gender roles tended to have more hostile sentiments toward gay men and lesbians (Ito, 2007). Contrarily, those with feminist or liberal views on gender roles had more positive views about homosexuals (Brown & Gladstone, 2012). Past studies showed that Malaysian culture has a predominantly negative attitude toward homosexuality (Ito, 2007). For example, the former Malaysian Prime Minister warned gay British ministers that they would not be welcome in Malaysia if they brought their male companions with them (“Gay Ministers Barred, Malaysia Tells UK”, 2001). One of the reasons Malaysians have a stigma against non-heterosexual sexual orientations and believe it to violate natural law is due to political influence. This can be demonstrated through how Malaysia's government actively combats the non-heterosexual community by criminalizing homosexuality and legalizing conversion therapies. In conclusion, the correlation between self-acceptance, gender role beliefs, optimism, and mental health among non-heterosexual people in Malaysia should thus be investigated in this study to better understand this topic.

Problem Statement

Although there are no significant data regarding the non-heterosexual community's mental well-being in Malaysia, many factors point to the fact that Malaysians who are non-heterosexual have a high risk of low mental well-being. One of the major factors that led to the assumption is the huge amount of barriers set up against non-heterosexual communities to access mental healthcare in this region. Said barriers included- internal resistance from the individual, lack of knowledge and resources about mental health, limited availability and accessibility to services, negative perception of mental health services, and stigma against LGBT communities (Zay Hta et al., 2021). Despite the removal of Gender identity disorder (GID) from the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and International Statistical Classification of Diseases and Related Health Problems (ICD-11), and systematic synthesis of 49 journals (O'Shaughnessy & Speir, 2018) showing the promising effectiveness of affirmative therapy on non-heterosexuals with low mental well-being, Malaysia persists in using corrective methods and criminalizing non-heterosexuals sexual inclination (See, 2019b). Besides, low public opinion, lack of legal protection, and rampant stigma in Malaysia can also lead to increased stress and fear in the local non-heterosexual community, thus lowering their mental well-being.

According to a policy proposal by See (2019a), many local mental health professionals lacked knowledge about the needs of local non-heterosexual people. This may lead to feelings of frustration, disappointment, and greater mental distress in non-heterosexual people as the needs required to improve mental well-being are not met in the therapy session. Despite LGBTQ+ affirming guidelines provided internationally, local studies on improving mental well-being in non-heterosexuals remain lacking. This may cause mental health providers difficulty in providing proper resources and conducting a successful

therapeutic relationship with non-heterosexual clients. For example, LGBTQ+ pathologizing approach does not take their non-heterosexual client's self-acceptance seriously in their session, as they actively discourage LGBTQ+'s sexual identity and orientation, which may worsen the client's mental well-being.

Following up, the low mental well-being of non-heterosexuals is often attributed to minority stress (O'Shaughnessy & Speir, 2018). Therefore, it is important to observe how factors related to minority stress are associated with the mental well-being of non-heterosexuals to further assist in improving their mental well-being. For instance, there are three major factors that minority stress consists of – the expectation of negative future experiences or rejection, internalization of societal stigma, and discrimination from the environment (Valentine & Shipherd, 2018). Optimism, self-acceptance, and gender role beliefs are a few of the factors that may influence minority stress as they can relate to the three major factors individually. However, the evidence for the correlation between minority stress and mental well-being in LGBTQ+ is lacking, as most studies were more focused on how minority stress was affected by stigmatization (Brown et al., 2015) and mental health (Li et al., 2020; Peltzer & Pengpid, 2016) instead of the aforementioned factors.

Empirical studies on the mental well-being of non-heterosexuals are rare in Malaysia. As there is no population-wide data regarding this community and the actual mental well-being of non-heterosexuals Malaysians is unexplored. However, as mentioned in the paragraph above, the barriers to mental health care access and other stigma-related factors painted a negative picture of the community's mental health. Moreover, the literature review by Tan et al. (2021) mentioned that many local studies only focus on transgender women, men who have sex with men (MSM), and gay men, thus other spectrums of sexual orientations such as bisexuality, lesbianism, and asexuality can be often overlooked. Tan et

al.'s (2021) literature review also commented that besides research related to STI prevention methods in said community, studies about LGBTQ+ community are scarce. This also includes studies about positive qualities that encourage mental well-being among non-heterosexual Malaysians.

Therefore, the present study aims to examine the association between optimism, self-acceptance, gender role beliefs, and mental well-being of Malaysian non-heterosexuals.

Significance of Study

This study aims to contribute empirical data and findings to fill in the literature gap in the local studies regarding the mental well-being among the non-heterosexual population in the local context. The practical contribution of the study is to bring benefits to the non-heterosexual community by creating a more inclusive society in Malaysia by providing insights on factors that can affect their mental well-being, thus leading mental health professionals to include said factors when incorporating their mental health plan.

In terms of practical contributions, this study's findings aim to contribute to developing or improvising psychological intervention programs that support the non-heterosexual population in enhancing their mental well-being in the local context. The outcomes of the findings should contribute to the limited literature regarding the mental health needs of the non-heterosexual community in the local context so that the local mental health providers can provide accordingly to them. The data collected from this study can be used to analyze and further understand what intervention elements have been overlooked and incorporate them into the existing or new intervention programs so that the programs can accurately meet the needs of the non-heterosexual community in the local context and present social climate.

In terms of theoretical contributions, the findings are more inclusive of overlooked non-heterosexual orientations instead of only focusing on a few specific sexual minority groups. The purpose of this contribution is to enable future researchers and practitioners to have a more comprehensive understanding of the present situation of state of mental well-being among the non-heterosexual population. Furthermore, as mentioned in the problem statement, the gap in local studies where there is a lack of research on qualities that can improve mental well-being in non-heterosexuals can also be addressed by our findings through increasing knowledge on how qualities such as self-acceptance, optimism, and gender role belief can contribute to mental well-being in non-heterosexual population.

Research Questions:

1. What is the level of mental well-being among non-heterosexual Malaysian?
2. What is the association between optimism and mental well-being among non-heterosexual Malaysians?
3. What is the association between self-acceptance and mental well-being among non-heterosexual Malaysians?
4. What is the association between gender role beliefs and mental well-being among non-heterosexual Malaysians?

Research Objectives:

1. To examine the level of mental well-being among non-heterosexual Malaysians.
2. To examine the association between optimism and mental well-being among non-heterosexual Malaysians.

3. To examine the association between self-acceptance and mental well-being among non-heterosexual Malaysians.
4. To examine the association between gender role beliefs and mental well-being among non-heterosexual Malaysians

Hypotheses

H1: There is a positive association between optimism and mental well-being among non-heterosexual Malaysians

H2: There is a positive association between self-acceptance and mental well-being among non-heterosexual Malaysians

H3: There is a negative association between gender role beliefs and mental well-being among non-heterosexual Malaysians

Conceptual and Operational Definition

Non-heterosexual

Conceptual Definition. Non-heterosexual is defined as an individual who identifies themselves as lesbian, gay, bisexual, or otherwise not straight and is attracted to or has had encounters with same-sex partners.

Operational Definition. Adult Malaysians who identify as non-heterosexual (bisexual, homosexual, and asexual) are this study's target participants. The population's age range is 18 and above. Additionally, the participants were chosen for the surveys based on criteria such as age, nationality, and sexual orientation.

Mental well-being

Conceptual Definition. Mental well-being is defined as a condition of well-being in which each individual fulfills his or her potential, can cope with life's regular stressors, can work efficiently and fruitfully, and can add value to her or his community." (WHO, 2004)

Operational Definition. The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) is a tool for measuring mental health that only emphasizes good mental health. A higher WEMWBS score implies a greater level of mental well-being (Tennant et al., 2007).

Optimism

Conceptual Definition. Optimism is defined as anticipation and faith regarding the success of an endeavor in the future. The degree to which people generally have positive expectations for the future is called optimism (Carver et al., 2010).

Operational Definition. The revised Life Orientation Test (Scheier et al., 1994) is a typical psychological measurement that will be used to determine the dispositional optimism levels of an individual. High optimism or high pessimism is indicated by higher scores on each subscale.

Self-acceptance

Conceptual Definition. As the term implies, self-acceptance is defined as the state of total acceptance of oneself. Accepting your identity without constraints, restrictions, or exceptions is what true self-acceptance entails (Seltzer, 2008). When someone has self-acceptance, they may be able to appreciate the entirety of themselves rather than just their desirable traits.

Operational Definition. The Self-Acceptance of Sexuality Inventory (SASI; Camp, 2020b) will be used to determine individual self-acceptance toward one's sexuality. As a

result, the higher scores obtained indicate a greater acceptance of an individual sexual orientation, respectively.

Gender role belief

Conceptual Definition. Gender role belief is defined as a sex role that includes a variety of actions and attitudes that are typically regarded as proper, appropriate, or desirable for a person based on that individual's sexual orientation (Whitley, 2001).

Operational Definition. The Liberal Feminist Attitude and Ideology Scale (LFAIS): Domains and Items Gender Roles subscale scores of respondents were used to determine respondents' gender role beliefs. The higher the scores on the LFAIS, which was developed to assess feminist perspectives, indicated a liberal view on gender roles (Morgan, 1996).

Chapter II

Literature Review

The State of Mental Well-Being of Non-heterosexuals in Malaysia

Past studies used different terms to coin mental well-being, such as mental health (Wittgens et al., 2022) and psychological well-being (Sabouripour et al., 2021). Although there are subtle differences between the terms, well-being generally represents how well the person is functioning in the domain of mental health, while health usually denotes deficiencies in functioning mentally (CDC, 2018). However, due to the lack of mental well-being in non-heterosexual communities being studied and the overlapping areas of the terms, this literature review includes studies that used mental health and psychological well-being as placeholders for mental well-being.

The mental health of non-heterosexuals was commonly lower than their heterosexual counterparts (Wittgens et al., 2022). A recent study showed that people in the said community are highly vulnerable to mental illness as they demonstrated a high tendency to present depressive symptoms, suicidality, and substance abuse (Mongelli et al., 2019). In addition, research showed that lower mental health could be caused by peer victimization (Heiden - Rootes et al., 2020), internalized homophobia (Wen & Zheng, 2019), and minority stress (Timmins et al., 2019).

According to the Equality Index (*LGBT Rights in Malaysia*, n.d.), Malaysia only scored 14 out of 100, indicating low public opinion and a lack of legal rights for the non-heterosexual community. Psychologically, the hostile environment could harm said community's mental well-being. Although no recent study in the Malaysian context specified the mental well-being of non-heterosexuals, much local research (Zay Hta et al., 2021; Tan et

al., 2021; See, 2019) revealed the factors that inhibit mental wellness for said community. For example, the inaccessibility of mental health services for LGBTQ+ people (Zay Hta et al., 2021; Tan et al., 2021), and the lack of LGBTQ+ affirming mental health guidelines in Malaysia (See, 2019). Furthermore, the legalization of conversion therapy and camps and the criminalization of LGBTQ+'s existence were inferred to be a source of social pressure from the local environment that negatively affected the mental well-being of the said community (See, 2019).

In conclusion, it can be observed that the mental well-being of Malaysian non-heterosexual members was not given attention. Tan et al. (2021)'s study provided insight that LGBTQ+ (which includes the non-heterosexual community) affirmative studies were lacking in Malaysian settings, as the focus was put on STI prevention in the LGBTQ+ community and scarcely on the well-being of the said community. Lim et al. (2017) inferred that the studies might be done to support the Ministry of Health's mission to decrease HIV cases. However, such support was lacking when it turned to the well-being of the community, particularly mental well-being. Another reason for the lack of local studies is the low visibility of the non-heterosexual community in Malaysia. The low visibility can be attributed to internalized homophobia, a factor that can lead to the lack of desire to come out (Hieu & Ng, 2015), making it hard to recruit non-heterosexual participants.

Optimism and Mental Well-Being

There are two perspectives regarding optimism. The first is called expectancy perspective and another is attributional styled. The former decides that optimism is defined by their tendency to view the future positively. In contrast, the attributional-styled perspective debated that optimism is defined by the habitual way of deciding the reason for bad events (Garcia, 2013). In this study, we chose to follow the first perspective, where optimism is

believed to be the tendency of people to view the future positively. As past literature did not commonly engage with non-heterosexual people as their sample group, the studies mentioned in the following paragraph that did not specify the sexuality of their target samples were assumed to be heterosexual unless stated otherwise.

Past studies proved that there is a significant positive relationship between mental well-being and optimism (Chen et al., 2019; Conversano et al., 2010). Chen et al., (2019) explained the positive relationship between optimism and mental health as self-efficacy optimism regulates depression and life satisfaction with cultural adaptation as a moderator. Past studies also researched that optimism plays a protective factor against negative psychological well-being (Stewart & Townley, 2019), and mental health (Grote et al., 2007) for people in adversity. As evidence, research regarding women with low income (Grote et al., 2007), homeless youth (Stewart & Townley, 2019), and individuals living with HIV (Ammirati et al., 2015) showed that optimism was associated with higher psychological well-being and mental health despite in stressful circumstances. Furthermore, research attributed the positive correlation between optimism and mental well-being to the positive qualities that optimistic people demonstrated, such as self-efficacy (Sabouripour et al., 2021), self-esteem (Duy & Yıldız, 2017), and resiliency (Miranda & Cruz, 2020).

In Malaysia, a qualitative research about gay men noted that their state of optimism was negatively impacted due to the stigma and expectations from the hostile society. However, the study also mentioned that persisting to be optimistic could lead to resiliency development (Gin et al., 2022). A study in the US agreed that to maintain psychological well-being, gay men should form better strategies to establish optimism during coming out (Quinn et al., 2019). However, in the Malaysian context, no recent studies were done regarding the correlation between optimism or resiliency and mental well-being in non-heterosexual

communities. Fortunately, a few local studies (with no focus on their sample's sexual identity) did examine the relationship between mental well-being and certain variables that have a significant relationship with optimism, such as stress (Yeo & Yap, 2020) and resilience (Sulaiman et al., 2016). Optimism was found to share a significant negative correlation with stress (Yeo & Yap, 2020) while having a positive correlation with resilience (Sulaiman et al., 2016) in previous Malaysian studies. Thus, the indication that optimism shared a positive correlation with mental well-being can be inferred when past studies indicated that resilience similarly shared a positive relationship with mental well-being (Idris et al., 2019) while stress also has a negative correlation with said variable (Nordin, 2019).

In conclusion, except for Gin and their colleagues' study (2022), there was a lack of studies related to the correlation between optimism and mental well-being in Malaysian non-heterosexual communities. Even without taking into account sexual orientations, local studies about optimism are more interested in knowing its correlation with work-related variables such as work performance (Tan & Sabrina, 2018; Alias et al., 2020) and work engagement (Othman et al., 2014; Nawaz et al., 2019). However, the positive association between optimism and mental well-being can be inferred through optimism's correlation with values such as resilience (Sulaiman et al., 2016; Gin et al., 2022) and stress (Yeo & Yap, 2020).

