Cross-Cultural Difference in Forgiveness

Ying-Tsen Ko

School of Psychology, The University of Adelaide

Honours Thesis in Psychology

Dr. Josiah Krieg, Prof. Deborah Turnbull

September 2020

This thesis is submitted in partial fulfilment of
the Honours degree of Bachelor of Psychological Science (Honours)

Word Count: 9209 words

Table of Contents

| List of | of Figures | iv |
|---------|-----------------------------|------|
| List of | f Tables | v |
| Abstra | ract | vi |
| Declar | ration | vii |
| Contri | ribution Statement | viii |
| Ackno | owledgements | ix |
| 1 In | ntroduction | 1 |
| 1.1 | What is forgiveness? | 1 |
| 1.2 | Measurements of forgiveness | 3 |
| 1.3 | What is culture? | 5 |
| 1.4 | Cultural dimensions | 7 |
| 1.5 | Measurements of culture | 9 |
| 1.6 | Multicultural forgiveness | 10 |
| 1.7 | Research goals | 11 |
| 1.8 | Research questions | 12 |
| 2 M | /Iethod | 13 |
| 2.1 | Participants | 15 |
| 2.2 | Measurement | 17 |
| 2.3 | Data analysis | 19 |

| 3 | Resu | ılts | .20 |
|---|---------|--|-----|
| | 3.1 | Do country differences predict dimensions of culture? | .20 |
| | 3.2 | Do country differences predict forgiveness and reasons for forgiving? | .23 |
| | 3.3 | Do the dimensions of culture predict forgiveness and reasons for forgiving? | .24 |
| | 3.4 | Do the dimensions of culture predict forgiveness and reasons for forgiving after | |
| | taking | age and gender into account? | .27 |
| 4 | Disc | ussion | .29 |
| | 4.1 | Do country differences predict dimensions of culture? | .29 |
| | 4.2 | Do country differences predict forgiveness and reasons for forgiving? | .31 |
| | 4.3 | Do the dimensions of culture predict forgiveness and reasons for forgiving? | .32 |
| | 4.4 | Do the dimensions of culture predict forgiveness and reasons for forgiving after | |
| | taking | age and gender into account? | .33 |
| | 4.5 | Strength | .34 |
| | 4.6 | Limitations | .35 |
| | 4.7 | Future implications | .36 |
| | 4.8 | Conclusion | .38 |
| R | eferenc | :es | .39 |

List of Figures

| Figure 1. Flowchart of Resear | h Questions | .14 |
|-------------------------------|-------------|-----|
|-------------------------------|-------------|-----|

List of Tables

| Table 1. Demographic Characteristics of Participants at Portugal and the United Kingdom | n16 |
|---|-----|
| Table 2. Summary of Multiple Regression Analyses for Country and Gender Predicting | |
| Dimensions of Culture | 22 |
| Table 3. Summary of Multiple Regression Analyses for Country and Gender Predicting | |
| Forgiveness and Reasons for Forgiving | 22 |
| Table 4. Summary of Multiple Regression Analyses for Dimensions of Culture Predicting | |
| Forgiveness and Reasons for Forgiving | 26 |
| Table 5. Summary of Multiple Regression Analyses for Dimensions of Culture, Age and | |
| Gender Predicting Forgiveness and Reasons for Forgiving | 28 |

Abstract

There is much research evidence on why people forgive, and what forgiveness means for the person who forgives. It is imperative that forgiveness can be studied from multiple dimensional manners, such as by including cultural influence on forgiveness, reasons for forgiving, and so on. The aim of this study was to identify the association between culture and forgiveness taking into account measure of forgiveness and culture. Four research questions were explored, included A) Do country differences predict dimensions of culture? B) Do country differences predict forgiveness and reasons for forgiving? C) Do the dimensions of culture predict forgiveness and reasons for forgiving? And D) Do the dimensions of culture predict forgiveness and reasons for forgiving after taking age and gender into account? The quantitative survey was published on the website for targeting specific countries' registers – the United Kingdom and Portugal via Prolific. There had 300 participants complete survey successfully. The CVSCALE, TRIM-18, and FFS were used to measure dimensions of culture, forgiveness, and reasons for forgiving in the research. Few major key findings were found in this study. First of all, the regression analysis showed that country is served as an effectual prediction of collectivism, masculinity, long-term orientation. In addition, reasons for forgiving can be predicted by collectivism and long-term orientation. Thirdly, country and gender are relatively better predictors for identifying the self-focus of an individual when it comes to forgiveness. Finally, cultural dimensions of masculinity and relationship focus are correlated.

Keywords: Forgiveness, Cultural Dimensions, Multi-Culture, Individualism, Collectivism

Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

I give permission for the digital version of my thesis to be made available on the web, via the University's digital research repository, the Library Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

Contribution Statement

For this study, I designed the survey and my primary supervisor – Josiah Krieg collected the data via Prolific. The data collection was funded through a research grant held by the secondary supervisor - Deborah Turnbull. I wrote up all aspects of the thesis.

