A Preliminary Study of the Relationship Among Critical Thinking, Religious Motivation, Religious Devotion, and Homosexual Attitude in Taiwan

Bo-Shen Chen  
Department of Psychology, Asia University  
kentericlin85@gmail.com

Mein-Woei Suen  
Department of Psychology, Asia University  
The Gender Equality Education and Research Center, Asia University  
blake@asia.edu.tw

Zih-Rong Chen  
Department of Psychology, Asia University  
lempicka34.tw@gmail.com

Fu-An Shieh  
Department of Food and Beverage Management, Jin-Wen University of Science & Technology  
idontcare42@yahoo.com

Abstract: With the advancement of generations, the issue of homosexual equality has not been neglected. As far as the researcher knows, the attitude adopted by Christians on this issue is also quite polarized, which also causes stigmatization, or the struggle within. In the past, the research pointed out that there is a correlation among religious motivation, religious devotion, homosexual attitude, religious motivation, and religious piety are also related to critical thinking. Therefore, this study aims to explore the role of the critical thinking on Christians’ attitude towards homosexuality. Therefore, this study select “The impact, and accordingly”, “The Questionnaire of Dispositions Toward Critical Thinking”, “The Intrinsic–extrinsic Religious Orientation Scale”, “The Religious Devotion Attitude Scale”, and “The Establishment of Homosexuality Attitude and Stereotype Scale” as tools for measuring. However, in order to make the research plan more complete, the expert validity check of all the scales was carried out in the pre-study, and the scale used this time was further modified according to the expert's suggestion. In addition, this study is used as a sample for college students, and is expected to explore the role of critical thinking, intrinsic motivation, and religious devotion in homosexuality attitudes, and to understand the relationship between each one, please refer to the text for details. More details are shown in this article.

Keywords: religious orientation, religious devotion attitude, homosexuality attitude, critical thinking, gender equality

Research motivation and the main topic

In 2019, the Republic of China (Taiwan) held the most popular referendum in history. The support of same-sex marriage is also a variety of arguments. The pros and cons of the two sides have been arguing, and after the results of the referendum are announced, it is regrettable that it is not successful. There are fewer incidents of suicide, gender bullying, and so on. However, the victims of this incident are not only homosexuals but also some Christians face misunderstandings. Because before the vote, many speeches with religious backgrounds deliver some position, and some of them were too extreme to make populace discussion. For example, homosexuals are guilty because it violates God's meaning, homosexual marriage can lead to family loss of function or make children sexual confusion etc. Although not all Christians do, this kind of speech can inevitably lead to doubts – what causes Christians to disagree? The same believers and the same classics - the Bible, why are there two extreme attitudes?

Ouyang (2018) mentioned that the biggest difference between Christians who oppose homosexuality is the lack of critical thinking about the content of the Bible, and Shi Lang (2018) also pointed out that the attitude of the church towards homosexuality needs to be open to this ethnic group, and also giving respect and care to protect everyone's chances of religious belief. These views all reveal that Christians should not reject homosexuality by doctrine, and must have critical thinking about doctrine and social culture. From this study, it is speculated that these positive ideas seem to be related to critical thinking, and Allport and Ross (1967) point out that there should be a link between religious motivation and critical thinking. Therefore, this study is intended to explore whether there is a correlation between the intervention of critical thinking, the religious nature of Christians, and the attitude towards homosexuality. Religiosity in this study refers to religious motivational orientation and devout religious attitude as operational definitions. The study predicts whether critical thinking skills are relevant to Christian homosexual attitudes.

Introduction

In order to more clearly sort out relevant research in the past, the following study will focus on "The Christian Attitude towards Homosexuality,” "The
The Christian attitude towards homosexuality

In Taiwan, there are less quantitative data about the correlation between Christians and their homosexual attitude. Most of the data is qualitative data. For example, Hong (2016) puts forward two major discussions on the views of homosexual Christianity on homosexuality. They are "logical fallacy" and "interpretation of the fallacy in the scriptures." First of all, in the "logical fallacy," not only for the Christian point of view but also for the role of non-Christians. Hong believes that Christians are not as radical as the news media, but particularly radical speeches or remarks. It is more likely to appear in the old school or the older age group. In this social impression, the knowledge of the older generation’s ethnic group accepting homosexuality is relatively lacking. The traditional stereotypes and the Chinese culture such as male superiority and female humiliation deeply influence its Gender attitude.