Self-acceptance and Mental Well-being

According to a past study and as suggested in the Minority Stress Theory (Meyer 2003; Woodford et al., 2014), heterosexism is one of the significant factors that cause psychological distress to non-heterosexual populations. Heterosexism is characterized by both subtle and overt discrimination towards people with non-heterosexual orientation. Non-heterosexual people often face psychological distress due to heterosexism because they live in a heterosexist society, where heterosexuality has been assumed as the societal norm since

they were born (Woodford et al., 2014). This assumption may lead to heterosexism when people encounter non-heterosexual individuals. Negative attitudes and behaviors will be shown toward those who had violated societal norms (which included non-heterosexual individuals). The negative attitudes and behaviors led to minority stress on non-heterosexual individuals thus affecting their mental well-being. This phenomenon can also be observed from a past study with participants who originated from Turkey (Lo et al., 2021), where heterosexism and prescribed gender roles were also normalized in the country. Although non-heterosexual orientations are not against legal policies and laws in Turkey, non-heterosexuality is still considered taboo and the non-heterosexuals inevitably faced heterosexism treatments such as discrimination and marginalization. As non-heterosexual people face various unfair treatment even in countries that have legalized LGBTQ rights, it can be imagined how bad their situations would be, especially in countries where homosexuality is still illegal, such as Malaysia (Lo et al., 2021).

On the other hand, self-acceptance is found to have a significant positive impact on people's mental well-being regardless of their sexuality. Self-acceptance of sexuality carries the definition of one's acceptance and comfort in oneself by embracing his or her sexuality as it is (Camp et al., 2020a). The findings from the past study by Woodford et al., (2014) showed that there was a possibility that individuals who face heterosexism will have lower evaluations about themselves that could exacerbate their psychological distress, inferring that self-acceptance is mediating between heterosexism and psychological distress among non-heterosexual people. This inference can be supported by the research findings by Woodford et al. (2014) that indicated the associations between higher levels of heterosexism and lower level of self-acceptance and between higher levels of self-acceptance and reduced level of psychological distress, hence showing that self-acceptance can mediate the effect of heterosexism on psychological distress (Woodford et al., 2014). Thus, inferring that self-

acceptance can protect the mental well-being of people with non-heterosexual orientation through its mediation effect on the psychological distress caused by heterosexism. For example, despite facing a high level of heterosexism, if the individual has a high level of self-acceptance, it can still result in a low level of psychological distress, where the effect of heterosexism is mediated by the individual's high self-acceptance. It was also found that certain components in self-acceptance of minority sexual orientation, such as embracement of one's own sexual identity, have a positive association with the general acceptance of oneself, and past studies suggested that general self-acceptance has a positive association with one's mental well-being among both general and non-heterosexual population (Camp et al., 2020a).

Furthermore, according to past literature, there is an association between self-acceptance of one's sexual orientation with lower psychological distress and improved mental health. The findings suggested that low self-acceptance of one's non-heterosexual orientation may harm their mental health, and one with a higher level of self-acceptance of their non-heterosexual orientation may contribute to lower chances of mental health risks due to the self-acceptance effect buffering the negative consequences caused by heterosexism. However, firm conclusions were unable to be drawn due to inconsistent findings from past studies that may be reflected by different samples. This inconsistency in the findings across several different past studies may be due to methodological limitations such as sampling bias. For example, in the past study with Russian samples (Yanykin & Nasledov, 2017), it can be inferred that the participants who were willing to participate in the research regarding their non-heterosexual orientation despite living in a country with a more extreme negative policy and attitude toward LGBTQ+ due to their innate higher level of self-acceptance in terms of their sexual orientation and well-being, hence resulting in sampling bias. Another example would be a past study that recruited participants from LGBTQ+ youth community centers

(Hershberger & D'Augelli, 1995). Non-heterosexual people who attended such centers tend to have higher self-acceptance as they have more resources for self-acceptance, such as peer support and a sense of belonging in a community, compared to those who did not attend the centers, resulting in sampling bias (Camp et al., 2020a).

The past studies also implied limited research on the self-acceptance of one's sexual orientation and the general self-acceptance among the non-heterosexual populations. Thus, it reflected a significant need for further research regarding self-acceptance among non-heterosexual populations, especially in the Malaysian context. In short, self-acceptance and its relationship with mental well-being among the non-heterosexual populations has become our topic of interest for research to further understand the non-heterosexual population in Malaysia and support them better.

Gender Role Belief and Mental Well-Being

Gender role beliefs are socially constructed that define the expectation of gender-appropriate behavior (Erazo, 2020). A previous study found that gender role beliefs are one of the important predictors of non-heterosexual individuals' mental well-being. The study explained that gender role belief is an indicator of a person's femininity or masculinity behavior, was significantly associated with his/her mental well-being (Erazo, 2020).

According to previous research, individuals whose gender roles were male were less likely to be interested in getting counseling guidance than their female counterparts (Erazo, 2020).

Additionally, gender role beliefs, as reflected in appearance, behavior, personality traits, etc. used to structure interaction between individuals. Studies showed that non-heterosexual individuals are more likely to adopt gender-neutral dress and behavior as gender role beliefs can serve as external signals or marks of heterosexual norms (Brown & Gladstone, 2012).

Thus, this will increase the possibility of the homosexual population becoming the target of

discrimination and victimization as said external signals are usually understood by heterosexual people as obstruction of norms. The increased risk of discrimination and victimization may lead to higher minority stress, thus affecting the non-heterosexuals' mental well-being negatively.

Contradictory, a recent study found that individuals with more traditional gender role beliefs tend to report weaker mental well-being outcomes (King et al., 2019). A study found that men's insistence on gender roles characterized by strength, aggression, and emotional limitations negatively affected these men (Erazo, 2020), thus highlighting the dangers of high gender role beliefs to mental well-being. Fischer and Turner (1970) also found that interpersonal openness is positively related to help-seeking behavior. Men who fit into these traditional gender role beliefs may view seeking help as a sign of failure or a weak point (Erazo, 2020). Thus, an individual's gender role belief can affect people with non-heterosexual orientation's attitudes and behavior toward psychological health as well as help-seeking (Simonsen et al., 2000).

Lesbian and bisexual women reported having used alcohol or tobacco at a considerably higher rate than heterosexual women. Sexual minorities reported severe suicide attempts at a considerably higher rate than heterosexuals. Studies have shown that sexual minorities experience stress-related problems at somewhat higher rates than heterosexuals, including higher chances of suicide intent (Cochran et al., 2000). Lesbians were observed to be substantially likelier than heterosexual women to report having an identity, psychological development, social support, and social stress concerns (Bradford et al., 1994). When sexual minority females seek the assistance of qualified physicians, they are likewise subjected to bias. Compared to lesbian and bisexual women, gay males frequently endure a higher level of negative attitudes, abuse, and extreme states of mind in response to internalized homophobia

(such as suicide and homicide), as well as greater violence and discrimination based on gender norm violation. As a result of conforming to male norms, transgender males reported fewer mental health difficulties and better well-being outcomes. It might be argued that some heterosexual men who are attracted to the same sex may be struggling with internalized homophobia and are still coming to terms with their sexual orientation (Erazo, 2020). Given the psychological risks of internalized homophobia, social isolation, and the poor mental health outcomes associated with sexual minority groups, it is advised that LGBT people, not just gay men, who experience high levels of internalized homophobia, should instead seek out other LGBT people and build strong relationships with them.

Theoretical Framework

The theory that is applied in this study is the minority stress model by Meyer (2003). Three assumptions underlying this theory, include: (1) non-stigmatized people did not experience the stressors, therefore they are unique to stigmatized people, (2) the stressors are chronic, as they are related to the structures of society and cultures, and (3) the stressors are formed through social processes, institutions and structures, therefore minority stress model is socially based (Meyer, 2003). The model theorized that people with deviant sexual orientation are at higher risk of facing negative mental health due to three factors: (1) the expectation of negative future experiences or rejection, (2) internalization of societal stigma, and (3) discrimination from the environment (Valentine & Shipherd, 2018).

The expectation of a negative future or rejection experiences illustrated the fear and anxiety of sexual minorities in expecting social stressors such as prejudice and discrimination towards their sexual identity due to past experiences (Hatzenbuehler & Pachankis, 2016). According to Jones (1984), perceived stigmatization of others increased, and the stress caused by vulnerability to one's self-concept would also increase as more energy is exerted to

maintain said self-concept. Therefore, it can be inferred that the higher stress caused by expectations of rejection or future negative experiences can harm one's mental well-being. Past studies' results are also consistent with the theory, such as Lewis et al.'s (2006) study about stigma consciousness, social constraint, and mental psychological well-being among lesbians and Timmins et al.'s (2019) research about minority stressors, rumination, and psychological distress in lesbian, gay and bisexual individuals. People with high optimism usually expect to have good experiences in the future, which allow them to foster positive energy and cope with their problems positively (Scheier & Carver, 1992). Past research also mentioned qualities such as self-esteem (Richardson, 2020) and resilience (Fontaine et al., 2022) that correlates with higher mental well-being even after facing discrimination in the non-heterosexual community. As mentioned before, studies regarding optimism and mental well-being in the non-heterosexual community are still scarce, however, said qualities were also proven to be positively correlated with optimism (Duy & Yıldız, 2017; Miranda & Cruz, 2020). Therefore, it can be inferred that if non-heterosexual people have high optimism, they will demonstrate positive qualities such as high self-esteem and resilience, leading to a lesser tendency to expect negative future social interactions.

Many individuals who identify as non-heterosexual encounter prejudice, stigma, and discrimination because of their sexual orientation. According to the minority stress model, these experiences lead to difficulties in self-acceptance of an individual's sexual orientation. The minority stress model stated that these minority stressors are on a continuum from distal to proximal (Meyer, 2003). The proximal end of the continuum includes sexual concealment from others, expectations of distal stressors, and internalization of negative social attitudes. Besides, the minority stress theory also suggested that discrimination and stigma that occurs in the form of heterosexism toward people with non-heterosexual orientation may cause chronic stress and lead to various negative outcomes, including

psychological distress among them, which might consequently affect their mental well-being (Meyer, 2003; Woodford et al., 2014). A cross-sectional study of non-heterosexual individuals found that greater experience and internalization of some stressors such as stigma and discrimination regarding their non-heterosexual orientation were associated with lower sexuality self-acceptance, while lower self-acceptance was associated with greater psychological distress (Woodford et al., 2014). Overall, the findings of lower self-acceptance among non-heterosexual individuals compared to heterosexual groups are consistent with the theory that exposure to low stressors makes non-heterosexual individuals more vulnerable to mental health and well-being difficulties effects, including process difficulties such as self-acceptance, compared to heterosexual individuals (Woodford et al., 2014).

While most men and women could not fulfill hegemonic gender-role expectations, these norms frequently collide with the lives of sexual minorities, especially those in same-sex partnerships and those whose looks or conduct deviates from traditional gender role beliefs. Gender-role norms shape interpersonal interactions by signaling to others various meanings, including those about sexual orientation. These meanings can be expressed through appearance (such as clothing and hairstyles), behaviors, and personality traits. It has been described as a persistent and specific source of pressure, founded in stigma when heteronormative norms and individual transgressions of these expectations clash (Meyer, 2003). In addition, recent studies on the association between gender nonconformity and depression reveal that gender nonconformity's detrimental impacts during adolescence diminish over time, possibly making it a protective factor against depression in maturity (Li et al., 2015). The studies' results dispute the causal hypothesis that gender nonconformity causes increased minority stress. Higher levels of distal minority stressors (such as victimization and discrimination) and lower levels of proximal minority stressors will be associated with masculinity (i.e., internalized homophobia and stigma consciousness).

Recognizing one's sexual identity is crucial in developing one's sexual orientation for many lesbian and bisexual women. Because of this, many sexual minority women want to be acknowledged as individuals of the sexual minority in their interactions and daily lives rather than trying to "pass" as heterosexual (Pfeffer, 2014). Many sexual minority women describe extra stressors related to "coming out" and accepting their femme identity, which they believe to be at variance with gender-role standards in the sexual minority community, according to research by Blair & Hoskin (2014). Likewise, it could increase stress brought on by a failure to follow social standards and/or gender expectations. Femininity will be associated with higher levels of proximal minority stressors but lower levels of distal minority stressors (such as victimization and discrimination) (i.e., internalized homophobia, and stigma consciousness).

Conceptual Framework

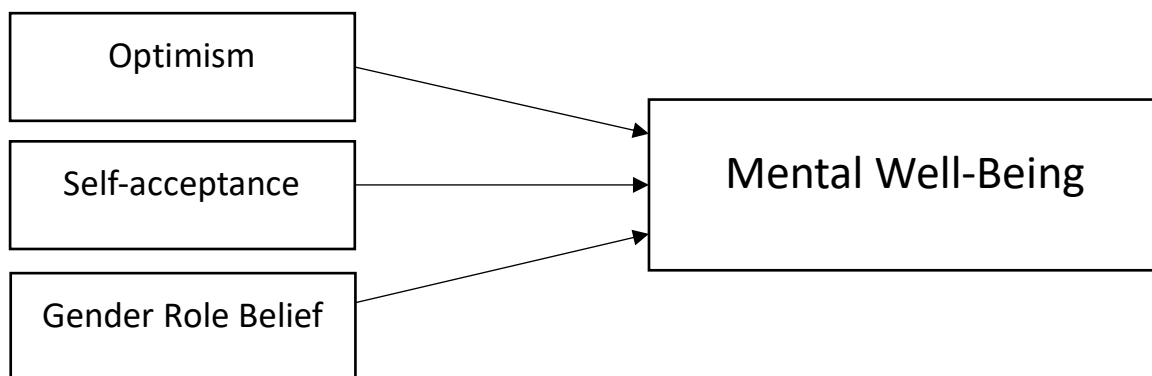


Figure 1. The conceptual framework of "The association between optimism, self-acceptance, gender role beliefs and mental well-being in non-heterosexual Malaysians".

Figure 1 shows the conceptual framework of the present study. Past studies showed a significant relationship between mental well-being and optimism (Chen et al., 2019; Conversano et al., 2010). Self-acceptance was also found to have a significant association with mental well-being among the general and non-heterosexual populations (Camp et al., 2020a). Besides that, gender role belief was significantly associated with an individual's

mental well-being (Erazo, 2020). Thus, the present study aims to examine the mental well-being of non-heterosexual Malaysians, and the association between optimism, self-acceptance, gender role beliefs, and mental well-being.

The minority stress model emphasized the negative health effects of stigma. Meyer (2003) described some distal forms of stress as those that occur outside the individual, such as discrimination and victimization. Chung and Katayama (1998) asserted that heterosexuality in Asian and Asian American cultures is associated with their tendency to maintain traditional male and female gender roles and be less open to sexual orientation. Thus, an Asian LGBTQ person revealing her or his sexuality may be seen as a rejection of her or his culturally appropriate role and a threat to family continuity. In Asian American communities where heterosexuality is prevalent, Asian LGBTQ members may be more vulnerable and may experience more anxiety during the coming out process (Szymanski, 2008). A qualitative study of ten Asian gay men showed that many participants perceived their Asian families as conservative and had difficulty identifying with their families that they were LGBTQ due to their Asian background (Chung & Szymanski, 2006). Therefore, being less open about one's sexuality may be a protective factor for mental health, as it reduces the likelihood of experiencing external heterosexuality and family stigma. It can be concluded that the stronger the gender role belief, the lesser the discrimination, and thus better well-being. The social norm can be known as a key to identifying salient groups that provide info for an individual. Gender role beliefs can be viewed as the most influential perception of normative health behavior, especially among the non-heterosexual population, indicating that people may resort to following and adhering to gender role beliefs due to their expectation of rejection and the stress of society.