Acknowledgements

Throughout the writing of this thesis, I have received much support and assistance.

Therefore, I would like to thank and acknowledge people who have contributed to my work development.

First of all, to my primary supervisor - Dr. Josiah Krieg, who has the greatest influence on my thesis. Thank you for your mentorship. You encouraged me to develop my thought and gave me strength when I faced the challenge. You never stingy with your praise, I apricate that, thank you. Your understanding helped me to go on this journey during this hard year.

Moreover, to my secondary supervisor - Prof. Deborah Turnbull, thank you for joining this project. Your kindly assistance and tutorship helped me can catch up on the writing progress and keep my study on track. Your insightful feedback pushed me to sharpen my thinking and brought my work to a higher level.

Besides, I would also like to thank the course coordinator - Dr. Matthew Dry. Without your valuable guidance, I could not go through my honours year. You provided me with the opportunity to catch up with my supervisor, and lead me in the right direction and successfully complete my thesis and other courses.

Finally, I would like to thank my family and friends. Your wise counsel and sympathetic ears were always there for me. I could not complete this thesis without all the support from you. You provided stimulating discussions as well as happy to rest my mind outside of my research.

Thank you everyone who always be patient with me and helped me to achieve this hard work.

1 Introduction

When studying the relationship between forgiveness and culture, the major question that needs an answer is why people forgive or what are the reasons behind when a victim forgives the perpetrator. However, most of the existing studies focus on discussing one or few of the aspect. For instance, a construct as simple as forgiveness is related to diverse constructs such as apologies or relationship values. Therefore, different from other studies, more variables related to cross-cultural backgrounds are involved in this research.

1.1 What is forgiveness?

A well-known concept in human relations, forgiveness, can be described as a process by a victim for undergoes changes in attitude voluntarily and intentionally for overcoming the feelings related to negative emotions such as vengeance and resentment (Doka, 2017). Most people have forgiven someone during their life time. Forgiveness is considered an emotion, like compassion for the offender, and thereby not punishing the individual. Although research scholars agree with this definition of forgiveness, they differ about the extent to which forgiveness implies the replacement of the negative emotions to positive emotions towards the perpetrators of the crime (Matsumoto & Juang, 2017).

The concept of forgiveness includes function properties articulated by the person who is the beneficiary when forgiveness is granted, whether it is the person who is granted forgiveness or who grants the forgiveness (Strelan, Mckee, Calic, Cook, & Shaw, 2013). According to Strelan et al. (2013), forgiveness comprises of functional properties. The functions that are served by forgiveness are articulated by the person who is benefited primarily when forgiveness is granted. The study provides evidence that the focus of forgiveness is salient to the lay people (Strelan et al., 2013). The aim of the paper was to provide a framework

that is theoretical in nature by including three studies. In each of the studies, it has been found that there is a high probability of forgiveness being granted by the victim for oneself and the relation. Firstly, it has been observed in the study that at the structural level, the valued relations demonstrate concern for the welfare of the offender. This is associated with the vengeful motivations that are inhibiting and have no association with the quality of the relation. Secondly, victims have a tendency of endorsing forgiveness for saving relations and lastly, self-focus is salient to the victims and has been endorsed consistently.

The reasons for forgiving could depend on the interpersonal context, self-focus and relationship-focus. On one hand, for self-focused people, regulating emotions is the major reason why people choose to forgive rather than managing or altering the problem (Strelan & Covic, 2006; Worthington & Scherer, 2004). The positive outcomes as removing negative feelings and grudges are pointed out by the thematic analyses of forgiveness (Younger, Piferi, Jobe, & Lawler, 2004). On the other hand, for people who are in a romantic relationship, preserving the relationship becomes the primary reason why they forgive, but rather the relationship with the offender. Comparing with self-focus people, relationship-focus people would like to choose to take greater emotional distress, and to maintain relationship (Strelan et al., 2013). McCullough (2008) reports that relationship preservation is a reason for forgiving. To support this argument, sacrifice behaviour from forgiveness often enhances relationships by contributing to relationship maintenance and repair (Karremans & Van Lange, 2004).

Forgiveness is the voluntary and intentional process where the victim has a change in attitude and feelings, overcomes any negative emotions and wishes the offender well (Doka, 2017). The world religions mostly include teachings on forgiveness and such teachings provide the underlying basis for modern traditions and the practices associated with forgiveness. Forgiveness is interchangeable and has been interpreted in different ways by different cultures and people. Often it has been established that people who have the ability of forgiving are

healthier and happier in comparison to those who hold resentment. It has been observed that forgiving people have a lesser tendency of suffering from illness. Therefore, it is concluded that forgiveness is beneficial for health and mental peace (Witvliet & McCullough, 2007).

1.2 Measurements of forgiveness

According to research scholars, the definition of forgiveness implies the positive emotions for benefit of both parties, it differs considerably from forgetting, pardoning, excusing, or condoning, as well as reconciliation related to the crime or issue (Matsumoto & Juang, 2017). In psychological studies, there are some measures of forgiveness and they include self-report, chemical, peripheral physiological, central physiological, behavioural measures, and implicit association test (IAT; Worthington, Lavelock, Witvliet, & Rye, 2015).