In the "interpretation of the essays," the pros and cons of the two parties are also extreme. Since Christianity can interpret the content of the doctrine on their own, it has extended some different explanations and opinions. Many non-religious people mistakenly believe that Christianity and Catholicism are the same religion, but there are obvious differences between the two in explaining the scriptures. Christianity differs from Catholicism in that Catholicism is interpreted by the Pope's unified doctrine, while Catholics interpret scriptures. The content needs to be explained by the priest. However, Christianity is not the same as Catholicism at this point. Because Christianity encourages self-interpretation of scriptures, the Christians establish groups with different core beliefs according to their respective concepts. The top three Christian groups in Taiwan are Presbyterian Church, The Assemblies of God, and Bread of Life Christian Church. Because of the different teachings that their respective groups focus on, their Christians have different ways of interpreting homosexuality. But even Christians of different sects still share the same religious beliefs. Therefore, this study used the "Religious Attitude Scale" compiled by Min Hai-yuan in 1988. This scale is for the measurement of different religious groups in Taiwan, and the data obtained also happens to happen. Respond to the religious qualities of different cultures between religions. Therefore, this study will also use this questionnaire to analyze the religious piety shared between different sects to analyze the influence of people's piety on their sects and homosexual attitudes.

The impact of motivation patterns on religious beliefs

As for what factors will affect the above religious beliefs or piety? In psychology, motivation is seen as the beginning of behavior. It has the concept of direction, intensity, and persistence, while the model of motivation-related models, such as the demand pyramid, generates different motives because of the different needs of each class (Maslow, 1943). Behaviorism also refers to the influence of reinforcement and punishment on learning motivation in operational constraints. However, the use of motivation in religion is just like the "intrinsic-extrinsic religious orientation" compiled by Allport and Ross (1967). In this study, the religious belief orientation is divided into intrinsic motivation. The orientation is distinguished from the extrinsic orientation by two dimensions, and the two dimensions can be used as the boundary to make four quadrants (see Table 1 as below). Explain that if the external motivation is fixed, the intrinsic motivation is high and the external motivation is low, and the religious belief is extremely firm. For this type of person, the belief and value of religion will be ranked above their own beliefs and values. The fixed intrinsic motivation is high extrinsic motivation but low intrinsic motivation. The characteristic is that religion is a tool for which benefits can be obtained. The identity of religious believers can be transformed into famous conditions such as fame, interpersonal interaction and appreciation. Many studies in the follow-up have further contributed to the religious motivation vector table. For example, Donahue (1985) used this scale to conduct research related to the number of participation in church activities, the number of reading verses, and the number of prayers. The results indicate that inward motivation believers lead to more religious acts; on the contrary, extroverted believers will be negatively correlated with religious behavior. Based on the above discussion, this study intends to analyze the classification of "memory-foreign religious motivation” and religious piety. It is expected that fixed intrinsic motivation will have higher performance in devotion than fixed external motivation.

Table 1. Four types of religious motivation scales (quoted from Chen, 1999)

| Religious motivation orientation | Intrinsic motivation orientation |
|----------------------------------|----------------------------------|
| High score                       | Undifferentiated pre-existing believer |
| Low score                        | Fixed external motivation |

The relationship between Critical Thinking and Christianity

The relationship between critical thinking and Christianity has rarely been clearly explored in past studies. The doctrine of Christianity is a belief that God
is revealing and teaching to man through the Bible. The most important thirteen doctrines of this belief can be called "Christian faith essentials", including biblical revelation, God's creation, human sin, the birth of Jesus Christ, Jesus' crucifixion and salvation, Jesus' Resurrection and ascension, justification by faith, baptism and communion, the power of the Holy Spirit, the mission of evangelism, the return of Jesus and the judgment of the last days, and the resurrection of the dead and eternal life. The biblical concept of revelation is that God conveys his ideas to people through the Bible, so for Christians, the Bible is the highest principle in life, and through the Bible, you can know God and the church more. There is no doubt about the importance of the Bible to Christians (Zhuang, 2008), but there are some different interpretations from the perspective of scientific thinking. Sutton and Oliveira (1995) study the ratio of Christian to theological education and critical thinking. The results show that students who receive complete theological education have a significant gap in critical thinking than those who receive general education. The above studies also mention that critical thinking is not entirely the responsibility of the school, and the family also needs to learn critically. Think hard. Therefore, the study shows that there is a correlation between the rate of accepting theological education and critical thinking, and this is also the link that this study intends to explore in the domestic sample.