Chapter III

Research Method

Research Design

The research method that was used for this correlational study was the quantitative research method with a cross-sectional survey research design. The survey research design was online as it was mentioned to be cost-effective, accessible to the public, and had a higher feedback potential (Kaye & Johnson, 1999). The correlational research design was also employed to examine the correlation between optimism, self-acceptance, gender role belief, and the mental well-being of non-heterosexual Malaysians. Furthermore, cross-sectional research design allows data collection at a set time point and observing several variables simultaneously (Thelle & Laake, 2015).

Participants

The participants chosen were non-heterosexual adult Malaysians. In this case, the study's criteria for non-heterosexuals included homosexuals, bisexuals, and asexuals. The participants were also chosen based on their age range- 18 and above, which aligned with the American Psychology Association (APA) definition that defined the appropriate terms for individuals 18 and above, including adults (*Age*, n.d.). It should be known that there was no population data regarding non-heterosexual Malaysians during the working of this study. Therefore, the study recruited the participants with age, nationality, and sexual orientation as criteria and resorted to purposive sampling because it allowed the samples to be selected based on specific research objectives and characteristics (Crossman, 2019). In addition to purposive sampling, snowballing sampling was also utilized, wherein recruited participants nominate potential participants, was used as the target samples are hard to locate and rare as

the non-heterosexual community has low visibility in Malaysia (*Apa Dictionary of Psychology*, n.d).

The sampling size was calculated using G*Power through software called G*Power 3.1. According to past studies, the correlation between mental well-being with optimism was 0.3 (Freitas et al., 2015), self-acceptance (Shilo & Mor, 2014, as cited in Camp et al, 2020b) was 0.18, and gender role beliefs was -0.15 (Van Beusekom et al., 2016), the combined effect size was found to be 0.1575. The effect size was calculated using Cohen's F statistic through this formula: $f^2 = \frac{r^2}{1-r^2}$. The effect size of each variable was 0.0989, 0.0335, and 0.023. The total effect size was calculated by averaging the three mentioned effects, resulting in 0.0518. The power chosen was 0.8, and the margin of error of 0.15. The estimated sample size needed was calculated to be 148 participants. Research showed that the non-heterosexual community had a lower response rate, therefore, requiring oversampling to better estimate community's attributes (Vaughan, 2017), a sample of 200 was planned to be recruited. However, due to time constraint and difficulties in recruiting participants, only 160 participants were recruited.

Procedure

The questionnaires were generated through Qualtrics. As the study involved human subjects, the application for "Ethical Clearance to Involve Human Subjects for Undergraduate Student's Project" was submitted to the UTAR Scientific and Ethical review committee for approval.

Due to ethical concerns, consent forms were given before the participants filled in their questions. The consent form explained the rights of the participant, where the survey is to be done voluntarily, and that they are free to withdraw anytime. It also included

information about the data collected, wherein the information they provide will not be judged and will be kept confidential.

After agreeing to the consent forms, the participants were directed to the survey about their demographics. Participants were allowed to fill in their age and sexual orientation. Those that were not adults (younger than 18 years old), non-Malaysian or heterosexual were directed to exit the questionnaire as they were not fulfilling the criterion of participants. Those who fulfilled the criteria will be guided to the following questionnaires about optimism, self-acceptance, and gender role beliefs.

Before officially starting the data collection, a pre-test was conducted. A pre-test is an essential step in a research study, where a small group of target participants will be recruited to test the study's survey questionnaires before the actual study. The purpose of this pre-test was mainly to improve the survey questionnaire's accuracy and reliability and check the feasibility of the study by identifying any problems within the questionnaire and revising it (Hu, 2014). Hence, this pre-test was conducted to avoid problems such as disorganized formatting of the questionnaire, ambiguous and long questions, as well as confusing phrases and instructions that could consequently lead to incomplete or invalid data (Hu, 2014). A sample size of 10 participants was recruited for this pre-test. Purposive and snowball sampling methods were applied to recruit Malaysian non-heterosexual participants. The results of the pretest lead to a few adjustments for the questionnaire, including – adding an 'others' for the options of gender, adding a category inquiring about any mental disorders and rephrasing the third item in the LOT-R instrument with the permission of the author.

The digital questionnaire was distributed online through social media platforms such as Facebook and Instagram LGBTQ+ support and social groups. Besides we also blanket

messaging potential participants in Microsoft Teams, Facebook, and Instagram. The period of conducting this pre-test was from 8 October 2022 to 12 October 2022.

After conducting the pre-test and making suitable adjustments to the questionnaires, the questionnaires were fully open to the public, and data collection commenced from 20th October to 17th November 2022. During the period, we managed to get a sponsor to contribute RM 150 to serve as 10 individual RM15 prizes for respondents participating in the lucky draw. After collecting the needed data, an analysis was conducted.

Research instrument

Mental well-being

The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant et al., 2007) is a tool for measuring mental health that only emphasizes good mental health. This scale measures a broad range of well-being factors, such as affective and emotional elements, psychological functioning, and cognitive and evaluative components. The items in WEMWBS are aimed at measuring mental health. The WEMWBS is a 14-item mental health scale that measures psychological functioning and subjective well-being. All the items are written positively and focus on components of good mental health. For example, items such as "I have been feeling confident" and "I have been feeling useful". Each response to an item on the scale, which can range from 1 to 5 Likert scale, is added up to determine the score. The scale has a minimum score of 14 and a maximum score of 70. This scale was reported with Cronbach's alpha coefficient of 0.89 (Tennant et al., 2007). The test-retest reliability was 0.83, demonstrating the scale's excellent level of reliability across time (Tennant et al., 2007). Moreover, the WEMWBS had been translated into Malay for the Malaysian context by specialists fluent in both Malay and English, and it displayed a high-reliability value of 0.94. The outcome of the new WEMWBS scale was comparable to that of the first version (0.91).

These findings demonstrated that the translated WEMWBS-ACREDA is a valid and useful tool for assessing the mental health of normal individuals (Shafie et al., 2016).

Optimism

We assessed optimism using the Revised Life Orientation Test (LOT-R). The test has ten statements in total three positive scores, three negative scores, and four unscored filler items. The sample item is “In uncertain times, I usually expect the best” and “If something can go wrong for me, it will.” The subjects are asked to indicate how strongly they agree or disagree with each statement by selecting the appropriate response on a Likert scale ranging from 0 (strongly disagree) to 4 (strongly agree). The LOT- R's items 3, 7, and 9 are scored in reverse while 2,5,6, and 8 are filling items. The score range is 0 to 24. Low optimism ranges from 0 to 13, 14 to 18 indicates moderate optimism while 19 to 24 indicates high optimism. (Scheier et al., 1994). Its conciseness makes it the perfect tool for tasks that involve the usage of numerous metrics. For reliability, the internal consistency of the LOT-R was satisfactory. The range of item-scale correlations, from .43 to .63, indicated that each item assessed the same underlying construct to some extent, but not sufficiently to be redundant with other items. The scale's overall Cronbach's alpha, which was .78, indicates acceptable reliability for the Revised Life Orientation Test. This scale was translated into LOT-R (Malay) and validated based on Malaysian samples. The LOT-R (Malay) total score had acceptable test-retest reliability but unsatisfactory internal consistencies (Cronbach's = 0.58; ICC = 0.62). The LOT-R (Malay) also proved to construct validity since exploratory component analysis revealed that all the items had factor loadings greater than 0.4. The LOT-R (Malay) was a valid psychometric tool that may be used to evaluate Malaysians' optimism (Abdullah et al., 2018).

Self-acceptance

The Self-Acceptance of Sexuality Inventory. A modified version of the Self-Acceptance of Sexuality Inventory (SASI; Camp et al., 2020b) was used to evaluate self-acceptance. Self-acceptance of sexuality and challenges with self-acceptance of sexuality are two subscales of the ten-item scale, each containing five items that are scored on a five-point Likert scale. Items 1, 3, 5, 7, and 9 on the self-acceptance of sexuality subscale are evaluated as follows: "totally true for me" indicates 5; "totally untrue for me" indicates 1. Items 2, 4, 6, 8, and 10 on the difficulties self-acceptance subscale are evaluated as follows: "totally true for me" indicates 1, while "totally untrue for me" indicates 5. Responses of 4 or 5, as opposed to 1 or 2, are more appropriate at the higher end of the rating scale. The reverse scoring of negatively worded items resulted in higher total scores that showed higher levels of self-acceptance of sexuality. The components of the second subscale (questions 2,4,6,8 and 10) are reverse coded to create one universal score. All references to "sexuality" were changed to "identification" to broaden the scale's applicability to all varieties of queer identity (example: "I accept all parts of my identity"). An explanation of the term "identification" was also supplied when the items were presented. The SASI displayed satisfactory test-retest reliability (ICC = 0.90) and internal consistency (= 0.94). (Camp et al., 2022b). Additionally, significant correlations (p.01) with outcome measures like sexuality self-esteem (r=.71), internalized heterosexism (r=-0.61), and general self-acceptance (r=0.36) provided evidence of strong construct validity.

Gender Role Belief

The Liberal Feminist Attitude and Ideology Scale (LFAIS), developed by Morgan in 1996, consists of 60 items and assesses a person's liberal feminism across three domains: gender role attitudes, feminism's objectives, and feminist ideology. For the current study,

only the 10-item gender role subscale was used. Participants must rate using a Likert scale from 1 (strongly disagree) to 6 (strongly agree). Ten questions make up Morgan's (1996) Liberal Feminist Attitude and Ideology Scale (LFAIS): Gender Roles subscale, which assesses perceptions of the appropriate roles for men and women. The statements "It is insulting to the husband when his wife does not take his last name" and "Both husband and wife should be equally responsible for the care of young children" are only a couple of examples of what is stated. The remaining items are calculated using the Likert scale, and only five items (questions 1,2,4,6, and 10) are reversed and scored. The computed score will be generated with a high score indicating a liberal view of gender role belief. Test-retest reliability was equal to .83, while the reliability of the subscale measuring gender roles is Cronbach's alpha = .77 (Morgan, 1996). In addition, it demonstrated good convergent and concurrent validity (Morgan, 1996).

Reliability Test

Due to the small sample size of ten in the pre-test, we decided to use the final sample in the actual study which consisted of 160 valid data to run the reliability test. The interpretation of the reliability test result was deciphered through the rule of thumb of Cronbach's alpha mentioned by Ursachi et al. (2015)'s study. Said study stated that results of Cronbach's alpha between .6 to .7 show acceptable reliability while .8 and above show great or greater reliability. As shown in Appendix V, the results of the reliability test showed that WEMWBS's Cronbach's alpha = .913, indicating a great level of reliability. On the other hand, LOT-R's Cronbach's alpha = .647, indicating an acceptable level of reliability. Moving on, SASI's Cronbach's alpha = .876 indicating a great level of reliability. Lastly, LFAIS's Cronbach's alpha = .744, indicating an acceptable level of reliability.

Data analysis

The software that was used for data analysis in this study was IBM SPSS Statistics version 26. The demographic data of the participants were analyzed using descriptive analysis to help researchers have a more comprehensive understanding of the sample characteristics and possibly make further assumptions regarding the relationship between participants' demographics and the results of the study. Normality test was also conducted through the skewness and kurtosis, histogram, Q-Q plot, and Kolmogorov-Smirnov Test (K-S Test) to determine that the data meets the assumption of normally distributed data. Screening and filtering of the data were conducted using SPSS by excluding incomplete or irrelevant responses to avoid inaccurate results.

Pearson's Product Moment Correlation (PPMC) was tested to find the relationship between self-acceptance and mental well-being, optimism and mental well-being, and gender-role belief and mental well-being. Pearson's correlation coefficient (r) was used to describe the nature of the relationship between the independent variable and the dependent variable in terms of the direction and strength between the two variables, while the significance value can be used to indicate whether the relationship found is significant or non-significant.

Besides that, Multiple Linear Regression (MLR) was applied to test the linear relationship between several independent variables and the dependent variable. In this case, the dependent variable is mental well-being, while the independent variables are self-acceptance, optimism, and gender-role belief.

Chapter IV

Results

Descriptive Statistics

Demographic Characteristics

As shown in Table 1, there were 160 respondents in this study. Among them, there were 61 males (38.1%), 79 females (49.4%), and 20 "others" (12.5%), which included those who identified as non-binary, transgender, genderfluid, and agender. All 160 respondents were Malaysian ($n = 160$). While the age of the respondents ranged from 18 to 48 years old ($M = 25.24$, $SD = 6.249$). As for the respondents' ethnicity, the respondents were constituted of 16.3% Malays ($n = 26$), 55.6% Chinese ($n = 89$), 12.5% Indians ($n = 20$), and 15.6% "others" ($n = 25$) which included mixed races of Chinese and Indian, mixed races of Malay and Chinese, Punjabi, Eurasian, native Sabahan (Kadazan, Dusun, Bajau, and Rungus), as well as native Sarawakian (Bidayuh and Melanau). There was a total of 14.4% Muslims ($n = 23$), 35% Buddhists ($n = 56$), 23.8% Christians ($n = 38$), 10.6% Hindus ($n = 17$), and 16.3% "others" ($n = 26$) which consisted of Catholic, Sikh, Atheist, Taoist, Pagan, agnostics and free thinkers. As for the respondents' sexual preference, there was a total of 40.6% ($n = 65$) who were attracted to people of the same gender (Homosexuals), 55.6% ($n = 89$) who were attracted to people of the same, and different gender (Bisexuals), and 3.8% ($n = 6$) who were not attracted to either of the genders (Asexuals). Most of the respondents had not been clinically diagnosed with a mental disorder before, which consisted of 82.5% ($n = 132$) of respondents, while 17.5% ($n = 28$) of the respondents had been diagnosed with a mental disorder before. In this context, mental disorder means any mental illnesses that caused disturbance and impairment in the respondents' daily functioning to the extent where they seek help from a professional and receive clinical diagnosis of a mental disorder.

Furthermore, to answer the Research Question (RQ1), the total scores of the respondents on the mental well-being scale were classified into three groups, namely low, medium and high mental well-being group. As the WEMWBS scale did not provide cut-off scores, the cut-off scores were computed using the formula, Mean \pm 1 SD. As computed, the cut-off score for low mental well-being group would be 34.58, for high mental well-being group would be 53.62, while medium mental well-being group would be between 34.58 and 53.62. As shown in Table 2, 13.8% of the respondents were in the low mental well-being group ($n = 22$), 66.9% were in the medium mental well-being group ($n = 107$), while 19.4% were in the high mental well-being group ($n = 31$). The total scores in the low mental well-being group ranged from 24 (lowest) to 34 (highest) points, in the medium mental well-being group was from 35 (lowest) to 53 (highest) points, and lastly the total scores in the high mental well-being group ranged from 54 (lowest) to 70 (highest) points. Overall, the mental well-being of the respondents was moderate, as majority of them scored in the medium mental well-being group.