A few self-report scales have already been developed to measure forgiveness of an offender. For instance, the first measurement of forgiveness is Wade Forgiveness Scale (WFS; Wade, 1989). Multidimensional forgiveness of cognitive, emotion, and behaviour are measured by 83 questions (23-items; α = .72 to .91). Based on the WFS, Transgression Related Interpersonal Motivations Scale (TRIM-12; McCullough et al., 1998) was developed combining two subscales - Avoidance and Revenge (α = .86 to .93). Responses to 12 statements referring to a transgression recipient's current thoughts and feelings about the transgressor are scored on a 5-point Likert scale. Benevolence motivation was added into the latest version of the TRIM scale. The TRIM-18 has high reliability and validity (McCullough, Root, & Cohen, 2006). The forgiveness Likelihood Scale (FLS; Rye et al., 2001) and the Transgression Narrative Test of Forgivingness (TNTF; Berry, Worthington, Parrott, O'Connor, & Wade, 2001) are situational attitude scales for measuring forgiveness. First of all, FLS questions were evaluated based upon whether they measured important indicators of forgiveness. The questions on the original survey specifically measured responses to wrongdoing in a romantic relationship (Rye, 1998). The revised scale consists of

15-items using a Likert scale (α = .76 to .87). Secondly, TNTF requires participants to answer questions based on five hypothetical situations (α = .75). The scale measures trait anger, rumination, neuroticism, agreeableness, and hostility. Test-retest reliability and stability of item locations were both good.

Cortisone and oxytocin are currently the most common chemicals used to measure forgiveness. Firstly, cortisone is a stress hormone which will be secreted higher than the regular level when patients under the forgiveness process with increasing anxiety (Berry & Worthington, 2001). Within the three different tests for chemical measurements, saliva detection is a short-term method to analyse cortisone with better reliability than blood and urine (Walker, Hughes, Riad-Fahmy, & Read, 1978). In addition, oxytocin is the opposite of cortisone known as hugging hormones (Nicolson, 2008). Forgiveness oxytocin may increase when participant feel lower anxiety. However, the sensitivity to environmental and cognitive may become habitual over time which may lead to low temporal stability of cortisone and oxytocin (Young, Abelson, & Lightman, 2004).

Central and peripheral physiology measures are also used for observation of forgiveness. Farrow, Zheng, Wilkinson and Spence (2001) point out that forgiveness ability and sympathetic decision are related to the left frontal lobe. The research by Pietrini et al. (2004) shows females had higher action than males on cingulate gyrus, which related to forgiveness ability. Additionally, Witvliet, Ludwig, and Laan (2001) ran the first peripheral physiological experiment in forgiveness. According to the result of this research, skin conductance, average blood pressure, and heart rate had higher physiological stimuli when participants are in and expresses that they cannot forgive the harmful incidents.

Orientation-behaviour test is a measured way based on experiments to manipulate resource distribution of forgiveness. In the research of Carlisle (2012), the distribution ratio of the tickets and self-report scale were used to evaluate the distribution motivation and degree of

forgiveness. Santelli, Struthers, and Eaton (2009) report that resource distribution and social distancing are more veiled but expensive than self-report questionnaires. Otherwise, Greenwald, McGhee, and Schwartz (1998) proposed the social cognition research method. Through computerized classification tasks, the connection strength between concepts was measured by reaction time, thus, indirectly reflecting the implicit psychological tendency of individuals.

1.3 What is culture?

Culture can be primarily described as the way of life in any society. It can be compared to an umbrella that encompasses the social norms and behaviour of a society and includes various aspects of life such as customs, traditions, laws, arts, beliefs, knowledge, and habits of an entire community (Macionis & Gerber, 2011). Culture has an impact on how people perceive their world. It changes their approach to understanding themselves and also their approach to their inner circles.

It can thus potentially change their approach to forgiveness. For instance, researchers like Sandage, Hill, and Vang (2003) identify how the nature of forgiveness is embedded in aspects like conflict resolution and this could change from culture to culture. The author's study on indigenous culture, forgiveness in indigenous culture, and contextualization, identified the need for more people to embrace interventions in positive psychology treating forgiveness more as a virtue and less in its functional aspects. Researchers like Miller, Worthington Jr., and McDaniel (2008) identified how culture could change gender perceptions when it comes to forgiveness. In their study, the authors identified that females are more forgiving than males, and there are various moderators like culture, target of forgiveness, trait or familial/marital forgiveness, and types of forgiveness measure. Culture changes one's functional disposition to forgiveness and even the perception of situational cues where forgiveness is given or sought.