In addition, in recent years, critical thinking has been used in new and promoted educational models both at home and abroad. Many experts and scholars have a positive attitude towards this mode of thinking (Ennis, 1996; Pithers & Soden, 2000), Critical Thinking Institute. The criticism is mainly to emphasize the facts or viewpoints that are distorted. From a scientific point of view, bold assumptions and careful verification, this method can make people excel from the superficial facts to achieve true ideological freedom. However, there are many different opinions on the definition of critical thinking in foreign studies. Here are a few examples, such as Perkins, Jay, and Tishman (1993) propose a ternary theory of critical thinking—thinking tendency, sensitivity to events, and Thinking ability, which emphasizes that all three are indispensable. Although thinking ability determines the type of thinking and problem solving, it is difficult to achieve substantive critical thinking without sensitivity to the problem and critical tendency to the problem. Perkins et al. said that critical thinking is a process of constant criticism and creation. Ennis adds openness to other programs in the critical thinking ternary theory, which emphasizes critical thinking as a new analysis model. It only involves skill or ability level, and more is the pursuit of mind, such as seeking knowledge, inference, and argument.

Critical thinking is not only important in academia but also in education. Su (2003) conducted a literature research method for critical thinking and scientific learning. By arranging the characteristics and applications of the past, Su indicates that critical thinking education can have more independent thinking, independent exploration and problem solving for learning, and only survive in the past. Simply focusing on cognitive function learning, critical thinking will be a higher level of learning attitude. Therefore, it is not difficult to imagine that critical thinking plays a pivotal role in today's society. This ability will be an important basis for future competition. Therefore, it is obvious that critical thinking is the ability that this generation needs and Christians are no exception.

However, how will the above critical thinking be measured? As far as the researchers know, Ye (1999) uses the Questionnaire of Dispositions Toward Critical Thinking to measure people's critical thinking, a total of 20 questions, which are aimed at critical thinking. It is divided into four subscales to detect: the systemic and analytical power, the open mind and the empathy, the wisdom of the question, the overall attitude, and the reflection of these four attitudes. The internal variable α value of the four subtests is .83, .58, .70, .63, and the internal variable α value of the total scale is .88, and this scale has been tested for a wide range of college students in the past, and its reliability and validity are good, and the tested object is also consistent with this study, thus this study will use this scale.

### Homosexual attitude and stereotype

Eventually, in recent society, people still have a negative stereotype for homosexuality, which has led to the obstruction of the affirmative process of promoting gay rights. As Madon (1997) studied college students as a research object and made a survey on his stereotype and intensity of homosexuality, the results showed that the impression of homosexuality was significantly stronger than the positive impression, so that the stereotype of homosexuality is still rooted in the society. There are still many researchers in China who contribute to the issue of homosexuality. For example, Zhou (2015) discusses the gender role attitudes and homosexual attitudes of college students. The results show that the attitude of college students towards homosexuality is positive. Suen, Lin, and Chen (2013) compiled the "Establishment of Homosexuality Attitude and Stereotype Scale" for homosexual attitudes and stereotypes. Since the norm is a college student, it is consistent with this study. Suen et al. have made great contributions to the development of gender stereotypes. There are many research support for the study of gender stereotypes, so this study will also use this scale to help study the tendency of homosexual attitudes.

Based on the above literary discussion, the researchers want to explore how critical thinking affects Christians' attitudes towards homosexuality. Combined with the above arguments, we can see that: (1) religious motivational orientation and critical thinking ability are influential; (2) religious piety is related to the ability of critical thinking; (3) religious
motivation orientation and religious piety are mutually influential; (4) religious motivation orientation and religious piety will affect the view of homosexuality. Due to the critical research on the study of Christianity and homosexuality in critical thinking, this study deliberately wants to ponder at this point, also with many different qualitative. The Christians mentioned in the study must have critical thinking about the doctrine. Therefore, this study wants to study whether critical thinking has an impact on homosexual attitudes. The key point is whether it can enhance critical thinking without affecting religious attitudes.

Pre-test
Aims: Experts in this field have been invited in the pre-study to conduct expert validity on the questionnaires designed in this study to improve the accuracy of the questionnaire.
Procedure: Using convenient sampling, the professors who are relevant to the research topic are invited to propose improved opinions for the research, and the revised scale is issued to the general students to confirm the effect of the surface validity. The corrections are presented in the table below. The revised scale was reissued to the three students studying the relevant departments, confirming that the contents of the scale can be clearly expressed and not too difficult to express.