Table 1
Demographic Information of Respondents (n = 160)

	<i>n</i>	<i>%</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Gender						
Male	61	38.1				
Female	79	49.4				
Others	20	12.5				
Age			25.24	6.249	18	48
Ethnicity						
Malay	26	16.3				

Chinese	89	55.6
Indian	20	12.5
Others	25	15.6
Religion		
Muslim	23	14.4
Buddhist	56	35.0
Christian	38	23.8
Hindu	17	10.6
Others	26	16.3
Sexual Preference		
Same gender (Homosexual)	65	40.6
Same and different gender (Bisexual)	89	55.6
Neither same nor different gender (Asexual)	6	3.8
Mental Disorder History		
Yes	28	17.5
No	132	82.5

Note. n = number of cases; % = percentage; M = mean; SD = standard deviation; Min = minimum value; Max = maximum value

Table 2

Classification of Mental Well-being Groups (n = 160)

	<i>n</i>	%	<i>M</i>	<i>SD</i>	Min	Max
Mental Well-being			44.10	9.52	24	70
Low (< 34.58)	22	13.8				
Medium (53.62 > x > 34.58)	107	66.9				
High (> 53.62)	31	19.4				

Note. n = number of cases; % = percentage; M = mean; SD = standard deviation; Min = minimum value; Max = maximum value

Detection and Removal of Statistical Outliers

Boxplot was generated along with the normality tests, and the statistical outliers were detected from the generated boxplots. No outliers were found in the boxplot for mental well-being. While for optimism, five outliers were detected (Cases 5, 86, 112, 143 and 150). As for self-acceptance, two outliers were detected (Cases 38 and 86). Lastly, for gender role belief, one outlier was detected (Case 144). As such, there was a total of 7 outliers, which were cases 5, 38, 86, 112, 143, 144 and 150. The outliers were first removed before further analysis of the data, hence, there was a total of 160 data that were valid for further processing and statistical analyses after the removal of the seven outliers (refer to Appendix K).

Assumptions of Normality

Normality tests were conducted to ensure normal distribution for all the variables which included optimism, self-acceptance, gender role belief, and mental well-being. The normality tests that were conducted were skewness and kurtosis, histogram, Q-Q plot, and Kolmogorov-Smirnov Test (K-S Test).

Skewness and Kurtosis. Based on the results of skewness and kurtosis, all variables did not violate the normality assumption, as all values fall within the acceptable range of ± 2 for skewness and kurtosis. In terms of skewness, the values were -.127, -.785, -.673, and .313 for optimism, self-acceptance, gender role belief, and mental well-being respectively, all within the acceptable range of skewness of ± 2 . While for kurtosis, the values were -.353, -.352, -.261, and -.219 for optimism, self-acceptance, gender role belief, and mental well-being respectively, all of which also fell within the acceptable range of kurtosis of ± 2 (refer to Appendix L).

Histogram. The histograms for optimism and mental well-being were almost excellent, while the histograms for self-acceptance and gender role belief were negatively skewed but still symmetrical, hence still acceptable (refer to Appendix M). Overall, the histograms for all the variables appeared to be nearly symmetrical, indicating that the histogram's normality assumption for all variables was not violated.

Q-Q Plot. Based on the Q-Q plots for all variables, the normality for optimism and mental well-being was almost excellent, as most of the observed values fell closely along the diagonal line representing the expected values. The normality for gender role belief was still acceptable, although there was a slight deviation, the observed values did not deviate too much from the expected values on the diagonal line. However, the normality of self-acceptance based on its Q-Q plot was not achieved, as the observed values deviated slightly further from the expected values (refer to Appendix N). Hence, this indicated that the normality assumption based on the Q-Q plot was achieved by optimism, mental well-being, and gender role belief, but not self-acceptance.

Kolmogorov-Smirnov Test (K-S Test). K-S Test was conducted to determine whether there was a difference in normal distribution between the sample and the population.

The results of the K-S test showed that all variables including optimism, $D(160) = .086$, $p = .006$, self-acceptance, $D(160) = .141$, $p < .001$, gender role belief, $D(160) = .092$, $p = .002$ and mental well-being, $D(160) = .083$, $p = .008$ had violated the normality assumption, as all the significance values were smaller than .05, indicating significant results and that there was a significant difference in normality between the sample and population (refer to Appendix O).

Conclusion for Assumptions of Normality. Optimism, gender role belief, and mental well-being satisfied four of the five normality indicators, including skewness, kurtosis, histogram, and Q-Q plot. While self-acceptance satisfied three out of the five normality indicators, including skewness, kurtosis, and histogram. Overall, all the variables had fulfilled more than half of the five indicators of normality, hence it can be concluded that all variables have achieved normal distribution.

Table 3

Skewness and Kurtosis

	Skewness	Kurtosis
Optimism	-.127	-.353
Self-Acceptance	-.785	-.352
Gender role belief	-.673	-.261
Mental well-being	.313	-.219

Assumptions of Multiple Linear Regression (MLR)

Preliminary analyses were conducted to determine whether the assumptions of regression analysis have been met, which included the assumptions of multicollinearity, independence of errors, multivariate outliers and influential cases, homoscedasticity, normality of residuals, and linearity of residuals.

Multicollinearity. Multicollinearity is problematic as it is related to the independent variables having high correlations among each other, resulting in difficulty in determining the

individual contribution of the independent variables respectively. Tolerance and Variance Inflation Factor (VIF) was utilized to identify collinearity among the independent variables, which included optimism, self-acceptance, and gender role belief. A tolerance value of $\leq .10$ and a VIF value of ≥ 10 indicated a collinearity issue (Hair et al., 2010; Pallant, 2010). As shown in Table 4, the tolerance values for all three independent variables were $>.10$, while the VIF values were all <10 . Therefore, there was no violation by any variable for the assumption of multicollinearity.

Independence of Errors. This assumption must be achieved to indicate that the residuals are independent of each other. Durbin-Watson was utilized to test the assumption, and the value should be within the range of 1 to 3, as values outside this range indicate a violation of the assumption. As shown in Table 5, the value of Durbin-Watson was 2.132, indicating congruence to the assumption as it was nearer to 2. Therefore, there was no violation of the assumption of independence of errors.

Multivariate Outliers and Influential Cases. Mahalanobis distance, Cook's distance, and Leverage were utilized to determine whether any potential outliers needed to be removed. Violation of any two of the residual statistics will result in the removal of the case. The conservative cut-off point for Mahalanobis distance is 15, where cases with values >15 are problematic. Based on the case summaries table in Appendix R, all the values of Mahalanobis distance were <15 , hence, all cases showed no violation. Next, Cook's distance value >1 indicates that the case may be a potential outlier (Cook & Weisberg, 1982). All values of Cook's distance in the case summaries were <1 (refer to Appendix R), therefore, no violation was found. Lastly, the Leverage value of .025 was calculated using the formula, $\text{Leverage} = (p+1)/n$. According to Steven (1984), cases with values > 3 times the value of Leverage may be problematic. Therefore, all cases showed no violation as the values were all

< 3 times the value of Leverage, except for case number 93 with a value >3 times the value of Leverage (refer to Appendix R). However, case number 93 was still retained as the other two residual statistics were fulfilled by it.

In conclusion, all cases fulfilled the residual statistics, hence there was no removal of cases from the sample data and all 160 data were retained for further analyses.

Homoscedasticity, normality, and linearity of residuals. Based on the scatterplot, the residuals appeared to be distributed randomly and evenly at the center of the scatterplot around the zero line. Hence, there was no violation of the assumption of homoscedasticity, normality, and linearity of residuals (refer to Appendix S).

Conclusion for Assumptions of Multiple Linear Regression (MLR). No violation was found for all the assumptions, including the assumption of multicollinearity, independence of errors, multivariate outliers and influential cases, homoscedasticity, as well as normality and linearity of residuals. Hence, it was suggested that the assumptions of MLR were all met with satisfactory results.

Table 4
Multicollinearity

		Tolerance	VIF
1	(Constant)		
	Optimism	.966	1.035
	Self-Acceptance	.795	1.259
	Gender role belief	.804	1.244

Dependent Variable: Mental Well-being

Table 5

Independence of Errors

Model	Durbin-Watson
1	2.132

Note. Dependent Variable = Mental Well-being. Predictors = Optimism, Self-Acceptance, Gender role belief

Inferential Statistics

There were three research hypotheses to be examined in the present study. Pearson Product Moment Correlation (one-tailed test) was conducted to investigate the hypotheses, as each of the research hypotheses was specified to examine either positive association or negative association. The normality assumptions of the parametric test were achieved prior, indicating a normal distribution of the data. The results of the Pearson Correlation will be explained below based on the said three research hypotheses.

H₁: There is a positive association between optimism and mental well-being among non-heterosexual Malaysians.

The results of PPMC demonstrated that the association between optimism and mental well-being among non-heterosexual Malaysians was statistically significant at .001 level and positively correlated, $r(158) = .580, p < .001$ (refer to Table 6). According to Schober (2018), as the correlation coefficient, r , fell within the range of .40 to .69, it was a moderate correlation. Therefore, H_1 was supported.

H₂: There is a positive association between self-acceptance and mental well-being among non-heterosexual Malaysians.

The results of PPMC showed no statistically significant positive association between self-acceptance and mental well-being among non-heterosexual Malaysians, $r(158) = .124$, $p = .06$ (refer to Table 6). Hence, H_2 was not supported

H₃: There is a negative association between gender role beliefs and mental well-being among non-heterosexual Malaysians.

The results of PPMC revealed that the association between gender role beliefs and mental well-being was statistically significant at .05 level and negatively correlated, $r(158) = -.159$, $p = .022$ (refer to Table 6). As the correlation coefficient, r , fell within the range of .10 to .39, it was considered a weak correlation (Schober, 2018). Therefore, H_3 was supported.

Table 6

Correlation between Optimism, Self-Acceptance, Gender role belief and Mental Well-being

Variables	Optimism	Self-Acceptance	Gender role belief	Mental Well-being
1. Optimism	-	-	-	.580**
2. Self-Acceptance	-	-	-	.124
3. Gender role belief	-	-	-	-.159*
4. Mental Well-being	.580**	.124	-.159*	-

Note. One-tailed test. * $p < .05$; ** $p < .01$

Additional analysis: Multiple Linear Regression (MLR) Analysis

Although the research objectives of the present study did not include examining whether the independent variables (optimism, self-acceptance, and gender role belief) were significant predictors of the dependent variable (mental well-being), Multiple Linear Regression (MLR) was still conducted as well to find out whether there was any predictive relationship between optimism, self-acceptance, gender role belief and mental well-being to

serve as a piece of additional information. Preliminary analyses were tested to ensure that the regression model fits and that there is no violation of the assumptions of MLR. As self-acceptance was not significant at the bi-variate level, it was excluded from this regression model.

Hence, Multiple Linear Regression (MLR) was conducted to examine whether optimism and gender role belief significantly predicted mental well-being among non-heterosexual Malaysians. As shown in Table 7 and Table 8 (Appendix U), the regression model was statistically significant, $F(3,156) = 29.67, p < .001$, and accounted for 35.1% of the variance. The results of the MLR analysis showed that optimism was a significant positive predictor of mental well-being ($\beta = .551, p < .001$), and gender role belief was a significant negative predictor of mental well-being ($\beta = -.176, p < .05$) among non-heterosexual Malaysians (refer to Table 9, Appendix U).

Chapter V

Discussion

Research Questions

What is the level of mental well-being among non-heterosexual Malaysian?

Most of our respondents scored in the group of medium mental well-being, indicating that their mental health was moderate. The results are supported by a few previous pieces of research. Particularly, the findings demonstrate a significant negative correlation between age and psychological discomfort, sadness, and somatization. These indicate that non-heterosexual individuals are less likely to develop emotional distress, anxiety, and somatization symptoms the older they are.

According to the study, older people who identify as a sexual minority share many traits with older people in general (Fredriksen-Goldsen et al., 2013). These findings may potentially be connected to a cross-cultural context. It was apparently practiced in China, Korea, Hong Kong, and Japan. In East Asian cultures, the tradition of xiao (filial piety) compels people to respect, follow, care for, and keep in touch with their elders (North & Fiske, 2015). Hindu vision of the joint family system (Singh et al., 2005) and Islamic teaching on duties to seniors are two examples of South Asian cultures that place a strong emphasis on honoring elders (Sung et al., 2009). Asians, notably Malaysians, place a high priority on appreciating elders, which may have an impact on how they view other older adults, including older non-heterosexual individuals.

One of the potential causes is that, unless people are well familiar with LGBT individuals, they find it difficult to distinguish between LGBT individuals and other heterosexuals in the community. Most heterosexuals in the community may be less likely to

discriminate against them because of this issue. LGBT individuals' physical qualities are not significantly different from those of other heterosexuals, in contrast to transgender people, whose physical traits are, according to studies, more likely to be discriminated against than those of transgender (Whitton et al., 2016). In addition, Asian culture places a strong emphasis on the idea that sexuality is a private subject and that it is improper to reveal sexual behaviors in public (Shelton & Barnes, 2016). Therefore, non-heterosexual individuals may not face much criticism because of their outward appearance and social taboos that serve to lessen suspicion. This serves as a benefit as they may face little or no rejection because of their actions, as well as leads to greater mental well-being.

What is the association between optimism and mental well-being among non-heterosexual Malaysians?

There is a statistically significant positive correlation between optimism and mental well-being among non-heterosexual Malaysians. This means that non-heterosexual Malaysians who reported to have higher optimism are more likely to have higher scores on mental well-being among non-heterosexual populations. Hence, H₁ is supported.

The results of the study align with Gin and colleagues' (2022) study that coming out is linked with deficiency because the Malaysian non-heterosexual population often experiences unfavourable treatment because of their toxic society. With these underlying problems, it will be difficult to see how they can accept responsibility for their life choices before their optimism diminishes. Fortunately, consistent with our hypothesis, the non-heterosexual population employs optimism as an essential component of their coming out to prevent psychological discomfort. Particularly when they have positive experiences coming out to their family members who support them wholeheartedly. They feel grateful because of

the normative societal impact. Non-heterosexual population in Malaysia utilizes their optimism and a sense of self-worth to aid them in coming out.

Conversely, homosexual individuals come out in response to stressful environments that emerge from insecurities. Coming out of the closet starts with dissatisfaction because of numerous unanticipated external circumstances. The rationale is that homosexual individuals commonly correspond coming out with discrimination against sexual minorities and with suicide (Ferlatte et al., 2019). Positively, due to their supportive social network, non-heterosexuals in Malaysia can effectively cope with their pressures. They are highly flexible and can tolerate the suffering their coming out has brought. They ought to develop a better strategy to encourage optimistic thinking during their coming out to preserve their mental well-being.

What is the association between self-acceptance and mental well-being among non-heterosexual Malaysians?

There is no statistically significant positive correlation between self-acceptance and mental well-being among non-heterosexual Malaysians. Therefore, the H₂ is not supported.

The results are supported by a few prior studies. Firstly, Elizur and Mintzer (2001, 2003), who discovered that lack of support from others had a negative impact on self-acceptance for those who identify as LGBTQ+ populations, explained the insignificant finding. Overall, these results show no correlation between self-acceptance and mental health, which could mean, for instance, that for participants still going through identity development, family acceptance of one's minority sexuality is more crucial.