Culture affects the personal values of the people for the world, but it also affects their approach towards the management of their relationships with their environment and issues (Sandage et al., 2003). The concept of associating human behaviour and action, such as forgiveness to one's culture is not new. Weber, for instance, makes the argument that key aspects of one's culture will influence one's action (Swidler, 1986). Subjective meanings, historically specified ideas and time-tested rules and practices can change how one acts. Forgiveness is rooted in tradition and beliefs like what the Calvinist protestants believed, or the Hindu mystics or Confucian officials because every one of them thought there were consequences for their actions. For instance, the lord's prayer has a stanza that asks forgiveness for one's trespasses. 'Please forgive us our trespasses as we forgive those who trespass against us'. The literal meaning is that the person saying the lord's prayer is asking God for forgiveness for his sins or trespasses, and states that he too will forgive those who have sinned against him (Bloom, 2018). This form of seeking forgiveness, and also giving it back to people who have sinned has governed Christianity and hence has affected a large part of the cultures of the world within which the religion is embedded (Beck, Dorff, & Hallisey, 2000; Davis, Hook, & Worthington, 2008). Therefore, culture, religion, and tradition intermingle to guide people's actions. Western traditions saw God as being a judge and hence forgiveness was to be sought from him for their actions, and eastern traditions sought to achieve divinity and forgiveness through their mystical practices (Joo, Terzino, Cross, Yamaguchi, & Ohbuchi, 2019).

1.4 Cultural dimensions

Developed by Geert Hofstede (1980), the Hofstede theory of cultural dimensions offers a framework for cross-cultural communication and understanding the effect of the societal culture on personal values. Moreover, the theory also defines the effects of the personal values by using a structure derived from the analysis of the factors. The five important factors in this model include power distance, individualism-collectivism, masculinity-femininity, uncertainty avoidance, and long-term orientation (Hofstede, Hofstede, & Minkov, 2010). Power distance refers to the fact that not all countries expect to have an equal distribution of power, and some countries are more hierarchical than others (Hofstede Insights, 2020). Individualism refers to how people within a country see one another. For example, they might refer to themselves more in terms of 'we' versus 'I' or vice versa (Bigoness & Blakely, 1996). Masculinity refers to how society is driven with respect to competition, achievement, and success. Uncertainty avoidance refers to the extent to which the member of a culture avoids ambiguity and uncertainty or embraces it (Hofstede Insights, 2020). Long-term orientation reflects people's thought for cultural tradition and links to the past, versus being more pragmatic when it comes to letting go of cultural practices. Indulgence refers to how society controls their impulses and desires (Hofstede Insights, 2020).

Applying an understanding of some of the dimensions and how it affects forgiveness could reveal how national culture can change perception and action in the context of forgiveness. Individualism and collectivism are one of the main ways that culture is categorised. In an individualist culture, as applicable in Western Europe and the United States, the emphasis is on personal achievement. This does not take into consideration the expenses in terms of the group goals, therefore, resulting in strong competition. On the other hand, in a collectivist culture as prevalent in Japan, Korea and China, the emphasis is on

group and family goals which are prioritised over the desires and needs of the individuals (Terzino, 2007). One study has found that people who belong to an individualist culture have a higher probability of being lonely while people who belong to a collectivist culture have a strong fear of being rejected and this could affect their perception and action of forgiveness (Mellor, Fung, & Binti Mamat, 2012). Lennon (2013) analysed how Hofstede dimensions can help understand revenge-seeking behaviour and forgiveness. The researchers made use of culture-specific data from around 9416 participants from as many as 16 countries. The countries that showed higher differences in uncertainty avoidance and power distance were also the same countries that showed the largest difference when it came to revenge and forgiveness (Lennon, 2013).

Zourrig, Chebat, and Toffoli (2009) conducted a study on how customer forgiveness in the context of a business setting could vary based on cultures. The researchers adopted the Hofstede model to understand national cultures, and also made use of cognitive appraisal theory to understand the cognitive, emotional, and motivational patterns that culture drives when it comes to forgiveness. The authors found that culture could influence the creation of both idiocentric customers and allocentric customers. Idiocentric people were more likely to adopt some problem-solving strategies when they decide to forgive. Idiocentric people are more individualistic and rational, whereas allocentric people worry about their in-group orientation. Therefore, in idocentric people (perhaps from highly individualistic societies) forgiveness flows from the self. Whereas in the allocentric population (from highly collectivistic societies) forgiveness is determined as a social virtue. Expressive benevolence, regulating emotions to show goodwill and forgiveness is associated with staying within a group and staying true to their culture.

1.5 Measurements of culture

In psychological studies, there are some measures of culture. Sometimes scholars defined people's culture by country of birth, or race. Besides, some research use scales to measure culture as an individual rather than a group. Among these studies, the Hofstede Model (Hofstede, 1980) is used to identify one's cultural characteristic regularly.

For studying cultural dimensions, the Value Survey Module (VSM13, Hofstede & Minkov, 2013) is a 30-item (α = .72 to .84) questionnaire developed for comparing cultural influenced values and emotions of similar respondents from two or more countries, or regions within countries. It allows scores to be computed on six dimensions of national culture, on the basis of four questions per dimension. The twenty-four content questions allow index scores to be calculated on six dimensions of national value systems as components of national cultures. All content questions are scored on five-point scales.