Main Study
Method
Aims: This study will focus on the impact of critical thinking on homosexual attitudes, as well as the relationship between religious motivational orientation and religious piety and critical thinking.
Subjects: This study considers that most of the research tools selected for the study are applied to college students, so the study participants are classified as early college students.
Tools: This study used four subtests to test the correlations. In order to make the research objectives cleaner, the solid test sequence was followed by the Critical Thinking Image Scale, the Homosexual Attitude and Stereotype Scale, Intrinsic–Extrinsic Religious Orientation Scale, and finally Religious Devotion Attitude Scale. These four studies have revealed significant results in this field, which are discussed one by one.
1. Critical Thinking Image Scale: This scale divides critical thinking into four kinds of abilities: systemic and analytical, open-minded, intellectual curiosity, and overall and reflective thinking which are applied to college students and graduate students. The reliability has an internal consistency of about 0.6, and the internal consistency of the total scale is 0.86. Since this study is consistent with the concept of critical thinking, it is used as a basis for measuring critical thinking.
2. Homosexual Attitudes and Stereotypes Scale: This scale is divided into three subtests: the degree of homosexuality, the degree of acceptance of homosexual relationships, and the level of homosexual knowledge. The internal consistency of the three-point test is above 0.7, and the total table has an internal consistency of 0.9, which is used by the scale.
3. Intrinsic–Extrinsic Religious Orientation Scale: the test is ten-questions of intrinsic motivation, ten-questions of extrinsic motivation, and the participants are grouped according to the questions’ answers. Each motivational orientation has an internal consistency of 0.7.
4. Religious Devotion Attitude Scale: This study has been applied to the Taiwanese religion, and the research results of the devout religious situation have a good performance, and the scale is used.

Procedure: This study will use the community relations existing in the researcher to communicate with Christian institutions or coordinate with the Christian nature of the university department to unify the research time and lead the questionnaires. First, confirm the participant's willingness to participate. If you are concerned about participating in the study, you can check "I don't agree" and wait outside the test environment. Next, the researchers made a simple reading of the research profile to ensure that participants were able to receive the research objectives. After that, the researchers will ask participants to complete the "critical thinking vector table," "Homosexual Attitudes and Stereotypes Scale," "Intrinsic–Extrinsic Religious Orientation Scale," and "Religious Devotion Attitude Scale." Upon completion, participants will be asked to fill in the basic information. After confirming that they have completed the filling, they will be reconciled and will explain and give rewards for the research.

Discussion
The results of the study are not consistent with the research expectations. The study expects that there should be a positive correlation between homosexual attitudes and critical thinking. For those with less critical thinking ability, it is easier to have a bad attitude towards the homosexuality community (Ouyang, 2018). However, the results of the study show the opposite state. For the part of critical thinking research, Lee (2012) explored the nature of critical thinking, which pointed out that critical thinking has nothing to do with age itself, and more is related to the background knowledge of the parties. This may explain the difference between the education of Sutton and Oliveira (1995) in the context of the research era and the education of today's society, and may also influence the relationship between critical thinking and religious piety. In today's society, Taiwanese students generally accept compulsory education in high school. Compared with the educational resources of the past society, today's society is richer, and the methods for obtaining background knowledge are more abundant. This may also affect current critical thinking.

The results of a qualitative study of Christians' gay past on this topic may explain the error of this study.
Qian (2010) conducted in-depth interviews with six ex-gay Christians, based on phenomenology. Discovering the turning point in life is the phenomenon of involving in the experience of converting homosexuals into heterosexuals. This crucial process involves the feeling of being "loved," especially the experience of faith from God's love. The level of influence of Christianity is comprehensive, so the interpretation of psychology alone does not seem to explain the psychological significance of homosexuality to Christians fully.

Based on the above, this study will modify the age of the subject, from the college to the old age, and expect to highlight the influence of critical thinking on Christians in the form of cross-cutting research by adding two more questions to the follow-up profile sheet: (1) my views on homosexuality (2) the idea of this questionnaire. Through open-ended questions, subjects can have more room for expression, and qualitative research can be used to improve the accuracy of research.

**Table 2.** Correlation between homosexual attitude, critical thinking, intrinsic motivation orientation, and devotion attitude.

| Pearson correlation r value | 1.   | 2.   | 3.   | 4.   |
|----------------------------|------|------|------|------|
| Homosexual attitude        | 1.000|      |      |      |
| Critical thinking          | -.293| .222 |      |      |
| Intrinsic motivation       | -.825| .565 |      |      |
| Devotion orientation       | .003*| .035*| 1.000|      |
| Devotion attitude          | .566 | .537 | -.151| 1.000|

**Conclusion**

The effective sample for this study is 18 copies. There are eight males and ten females, aged 20 to 25, all of whom have received baptism. The study used Win10.SPSS22 as a statistical tool and Pearson product-moment correlation as a statistical method. With a p-value of less than .05 as a significant value, it was found that there was a significant negative correlation between homosexual attitude and the degree of intrinsic motivation; there was a significant positive correlation with the degree of piety. Critical thinking has a significant positive correlation with the intrinsic motivation orientation; it has a significant positive correlation with the level of piety (See Table 2).

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