Similarly, Yanykin and Nasledov (2017) discovered no association between psychological well-being and one's level of self-acceptance of their sexuality. Although these

variances in results may be due to sample differences, it is impossible to draw any firm conclusions from them. For instance, the lack of a correlation between self-acceptance and psychological discomfort in a Russian sample could result from sampling bias. In a culture with many anti-LGBQ+ narratives and policies, individuals might only be willing to access and participate in research about their LGBQ+ sexual identity if they had very high levels of self-acceptance and well-being. These may be debatable, which played a small role in the non-heterosexual Malaysians' insignificant results of self-acceptance and mental health.

What is the association between gender role beliefs and mental well-being among non-heterosexual Malaysians?

There is a significant negative correlation between gender role belief and mental well-being among non-heterosexual Malaysians. This implies that among non-heterosexual Malaysians, those with high LFAIS scores tend to have more liberal gender role beliefs, which contributes to better mental well-being. Therefore, H₃ is supported.

As a result, the findings of this study demonstrated that individuals with reduced gender role beliefs are more likely to lead lives with better mental health. Higher levels of masculinity in adolescent males and females predicted fewer depressive symptoms for both genders, according to a previous study by King and their colleagues (2019), whereas among a sample of adolescent females, those supporting conventional feminine ideologies associated with body objectification (i.e., the importance of looking beautiful) had a relatively high depressed mood.

Our findings are consistent with other studies showing that young males who adhere to masculine norms about emotional containment are prevented from revealing the full consequences of their distress. These studies have also been done with adults, showing that certain masculine norms have been linked to suicidal ideation.

This can be explained by the fact that an individual who adheres to the stricter traditional gender roles is expected to value gender identities and roles. Additionally, according to cultural standards, homosexuality is thought to go against the nature of femininity and masculinity (Nierman et al., 2007). Thus, compared to those who perceived more traditional gender beliefs, individuals who perceived more liberal gender role beliefs held less psychological distress among homosexuals.

Implications

Theoretical implications

The theory applied in this research was the minority stress model by Meyer (2003). According to the minority stress model, non-heterosexual populations encounter more stress than heterosexuals because of stigma, prejudice, and discrimination, and this stress can result in mental and physical problems. According to the findings, self-acceptance does not significantly positively correlate with the mental well-being of non-heterosexuals. This can be explained as the lack of support from others had a detrimental effect on self-acceptance for LGBTQ+ groups, it is especially crucial for individuals still forming their identities to have family members that accept their minority sexuality.

Moreover, according to the results, optimism and mental health are positively correlated among Malaysian non-heterosexuals. People with high optimism typically anticipate having pleasant experiences in the future, which enables them to generate positive energy and favourably deal with their challenges, which can be explained by the minority stress model (Scheier & Carver, 1992). Self-esteem and resilience are traits that have been linked to improved mental well-being even in the face of discrimination in the non-heterosexual population (Richardson, 2020; Fontaine et al., 2022). Therefore, it may be concluded that non-heterosexuals who exhibit high optimism will also exhibit positive traits

like strong self-esteem and resilience, reducing their tendency to anticipate undesirable future social interactions. This study has also enriched the literature on research regarding homosexuality in Malaysia.

Meanwhile, based on the results, gender role belief is positively correlated among non-heterosexual populations. According to the minority stress model, gender-role norms influence social interactions by sending signals to other people that might have many interpretations, including ones related to sexual orientation. These interpretations can be communicated by appearance (including attire and haircut), actions, and character attributes. When heteronormative norms and personal offences of these expectations collide, it has been defined as a constant source of pressure, grounded in stigma. The results show that non-heterosexual Malaysians who believe in gender roles have a substantial unfavourable link with their mental well-being. This study showed that gender role beliefs were associated, and the minority stress model contributed to understanding why this phenomenon occurred. As an outcome, our study was able to provide statistical proof of the relationship as well as strengthen the minority stress concept. As a result, this study's findings can be used as a baseline and a valuable contribution to subsequent research in this area.

Practical implications

Practically speaking, the study's findings could be used as a source of inspiration when developing psychological awareness-raising interventions or public health campaigns that aim to change the public's opinions regarding homosexuals in ways that promote sexual behavior. Only a small portion of the information on homosexuality is exposed to the public in Malaysia. The public can be educated to have a greater awareness and comprehension of their prejudices toward homosexuals as well as about homosexuals by implementing

awareness-raising campaigns. Unquestionably, this is significant since the program will eventually help non-heterosexual people improve their mental health locally.

Other than that, this study can generate more recent data and findings on this issue for follow-up studies. The outcomes of this study can support and motivate additional research in this field by raising awareness of the problems experienced by this sexual minority group, as there have not been sufficient studies in Malaysia on this delicate issue of homosexuality. As a result, this study's revised findings can be used as a model and point of reference for future studies that study more of the numerous aspects that influence views and the association of mental well-being toward homosexuals in Malaysia or the setting of Southeast Asia.

Finally, the results of this study might also be a resource when formulating policies for fostering beneficial social change. The public is urged to confront their biases and demonstrate transparency to discover more about homosexuals and the hardships they had as a sexual minority in Malaysia. By accomplishing this, society's homophobic attitudes and prejudices can be altered, leading to greater acceptance of homosexuals. Thus, our society can be trained to accept variety, understand homosexuality-related concerns more and combat anti-homosexual prejudice and discrimination.

Limitation

Due to financial and time constraints, the research was done through a self-report survey, as such, the participants might post answers that make themselves look more favorable (Bhattacharjee, 2012). This may endanger the validity of the response as the answers given could be dishonest, thus leading to unreliable data. Another limitation contributed by the survey's self-report nature was the lack of human contact. Due to the lack of human contact, participants can give dishonest responses without supervision, which increases the risk of validity. Besides, if the participants encountered unclear instructions

from the questionnaire, there was no one to assist them. To reduce the risk of said occurrence, we conducted a pre-test to ensure the difficulty and relevance of the survey.

Another limitation came from the usage of the online survey. The disadvantage of using the online survey includes the attraction of only “volunteer” participants (Baltar & Brunet, 2012). In addition, as the survey was delivered online in an unsolicited manner through publishing on online platforms and private messaging potential participants, only proactive participants that were confident to be open with their sexual orientation responded, thus increasing the risk of skewed results.

The following limitation of the study is a weak generalization. As the research used purposive sampling to target participants that are non-heterosexuals, adults, and Malaysians, the generability of the results is weak. Purposive sampling was mentioned to be hard to defend the representativeness of the sample due to its subjectivity and non-probability nature (Rai & Thapa, 2015). Besides, we also used snowball sampling to recruit participants. According to Baltar and Brunet (2012), the snowballing method was unsuitable for applying statistical analysis for generalization results. Another cause of this limitation includes the usage of a cross-sectional study. As a cross-sectional study only collects data at a set point in time, as such if data is taken at another time, differing results may occur, leading to weak generalization (Levin, 2006).

Recommendation

As it is impossible to overcome social desirability bias through self-report methods, we recommend that future researchers use interviews or other in-person methods to reduce said bias. This is because the researchers can spot inconsistent responses and uncomfortable body language of the participants and react accordingly. Besides, the participants can ask questions and clarify if they face difficulties in answering survey if it is done face-to-face.

Moving on, we recommend collecting more funds and incentives to recruit non-heterosexual participants. For example, giving RM15 to every respondent instead of a lucky draw. This can attract more non-heterosexual participants, thus increasing the sample size and reducing the limitation of weak generalization of the non-heterosexual community.

Besides, we also recommend doing a longitudinal study about the mental well-being of non-heterosexuals if there are sufficient funds and time. This is because a longitudinal study can observe consistent patterns of thought and behavior over a certain amount of time, thus reducing the risk of the results being affected by situational factors.

Conclusion

Both the government and society in Malaysia discriminated against and stigmatized homosexual populations. Therefore, this study aimed to examine the association between self-acceptance, optimism, gender role beliefs, and mental well-being among non-heterosexual Malaysians.

A sample of 160 adult non-heterosexual Malaysians were recruited through online platforms. Purposive and snowball sampling methods were applied to recruit a group of Malaysian non-heterosexual participants based on their age range which is 18 years old and above. This study used a quantitative research method with a cross-sectional survey research design. The data was collected by distributing a survey that included the Warwick-Edinburgh Mental Well-Being Scale, Revised Life Orientation Test, Self-Acceptance of Sexuality Inventory, and Liberal Feminist Attitude and Ideology Scale: Domains and Items Gender Roles.

Results showed a significant positive correlation between optimism, gender role beliefs, and mental well-being in non-heterosexuals. This occurred because the non-

heterosexual community uses optimism as a key strategy for stepping out to minimize psychological distress. They are extremely adaptable and optimistic, enabling them to keep up with the sorrow that their coming out has caused. High LFAIS scores, on the other hand, are more likely to hold liberal views on gender roles, which benefits mental health. Regarding the unequal treatment of gender identities and roles, they were stricter and more respected. As a result, individuals who held traditional gender roles had more negative opinions, whereas those who engaged in liberal gender roles belief had more tolerant attitudes leading to better mental health.

In addition, it was demonstrated that the theoretical implications of the minority stress model findings supported the theory's construct and could bridge the knowledge gap in this field. The practical implications of the findings include serving as a resource in developing psychological interventions aimed at increasing public awareness of health issues and public health discourse, as well as a planning tool for initiatives to cultivate positive social change and a source of more current data for upcoming studies. Additionally, the study was constrained by a lack of funding and time, which could have produced incorrect results. While the self-report survey may cause participants to give dishonest answers, the use of purposive and snowball sampling in the sampling process may result in shaky generalization.

Finally, suggestions for enhancement and improved future research were also provided. To lessen the bias, it may be able to undertake interviews or other face-to-face procedures, gather additional funding and incentives to entice more reluctant volunteers and finally perform longitudinal studies to track recurrent patterns of thought and behaviours over an extended period.

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Appendices

Appendix A: CONSENT FORM

Consent Form



**UNIVERSITY TUNKU ABDUL RAHMAN
FACULTY OF ARTS AND SOCIAL SCIENCE**

Introduction

This research study is being conducted to study "**The association between optimism, self-acceptance and gender role beliefs in non-heterosexual Malaysians**" as a requirement for the subject UAPZ3013 Final Year Project I. In order to collect required data, your participation is needed for our research study.

Procedures

You will be asked to complete the questionnaire which consists of **5 sections**. You are required to complete this questionnaire within **15-20 minutes**. Questions in this questionnaire included details about optimism, self-acceptance and gender role beliefs in non-heterosexual.

Benefits

There are no direct benefits to subjects. However, your participation will help us get more information and learn more about the **association between optimism, self-acceptance and gender role beliefs in non-heterosexual** so we would like to ask for your cooperation.

Confidentiality

All information provided will remain as **private and confidential**. The information given will only be reported as group data with no identifying information and only use for academic purpose. All information will be kept in secure location where only our group members will have the access to them.

Participation

The participation in this research study is voluntary and you have the right to withdraw or refuse to participate entirely without any loss to you.

Contact information

If you have any questions or concerns, please feel free to contact our group member at tanzhiying11@lutar.my (Tan Zhi Ying), vanessalai0412@lutar.my (Lai Weng Yen) and teelijia2001@lutar.my (Tee Li Jia).

Q16 Participant's signature:

Q17 Date:

Page Break

Appendix B: Demographic Details

PART A: Demographic Details

Instruction: Please fill in your personal details or put a tick in the box given.

1. Age:

2. Are you a Malaysian?

Yes (1)

No (2)

Skip To: End of Survey If 2. Are you a Malaysian? = No

3. What is your sexual preference?

I'm attracted to people of a different gender (1)

I'm attracted to people of a same gender (2)

I'm attracted to people of a same and different gender (3)

I'm not attracted people of a same and different gender (4)

Skip To: End of Survey If 3. What is your sexual preference? = I'm attracted to people of a different gender

4. Gender:

Male (1)

Female (2)

5. Ethnicity:

Malay (1)

- Chinese (2)
- Indian (3)
- Others, please state: (4) _____

6. Religion:

- Islam (1)
- Buddhism (2)
- Hinduism (3)
- Christianity (4)
- Others, Please state: (5) _____

7. Do you have any family members/relatives/close friends who are attracted to same sex relationship?

- Yes (1)
- No (2)

Appendix C : The Warwick–Edinburgh Mental Well-being Scale (WEMWBS)

PART B: The Warwick–Edinburgh Mental Well-being Scale (WEMWBS)

Instruction: Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last 2 weeks.

	None of the time (1)	Rarely (2)	Some of the time (3)	Often (4)	All of the time (5)
I've been feeling optimistic about the future (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been feeling useful (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been feeling relaxed (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been feeling interested in other people (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've had energy to spare (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been dealing with problems well (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been thinking clearly (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been feeling good about myself (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been feeling close to other people (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been feeling confident (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've been able to make up my own mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

about things
(11)

I've been
feeling loved
(12)

I've been
interested in
new things
(13)

I've been
feeling
cheerful (14)



Appendix D: Revised Life Orientation Test (LOT-R)

PART C: Revised Life Orientation Test (LOT-R)

Instruction: Please answer the following questions about yourself by indicating the extent of your agreement using the following scale.

	Strongly disagree (0)	Disagree (1)	Neutral (2)	Agree (3)	Strongly agree (4)
In uncertain time, I usually expect the best (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's easy for me to relax (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If something can go wrong for me, it will (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm always optimistic about my future (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy my friends a lot (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's important for me to keep busy (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I hardly ever expect things to go my way (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't get upset too easily (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely count on good things happening to me (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I expect more good things to happen to me than bad (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix E: Self Acceptance of Sexuality Inventory (SASI)

PART D: Self Acceptance of Sexuality Inventory (SASI)

Instruction: Please read the following statements carefully and indicate how true each statement is for you. “Sexuality” below refers to your sexual attractions to people of the same-sex, multiple sexes, and/or non-binary individuals.

	Totally true for me (5)	Somewhat true for me (4)	Neither true nor untrue (3)	Somewhat untrue for me (2)	Totally untrue for me (1)
I accept my sexuality (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel in conflict about my sexuality (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable with my sexuality (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am ashamed of my sexuality (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I accept all parts of my sexuality (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I struggle to accept my sexuality (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel at peace with my sexuality (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to fight my sexuality (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have come to terms with my sexuality (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking about my sexuality makes me feel upset (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The first duty of a woman with young children is to home and family (6)

A man who has chosen to stay at home and be a house-husband is not less masculine than a man who is employed full-time (7)

An employed woman can establish as warm and secure a relationship with her children as a mother who is not employed (8)

A woman should not let bearing and rearing children stand in the way of a career if she wants it (9)

Women should be more concerned with clothing and appearance than men (10)

Appendix G: Permission for Scales

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Betsy Morgan <bmorgan@uwlax.edu>
to me ▾

Tue, Aug 23, 5:31 AM ☆ ↶ ⋮

I'm happy to have you use the scale. Here is additional information if helpful - <https://sites.google.com/a/uwlax.edu/betsy-morgan/liberal-feminist-attitude-and-ideology-scale>.

If you translate into a different language – I'd be happy to put the translation at the page above.

Betsy Morgan, UWL Provost



Appendix H: Turnitin Report

FYP2 Chapter 3 to 5

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Appendix I: Ethical Approval Letter



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Re: U/SERC/201/2022

28 September 2022

Dr Pung Pit Wan
 Head, Department of Psychology and Counselling
 Faculty of Arts and Social Science
 Universiti Tunku Abdul Rahman
 Jalan Universiti, Bandar Baru Barat
 31900 Kampar, Perak.