Moreover, the individualist-collectivist factors ascertain the way inter-conflict is resolved. First of all, the Communal Orientation Scale (COS; Clark, Ouellette, Powell, & Milberg, 1987) is a 14-item scale (α = .68 to .78) that assesses the extent to which an individual expects others to behave in a communal fashion. All content questions are scored on a seven-point scale. The COS was used to examine how incompatibility friendships and communal orientation affected the expectations people bring to negotiation (Thompson & DeHarpport, 1998) and human social life on combinations of 4 psychological patterns (Fiske, 1992). In addition, Luhtanen and Crocker (1992) established the Collective Self-esteem scale (CSE) to evaluate different levels of self-esteem. Member esteem, private collective self-esteem, public collective self-esteem, and importance to identity are scored by 16-item (α = .91) with a seven-point scale. Evidence for reliability and construct validity of the scale was provided by 3 studies.

1.6 Multicultural forgiveness

Goldilocks and the Three Bears is a popular children's tale where Goldilocks enters the house of the bears and leaves a mess behind due to which the bears get angry. However, in the Japanese version of the same story, the ending is different and instead of running away, the girl apologises to the bears for the mess and therefore is forgiven by the bears. It is often believed that children's tales are essential in conveying central beliefs and values of culture to the younger generations (Kadima Kadiangandu, Gauché, Vinsonneau, & Mullet, 2007). Even in the same story, different cultures have different interpretations of the ending, which shows the difference in understanding of forgiveness.

The motivation behind forgiveness is different in each culture and is based in part on the individualism-collectivism nature of society. It has often been argued that the processes and conception of forgiveness in individualistic culture are framed differently from the collectivist context of culture. In both societies, the dynamics are different and it causes individual differences and emotional outcomes in any particular situation (Belicki, Decourville, Kamble, Stewart, & Rubel, 2020). The research reports a wide diversity between two different cultural backgrounds - Canada and India, in the reasons for forgiving. In the Canadian sample, the participants were more likely to forgive for relationships. Feeling better for themselves is the primary reason to forgive. In this case, forgiving offenders was related to more positive outcomes. In contrast, in the Indian sample, the results show more social pressure causes forgiveness rather than emotional relation. With the complex situation in India, victims may receive less avoidance, but more vengefulness from offenders. Forgiving would be forced to happen by society-focus with more negative emotional outcomes. In addition, the Indian sample shows highly religious factors in forgiveness process than the Canadian sample. The doctrinal norms and fear of punishment after death pushed Indians to choose to forgive each

other. These results point out the statical significant impact of forgiveness and reasons for forgiving from cultural differences between individualism and collectivism.

The newer research conducted on cultural philosophy has been able to identify that there are several ways that West European Heritage (WEH) and East Asian Heritage (EAH) differ from one another in terms of emotion, motivation and cognition. It has been hypothesized that the differences in terms of American and Japanese features for forgiveness are due to the potential contributors towards the understanding of forgiveness that is culturally specific (Joo, et al., 2019). There are differences while people focus on self-enhancement or harmony in relation. This means there is a level of motivation for adjusting to or influencing others based on emphasis on the individual or the situation.

Generally, the research and theories on forgiveness have been based on the cultural concept of the West European Heritage. Consequently, the beliefs and assumptions of the west are related to relations, nature of the individual, cognitions and emotions. Most studies focus on the internal forgiveness within the individual, rather than the process and motivations that occurs in the relationship between the victim and the offender (Karremans et al., 2011).

1.7 Research goals

The section above illustrates that there is a relationship between forgiveness and culture. The purpose of current research is to identify the relationship between culture and forgiveness by considering new variables. Most of the existing studies focus on discussing one or few of the aspect. For instance, a construct as simple as forgiveness is related to diverse constructs such as apologies or relationship values. This results in a research gap. The lack of consideration of diversity in the concept of the various constructs may lends to non-holistic outcomes. Besides, as the previous literature reviews, the motivation behind forgiveness might be different in each culture, and the dynamics are different and it causes individual differences and emotional outcomes in any particular situation. In view of this, the cultural background has

a great influence on the process of individual forgiveness. Therefore, different from other studies, more variables related to cross-cultural backgrounds are involved in this research. The researcher tries to connect cross-cultural psychology and forgiveness through this research to understand multi-cultural forgiveness deeply and to provide more value for future studies. This research aims to examine the relationships between dimensions of culture, forgiveness, and reasons why people forgive taking culture into account.

1.8 Research questions

As known from the previous sections, the concept of forgiveness is different in every culture. From the viewpoint of cultural differences in the country, this dynamic difference may reflect different levels of influence between countries by dimensions of culture. The study is based on the review of relevant researches and summarises the following expected results,

- A. Do country differences (collectivism and individualism) predict dimensions of culture?
- B. Do country differences (collectivism and individualism) predict forgiveness and reasons for forgiving?
- C. Do the dimensions of culture predict forgiveness and reasons for forgiving?
- D. Do the dimensions of culture predict forgiveness and reasons for forgiving after taking age and gender into account?

2 Method

This quantitative research used an online survey to complete data collection. The first part of the survey is designed for collecting participants' demographic information and a scale measures dimensions of culture. The second part of the survey is used to assist participants to recall a related hurtful event within a relationship. Finally, the participants will be asked to complete scales about forgiveness and reasons for forgiving when the nominated event happened. They were paid 1.50 GBP for their participation instead as their questionnaire is useable, in accordance with Prolific's requirements for participant management and reimbursement. The ethical approval of this research was obtained from the Human Research Ethics Committee of the University of Adelaide (Approval 20/61).

As previous literature reviews, the researchers adopted the Hofstede model to understand national cultures and to compare the cultural differences between countries. According to the national culture list from Hofstede Insights (2010), Portugal, in comparison with the rest of the European countries, is collectivist (scoring 27 points on the dimension of individualism). On the other hand, at a score of 89, the United Kingdom is amongst the highest of the Individualist scores. Therefore, the participants from Portugal and the United Kingdom were recruited to represent the cultures of collectivism and individualism respectively in this study. Also, these countries were selected to represent collectivist and individualist countries because they have a large number of Prolific users. In the research by Beilmann, Kööts-Ausmees, and Realo (2018), Portugal has a different stand from the United Kingdom in social culture. Portuguese prefer to follow the trend and work as a group. Compare to Portugal, the residents from the United Kingdom have a more high-level of individualism. In contrast, the southern European countries, such as Italy, Spain, and Portugal were at the low end.

Figure 1Flowchart of Research Questions

Research Question: To identify the association between culture and forgiveness taking into account measure of forgiveness and culture IV: Country (Portugal and the United Research Question A: Kingdom) Do country differences (collectivism and DV: Dimensions of Culture (the CVSCALE individualism) predict dimensions of culture? sub-scale) Research Ouestion B: IV: Country (Portugal and the United Research Variables Do country differences (collectivism and Kingdom) Country individualism) predict forgiveness and reason DV: Forgiveness (the TRIM-18), and Reasons Age for Forgiving (the FFS sub-scale) for forgiving? Gender **Dimensions of Culture** Forgiveness Reasons for Forgiving IV: Dimensions of Culture (the CVSCALE sub-Research Question C: scale) Do the dimensions of culture predict DV: Forgiveness (the TRIM-18), and Reasons forgiveness and reason for forgiving? for Forgiving (the FFS sub-scale) IV: Dimensions of Culture (the CVSCALE sub-Research Question D: scale), Age, and Gender Do the dimensions of culture predict DV: Forgiveness (the TRIM-18), and Reasons forgiveness and reason for forgiving after for Forgiving (the FFS sub-scale) taking age and gender into account?

2.1 Participants

We recruited participants via the participant recruitment platform Prolific. The participants were the registrants from Prolific. Prolific is a site where scholars are paid for their participation in research studies. The survey was published on the website for targeting specific countries' registers – the United Kingdom (UK; 152 responses) and Portugal (154 responses). However, we had a few additional responses, either because they formally withdrew from the study partway through, or provided responses that stated a hurtful event had not happened to them. Participants were informed prior to participating in the survey that they would be asked to recall a hurtful event within their personal relationships, and that stating they were unable to recall such an event during the survey was a formal exclusion criterion for the study. Yet, these handfuls of participants either formally withdrew or were rejected from the study, therefore, their demographics did not be reported. The final sample consisted of 300 participants (N = 149 males, 151 females). Age ranged from 18 to 72 years (M = 28.89, SD = 10.61). Participants reported coming from diverse country backgrounds (birth of country): Portugal (46%), the United Kingdom (37%), Scotland (2%), France (1%), Brazil (1%), India (1%), Philippine (1%), Poland (1%), and other countries (including Bulgaria, Canada, Germany, Nigeria, Romina, Spain, America, Belgium, Bolivia, Denmark, Glasgow, Hong Kong, Italy, Latvia, Malaysia, Norway, Russia, and South Africa; 11%). The data were gathered on July 28 to 29, 2020.

Table 1Demographic Characteristics of Participants from Portugal (N = 149) and the United Kingdom (N = 151)

| Baseline | P | Portugal | the Uni | ted Kingdom |
|-----------------|------|----------|---------|-------------|
| characteristics | n | % | n | % |
| Gender | | | | |
| Male | 107 | 28.2 | 42 | 27.8 |
| Female | 42 | 71.8 | 109 | 72.2 |
| | M | SD | M | SD |
| Age | | | | |
| | 25.5 | 7.70 | 32.2 | 11.90 |

2.2 Measurement

At the beginning of the survey, the participants were asked to provide demographic information, including Prolific ID, age, gender identity, country of birth, and first language. The scale about dimensions of culture was measured in this section. Secondly, the participants were asked to think a specific hurtful event within relationships, the experience where participant was hurt by someone but later forgave them, at least to some extent. The instruction of this stage has required responses to fill the name of the person. The information on this experience and how the experience makes them feel was asked to describe in several sentences. Finally, participants were asked to complete scales about forgiveness and reasons for forgiving when the nominated event happened.