Dear Dr Pung,

Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research project from Bachelor of Social Science (Hons) Psychology programme enrolled in course UAPZ3023. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	The Association Between Optimism, Self-acceptance, Gender Role Beliefs and Mental Well-being in Non-heterosexual	1. Lai Wang Yen 2. Tan Zhi Ying 3. Tee Li Jia	Mr Tan Soon Ann	28 September 2022 – 27 September 2023

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.
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Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,

Professor Ts Dr Faidz bin Abd Rahman
 Chairman
 UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Arts and Social Science
 Director, Institute of Postgraduate Studies and Research

Appendix J: SPSS Output of Demographic Information

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	61	38.1	38.1	38.1
	Female	79	49.4	49.4	87.5
	Others, please state:	20	12.5	12.5	100.0
	Total	160	100.0	100.0	

Age

	N	Minimum	Maximum	Mean	Std. Deviation
Age	160	18	48	25.24	6.249
Valid N (listwise)	160				

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	26	16.3	16.3	16.3
	Chinese	89	55.6	55.6	71.9
	Indian	20	12.5	12.5	84.4
	Others, please state:	25	15.6	15.6	100.0
	Total	160	100.0	100.0	

Religion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Islam	23	14.4	14.4	14.4
	Buddhism	56	35.0	35.0	49.4
	Hinduism	17	10.6	10.6	60.0
	Christianity	38	23.8	23.8	83.8
	Others, Please state:	26	16.3	16.3	100.0
	Total	160	100.0	100.0	

Sexual Preference

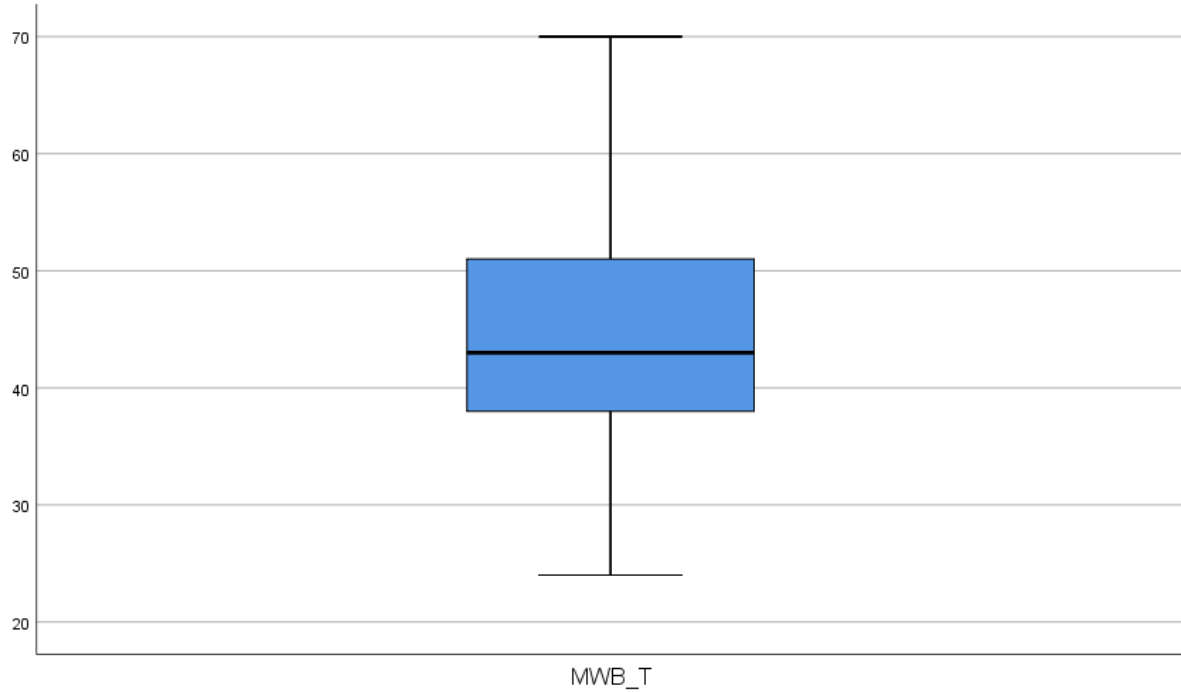
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I'm attracted to people of a same gender	65	40.6	40.6	40.6
	I'm attracted to people of a same and different gender	89	55.6	55.6	96.3
	I'm not attracted people of a same and different gender	6	3.8	3.8	100.0
	Total	160	100.0	100.0	

History of Mental Disorder

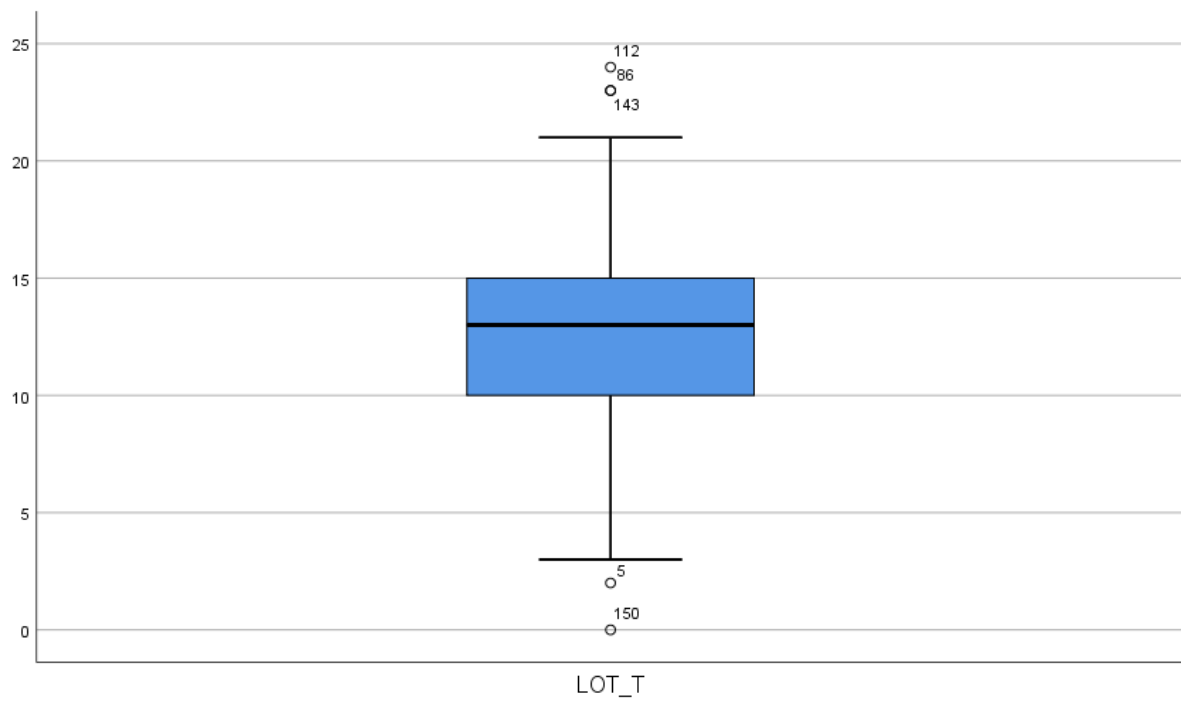
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, please state:	28	17.5	17.5	17.5
	No	132	82.5	82.5	100.0
	Total	160	100.0	100.0	

Appendix K: Boxplot

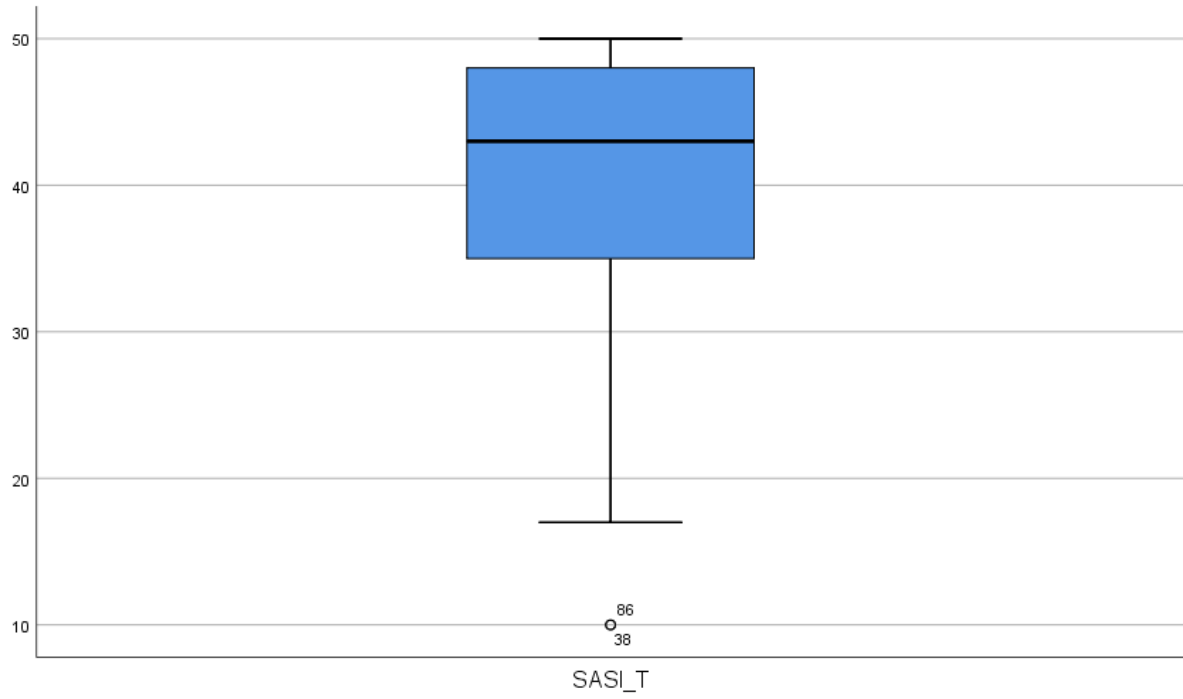
Mental Well-being



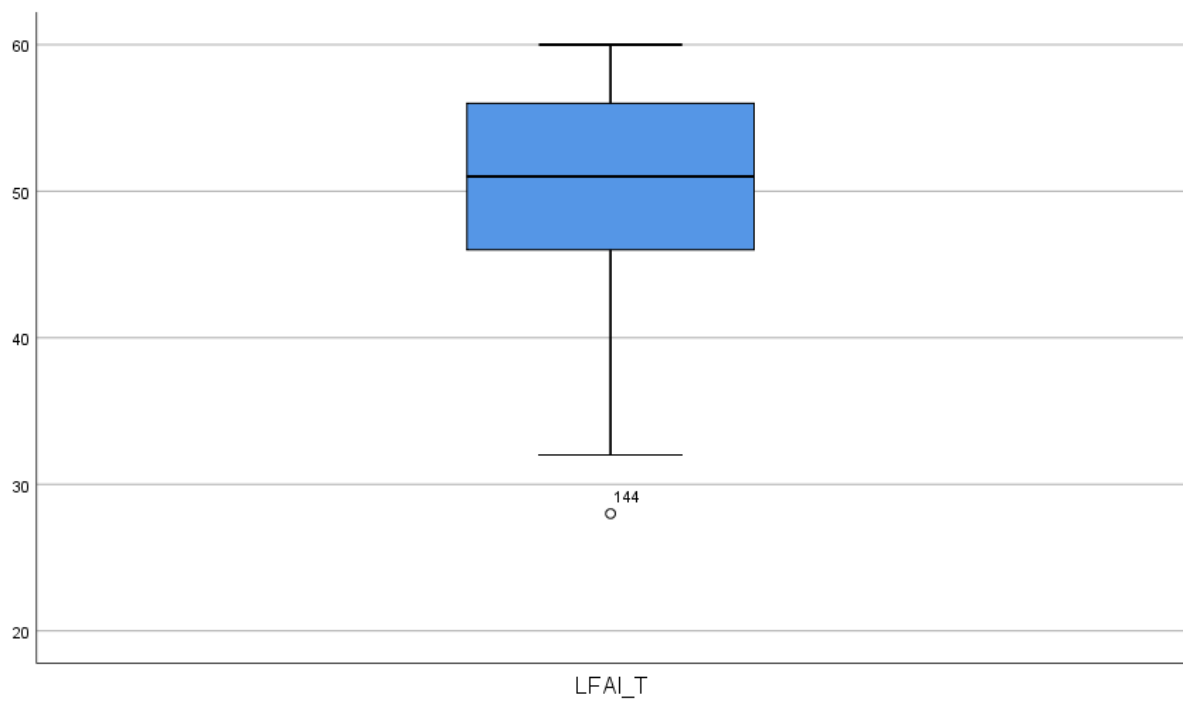
Optimism



Self-Acceptance



Gender role belief



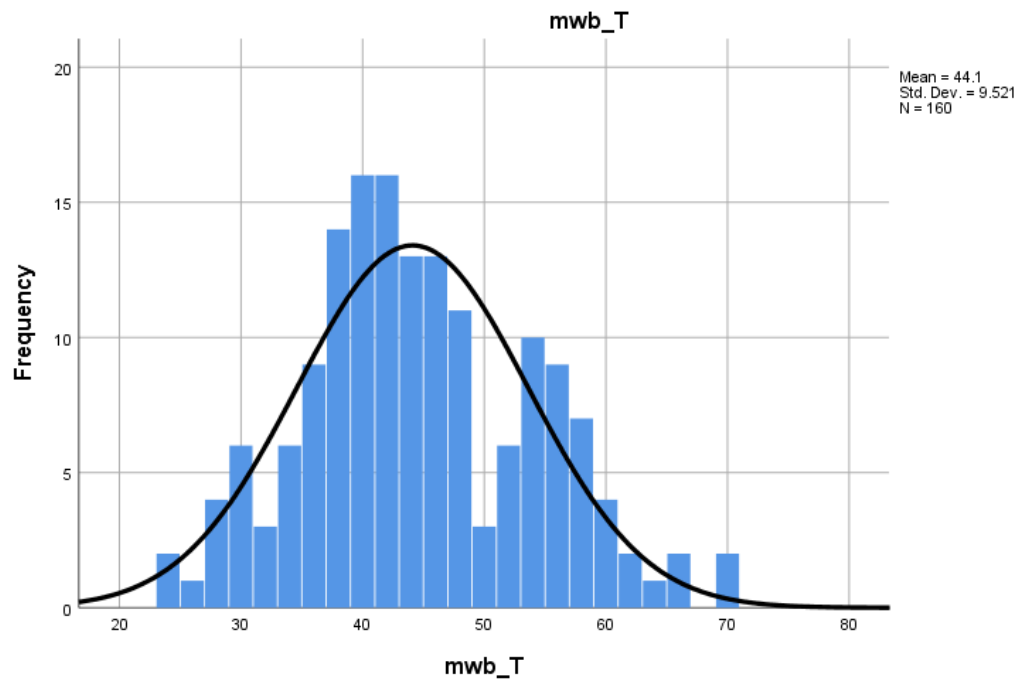
Appendix L: SPSS Output of Skewness & Kurtosis