The following scales are displayed in the order by the presented to participants.

Dimensions of culture The Cultural Value Scale (CVSCALE) is a scale that has been established by Yoo, Donthu, and Lenartowicz (2011). The CVSCALE consists of a 26-items questionnaire that assesses the cultural values by Hofstede's (1980, 1991) renowned five-dimensional typology of culture namely. The five dimensions are power distance (five items; $\alpha = .69$), collectivism (six items; $\alpha = .80$), masculinity (four items; $\alpha = .77$), uncertainty avoidance (five items; $\alpha = .80$), and long-term orientation (six items; $\alpha = .76$). The twenty-six content questions allow index scores to be calculated on dimensions as components of national cultures. Items were rated on a five-point Likert scale ranging from "Strongly disagree-1" to "Strongly agree-5". Long-term orientation ranged from "Not at all important-1" to "Very important-5".

Forgiveness Forgiveness was operationalized using the 18-item version of the Transgression Related Interpersonal Motivations Inventory (TRIM-18, McCullough et al.,

1998; McCullough, Root, & Cohen, 2006), which measures revenge (five items; α = .73), avoidance (seven items; α = .93), and benevolence (six items; α = .88, McCullough, Fincham, & Tsang, 2003) motivations toward an offender. Avoidance motivation refers to the motivation to avoid contact with the victim, such as ignoring him/her. Revenge motivation is the motivation to retaliate the victim, such as letting him/her pays the price. Benevolence motivation is a positive motivation for the victim. Subscale scores were summed and averaged with totals ranging between 1 and 5 for each subscale. The scale adopts a Likert five-point scale (1-strongly disagree and 5-strongly agree). Avoidance motivation and revenge motivation adopt a positive scoring method. Benevolence motivation is a negative scoring. This study used to calculate an overall forgiveness score for the TRIM-18. Besides, avoidance and revenge were decided to reverse so that high scores represented high forgiveness.

Reasons for forgiving Reasons for Forgiving was measured by the Focus of Forgiveness Scale (FFS; Strelan, Mckee, Calic, Cook, & Shaw, 2013) of 15-items. FFS was developed from an original sample pool of 30-items. Three factors were clearly distinguishable with all items loading highest among all factors. The average scores were measured by three focuses - self-focus (five items; $\alpha = .86$), relationship (five items; $\alpha = .92$) and offender focus (five items; $\alpha = .82$).

All questions were beginning with a variation on the tag, "I forgave because...", and randomly presented in the questionnaire. The scale adopts a Likert five-point scale (1-strongly disagree, 2-disagree, 3-no disagree/no agree (neutral), 4-agree, and 5-strongly agree).

2.3 Data analysis

The original data of this study were obtained from the response of 306 participants in the survey. Using the score of the CVSCALE, the TRIM-18, and the FFS to analyse the differences among dimensions of culture, forgiveness, and reasons for forgiving in country, gender, and age. After deleting the invalid data (uncompleted answers), 300 valid data were analysed for the final results. In addition, the score of power distance from the CVS showed right-skew. Therefore, the middle-transformed score (LN) was used as the final score of power distance.

Besides, we found large and unexpected statical significant differences in the gender composition of the samples from the two countries meant (p < .001) that gender needed to be accounted for in any country comparisons to avoid confounds. Therefore, gender was added as another independent variable (with country) together for analysis of the predicting of dimensions of culture, forgiveness, and reasons for forgiving.

Four multiple linears regressions were run in this study. Firstly, in the first and the second regression, the average score in each sub-scale of the CVSCALE and the FFS, the average score of the TRIM-18 were analysed as the dependent variables to measure the relationships between dimensions of culture, forgiveness, and reasons for forgiving in two countries and gender. In addition, the TRIM-18 and the FFS were analysed as the dependent variables to measure the relationships between forgiveness, and reasons for forgiving in different levels of dimensions of culture (the sub-scale of the CVSCALE). Finally, age and gender were used as the extra control variable in the analysis.

3 Results

Four sets of multiple regression analysis were conducted, and the results are presented below. Multiple regression as an extension of linear regression allows for the prediction of the value of one variable (the dependent variable; DV) based on the value of one or more variables (the independent variables; IV).

3.1 Do country differences predict dimensions of culture?

Research studies show that culture affects people's worldviews and personal values, and culture as a way of life varies across countries (Sandage et al., 2003). To understand if the dimensions of culture differ across countries is, therefore, the purpose of the analysis. The first table (Table 2) of results shows the prediction of the different dimensions of culture. Power distance, collectivism, masculinity, uncertainty avoidance, and long-term orientation are the different dependent variables whose values are predicted with the independent variables of country and gender.