		Statistics			
		lot_T	sasi_T	lfai_T	mwb_T
N	Valid	160	160	160	160
	Missing	0	0	0	0
Mean		12.38	41.56	49.58	44.10
Std. Error of Mean		.275	.619	.559	.753
Median		13.00	44.00	51.00	43.00
Mode		14	50	52 ^a	39
Std. Deviation		3.475	7.825	7.066	9.521
Variance		12.074	61.230	49.931	90.657
Skewness		-.127	-.785	-.673	.313
Std. Error of Skewness		.192	.192	.192	.192
Kurtosis		-.353	-.352	-.261	-.219
Std. Error of Kurtosis		.381	.381	.381	.381
Range		18	33	28	46
Minimum		3	17	32	24
Maximum		21	50	60	70

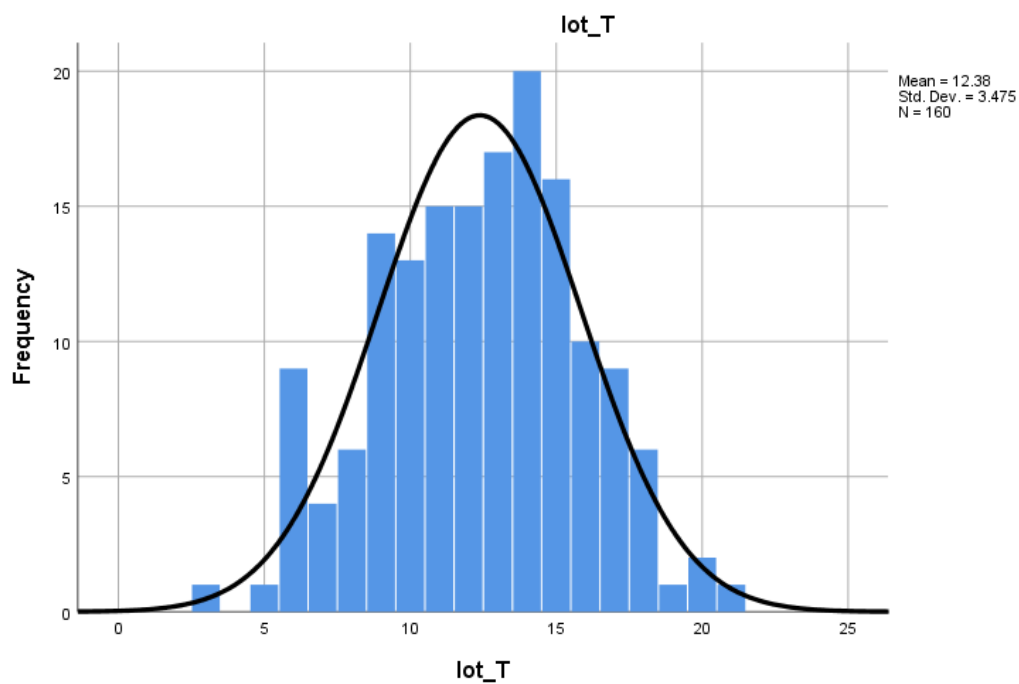
a. Multiple modes exist. The smallest value is shown

Appendix M: Histogram

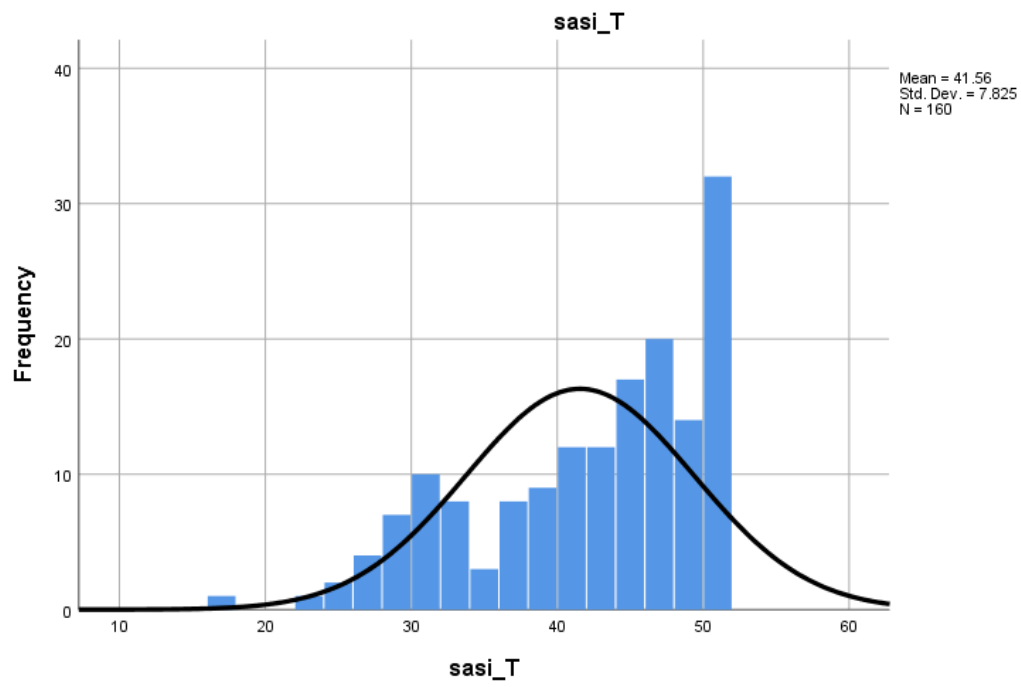
Mental well-being



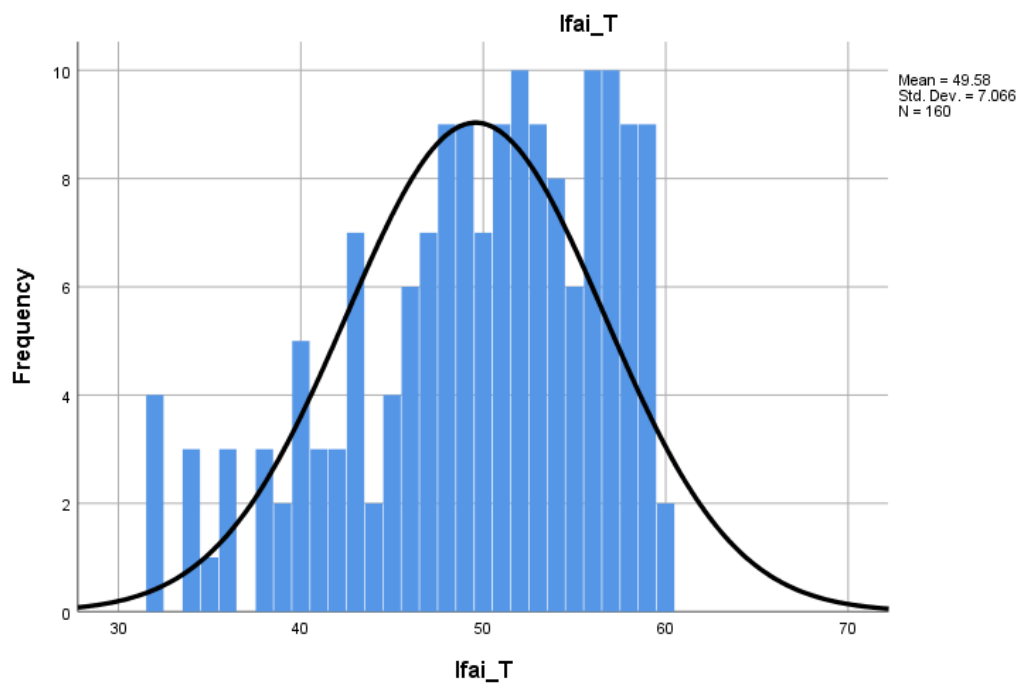
Optimism



Self-Acceptance

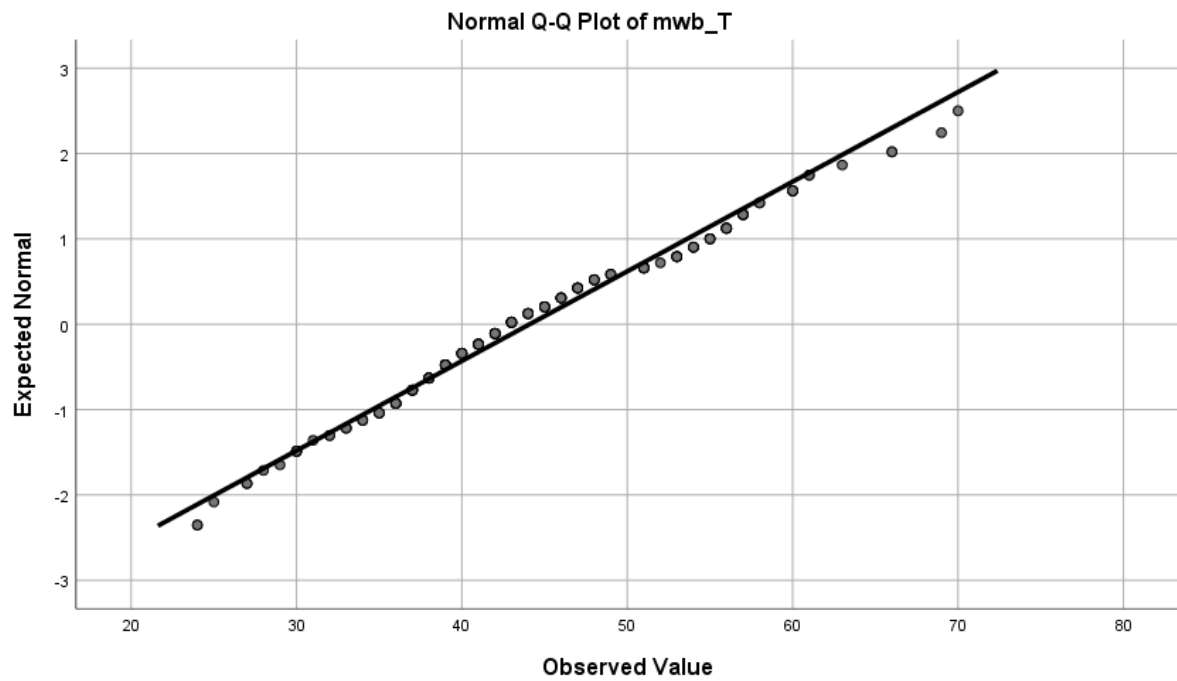


Gender role belief

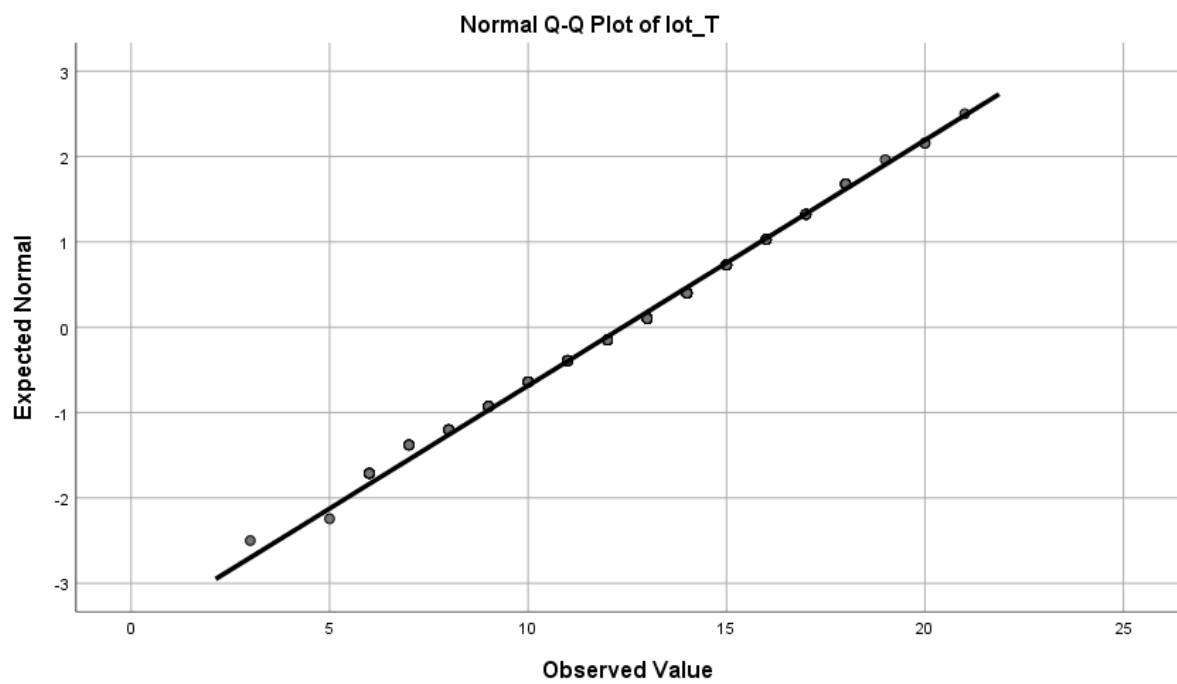


Appendix N: Q-Q Plot

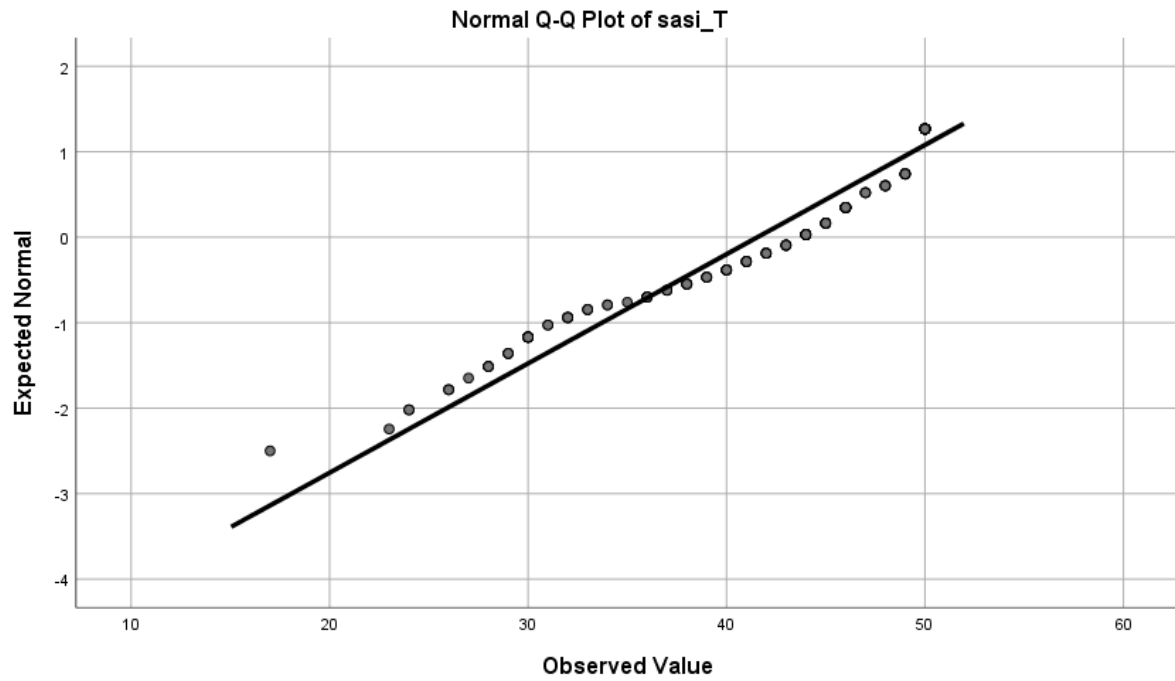
Mental Well-being



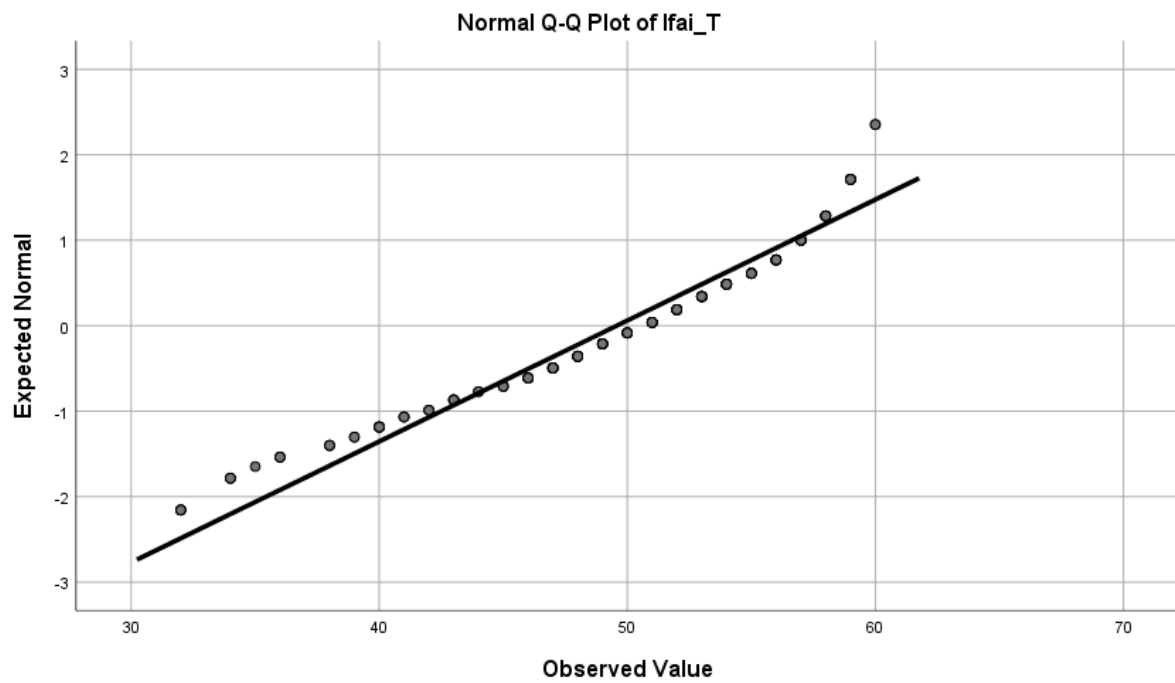
Optimism



Self-Acceptance



Gender role belief



Appendix O: SPSS Output of Kolmogorov Smirnov Test (K-S Test)

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
mwb_T	.083	160	.008	.984	160	.069
lot_T	.086	160	.006	.987	160	.127
sasi_T	.141	160	.000	.897	160	.000
lfai_T	.092	160	.002	.944	160	.000

a. Lilliefors Significance Correction

Appendix P: SPSS Output of Test on Multicollinearity

		Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	30.613	5.099		6.003	.000	20.540	40.685		
	lot_T	1.511	.178	.551	8.480	.000	1.159	1.862	.966	1.035
	sasi_T	.157	.087	.129	1.797	.074	-.016	.329	.795	1.259
	lfai_T	-.237	.096	-.176	-2.464	.015	-.426	-.047	.804	1.244

a. Dependent Variable: mwb_T

Appendix Q: SPSS Output of Test on Independence of Errors

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
						F Change	df1	df2		
1	.603 ^a	.363	.351	7.670	.363	29.670	3	156	.000	2.132

a. Predictors: (Constant), lfai_T, lot_T, sasi_T

b. Dependent Variable: mwb_T

Appendix R: SPSS Output of Case Summaries Table

Case Summaries			
	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
1	2.26137	.01584	.01422
2	4.73779	.01111	.02980
3	8.63356	.00110	.05430
4	1.77756	.00444	.01118
5	2.87169	.00136	.01806
6	3.79622	.00962	.02388
7	1.29057	.00131	.00812
8	6.18949	.00001	.03893
9	2.64880	.00938	.01666
10	5.79944	.01925	.03647
11	3.23866	.00005	.02037
12	5.46582	.00023	.03438
13	1.49518	.00314	.00940
14	7.06126	.00006	.04441
15	1.30801	.00488	.00823
16	1.60002	.00005	.01006
17	1.57139	.00032	.00988
18	.64557	.00067	.00406
19	3.53787	.00925	.02225
20	1.52295	.00627	.00958
21	6.92532	.01014	.04356
22	.89210	.00620	.00561
23	3.42301	.00023	.02153
24	.72726	.00485	.00457
25	2.43881	.00596	.01534
26	.98884	.00006	.00622
27	1.94530	.00880	.01223
28	.36927	.00398	.00232
29	.28782	.00004	.00181
30	1.81715	.00473	.01143
31	2.51100	.00466	.01579
32	1.67317	.00426	.01052
33	2.45705	.00063	.01545
34	4.71234	.10122	.02964
35	3.42522	.00968	.02154
36	2.57894	.00009	.01622

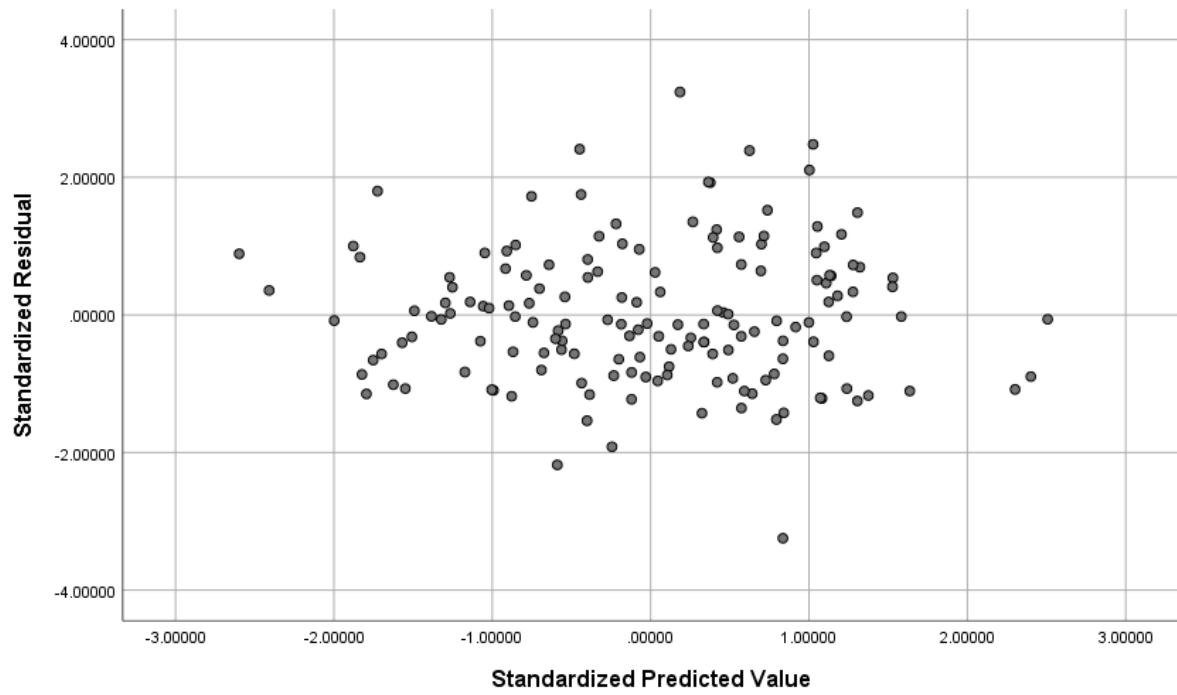
37	7.33235	.00100	.04612
38	4.48372	.01873	.02820
39	1.73646	.00001	.01092
40	6.33619	.01018	.03985
41	2.80867	.03579	.01766
42	4.28220	.00384	.02693
43	2.10976	.00412	.01327
44	4.03962	.00845	.02541
45	5.38490	.00057	.03387
46	2.58231	.00746	.01624
47	4.22982	.00003	.02660
48	2.12770	.00133	.01338
49	4.78877	.00471	.03012
50	4.22834	.00143	.02659
51	5.95693	.00116	.03746
52	6.54444	.13756	.04116
53	2.25548	.00005	.01419
54	1.13098	.01521	.00711
55	5.55686	.06885	.03495
56	.78663	.00661	.00495
57	.36851	.00207	.00232
58	1.67848	.00139	.01056
59	3.22937	.00829	.02031
60	1.09757	.00508	.00690
61	2.44411	.00000	.01537
62	2.36838	.00296	.01490
63	3.74496	.01086	.02355
64	1.24548	.00006	.00783
65	1.29843	.00333	.00817
66	1.26510	.00057	.00796
67	2.13408	.00353	.01342
68	2.01262	.00000	.01266
69	2.36838	.00053	.01490
70	2.12161	.00015	.01334
71	1.31484	.00123	.00827
72	4.31502	.02891	.02714
73	1.67506	.01594	.01053
74	3.97609	.00119	.02501
75	7.46830	.01170	.04697
76	5.38488	.00430	.03387

77	2.57870	.00175	.01622
78	6.60822	.00009	.04156
79	5.68798	.01342	.03577
80	1.92106	.00653	.01208
81	1.35929	.01408	.00855
82	.45005	.00297	.00283
83	1.75897	.00054	.01106
84	2.12799	.00147	.01338
85	3.70393	.00837	.02330
86	5.26092	.06181	.03309
87	2.15115	.00194	.01353
88	1.57504	.00134	.00991
89	6.54444	.00531	.04116
90	.05353	.00008	.00034
91	1.73684	.00182	.01092
92	8.12135	.00412	.05108
93	14.25224	.00370	.08964
94	5.78903	.00336	.03641
95	4.74060	.00510	.02982
96	5.09942	.00115	.03207
97	4.45595	.00520	.02802
98	.84016	.00001	.00528
99	3.29279	.00230	.02071
100	1.25199	.00002	.00787
101	2.02350	.00018	.01273
102	7.86675	.00597	.04948
103	1.51919	.00548	.00955
104	1.89751	.00028	.01193
105	2.84991	.00336	.01792
106	1.85192	.00354	.01165
107	4.87204	.02351	.03064
108	5.43335	.00112	.03417
109	1.89679	.00014	.01193
110	1.42409	.00098	.00896
111	2.67310	.00092	.01681
112	4.21775	.01074	.02653
113	2.90107	.00094	.01825
114	1.95674	.00002	.01231
115	1.69419	.00015	.01066
116	5.28099	.01225	.03321

117	4.38873	.00739	.02760
118	.32171	.00062	.00202
119	2.34496	.00006	.01475
120	.16585	.00017	.00104
121	3.54681	.00126	.02231
122	1.85730	.00008	.01168
123	1.75810	.00008	.01106
124	4.83438	.00898	.03040
125	2.26622	.00787	.01425
126	2.88763	.00091	.01816
127	1.79675	.01391	.01130
128	2.35488	.00468	.01481
129	.37301	.00091	.00235
130	2.27502	.00087	.01431
131	.88219	.01126	.00555
132	3.56315	.00244	.02241
133	.24676	.00000	.00155
134	.50461	.00221	.00317
135	.40386	.00035	.00254
136	1.79172	.01003	.01127
137	1.63675	.00278	.01029
138	1.53661	.01951	.00966
139	3.53972	.00027	.02226
140	5.27268	.00483	.03316
141	1.62602	.00985	.01023
142	.41637	.00158	.00262
143	1.99901	.00008	.01257
144	2.14774	.00075	.01351
145	1.47139	.00581	.00925
146	1.85662	.00000	.01168
147	.96921	.00272	.00610
148	6.68408	.01370	.04204
149	.69595	.00030	.00438
150	2.74957	.00000	.01729
151	.87689	.00394	.00552
152	1.57695	.00085	.00992
153	2.58105	.00821	.01623
154	3.37285	.00955	.02121
155	.41813	.00217	.00263
156	4.25199	.00661	.02674

157		.80368	.00088	.00505
158		8.30414	.01161	.05223
159		5.24533	.00352	.03299
160		1.84393	.00297	.01160
Total	N	160	160	160

Appendix S: Scatterplot



Appendix T: SPSS Output of Pearson Product Moment Correlation (PPMC)

Correlations

		lot_T	sasi_T	lfai_T	mwb_T
lot_T	Pearson Correlation	1	.126	-.069	.580**
	Sig. (1-tailed)		.056	.193	.000
	N	160	160	160	160
sasi_T	Pearson Correlation	.126	1	.426**	.124
	Sig. (1-tailed)	.056		.000	.060
	N	160	160	160	160
lfai_T	Pearson Correlation	-.069	.426**	1	-.159*
	Sig. (1-tailed)	.193	.000		.022
	N	160	160	160	160
mwb_T	Pearson Correlation	.580**	.124	-.159*	1
	Sig. (1-tailed)	.000	.060	.022	
	N	160	160	160	160

** . Correlation is significant at the 0.01 level (1-tailed).

* . Correlation is significant at the 0.05 level (1-tailed).

Appendix U: SPSS Output of Multiple Linear Regression (MLR)

Table 7

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
						F Change	df1	df2		
1	.603 ^a	.363	.351	7.670	.363	29.670	3	156	.000	2.132

a. Predictors: (Constant), lfai_T, lot_T, sasi_T

b. Dependent Variable: mwb_T

Table 8

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5236.677	3	1745.559	29.670	.000 ^b
	Residual	9177.723	156	58.832		
	Total	14414.400	159			

a. Dependent Variable: mwb_T

b. Predictors: (Constant), lfai_T, lot_T, sasi_T

Table 9

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error				Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	30.613	5.099		6.003	.000	20.540	40.685		
	lot_T	1.511	.178	.551	8.480	.000	1.159	1.862	.966	1.035
	sasi_T	.157	.087	.129	1.797	.074	-.016	.329	.795	1.259
	lfai_T	-.237	.096	-.176	-2.464	.015	-.426	-.047	.804	1.244

a. Dependent Variable: mwb_T

Appendix V: SPSS Output of Reliability of Scales

Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)

Reliability Statistics

Cronbach's Alpha	N of Items
.913	14

Life Orientation Test-Revised (LOT-R)

Reliability Statistics

Cronbach's Alpha	N of Items
.647	6

Self-Acceptance of Sexuality Inventory (SASI)

Reliability Statistics

Cronbach's Alpha	N of Items
.876	10

Liberal Feminist Attitude and Ideology Scale (LFAIS)

Reliability Statistics

Cronbach's Alpha	N of Items
.744	10

Appendix W: SPSS Output for Classification of Mental Well-being Groups

Low Mental Well-being

low_mwb

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	22	13.8	100.0	100.0
Missing	System	138	86.3		
Total		160	100.0		

Medium Mental Well-being

medium_mwb

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	107	66.9	100.0	100.0
Missing	System	53	33.1		
Total		160	100.0		

High Mental Well-being

high_mwb

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	31	19.4	100.0	100.0
Missing	System	129	80.6		
Total		160	100.0		