In Table 2, country was a statical significant predictor of collectivism, masculinity, and long-term orientation. In the case of country, and masculinity, it was identified that there is a difference between Portugal and the United Kingdom there, and .37 in masculinity. For collectivism, and long-term orientation, the *B* value decreases for a unit impact when moving from Portugal to the United Kingdom, by a negative value .19, and .20 respectively. Power distance and uncertainty avoidance did not statical significantly differ according to country.

Compare to the country to predict dimensions of culture, gender was only a statical significant predictor of masculinity. For every unit in the gender variable, there is a .06 difference in collectivism by *B* value when moving from male to female. For masculinity (the cultural dimensions), the *B* value increase for a unit impact in gender (moving from male to female), by .49. Besides, other variables are not statistical significantly different from zero.

Power distance, collectivism, long-term orientation, and uncertainty avoidance did not statistical significantly differ according to gender.

In terms of country and gender, and power distance, the β value is .08 for country and .09 for gender. Both are in the positive directionality, but neither is closer to 1 or -1 and hence could account for a low correlation. The β value is highest for .24 for gender and masculinity and is the lowest (negative) for country and collectivism. The former indicates a more positive correlation whereas the latter will be indicative of a low correlation. In the case of country and gender, and power distance, the coefficient of determination is .01 or 1. Therefore, while comparing to the standardised regression coefficients, country or gender is a better predictor of masculinity rather than other variables. Of all the given dimensions, the connection between country and gender, and collectivism, and masculinity is relatively high at 5%, meaning about 5% of the variations in the dependent variables can be explained by the independent variables. In the case, the overall model was not statistically significant for uncertainty avoidance and power distance. Therefore, very little variations in the uncertainty avoidance cultural dimension can be described by country and gender. For the regression with the two statical significant predictors, the effect of country and gender in presenting some variables like collectivism and masculinity is better than other cultural dimensions. In other cultural dimensions, the regression analysis shows that country and gender are not good predictors. If one were to consider predictor variances between the dimension's masculinity and uncertainty avoidance and the other dimensions, the variance is not much, and there is only a 5% capability noticed. Therefore, one must be very cautious about interpreting results with respect to predictor capability.

 Table 2

 Summary of Multiple Regression Analyses for Country and Gender Predicting Dimensions of Culture (N = 300)

| Variable | Po | wer Dista | ınce | Co | Collectivism | | Masculinity | | | Uncertainty Avoidance | | | Long-term Orientation | | |
|-----------|------|-----------|---------|----------|--------------|---------|-------------|------|---------|-----------------------|------|---------|-----------------------|------|-----|
| variable | В | SEB | β | B | SEB | β | B | SE B | β | B | SEB | β | B | SEB | β |
| Country | 0.06 | 0.04 | .08 | -0.19** | 0.06 | 19** | 0.37** | 0.13 | .18** | -0.05 | 0.07 | 05 | -0.20* | 0.08 | 16* |
| Gender | 0.06 | 0.04 | .09 | 0.06 | 0.06 | .06 | 0.49*** | 0.13 | .24*** | -0.01 | 0.07 | 01 | 0.08 | 0.08 | .06 |
| R^2 | .01 | | | .05 | | | .05 | | | .00 | | | .04 | | |
| $Adj R^2$ | .00 | | | .05 | | | .05 | | | 01 | | | .03 | | |
| F | 1.22 | | | 8.03*** | | | 8.06*** | | | 0.28 | | | 6.24** | | |
| 1C | (2, | | | (2, 207) | | | (2, 207) | | | (2, | | | (2, | | |
| df | 297) | | | (2, 297) | | | (2, 297) | | 297) | | | 297) | | | |

^{*} *p* < .05. ** *p* < .01. *** *p* < .001

Table 3
Summary of Multiple Regression Analyses for Country and Gender Predicting Forgiveness and Reasons for Forgiving (N = 300)

| Variable | the TRIM-18 | | | Self-focus | | | Re | lationship F | Focus | Offender Focus | | | |
|-----------|---------------------------|------|---------|---------------------------|------|---------|----------|--------------|---------|----------------|------|------------------|--|
| | $\boldsymbol{\mathit{B}}$ | SEB | β | $\boldsymbol{\mathit{B}}$ | SEB | β | B | SEB | β | B | SEB | $oldsymbol{eta}$ | |
| Country | 0.01 | 0.11 | .01 | 0.21* | 0.10 | .14* | 0.05 | 0.13 | .02 | 0.24 | 0.11 | .01 | |
| Gender | -0.12 | 0.11 | 07 | -0.11 | 0.10 | 07 | -0.18 | 0.13 | 09 | -0.09 | 0.11 | 05 | |
| R^2 | .01 | | | .03 | | | .01 | | | .00 | | | |
| $Adj R^2$ | 00 | | | .03 | | | .00 | | | 00 | | | |
| F | 0.83 | | | 5.03** | | | 1.50 | | | 0.52 | | | |
| df | (2, 297) | | | (2, 297) | | | (2, 297) | | | (2, 297) | | | |

^{*} *p* < .05. ** *p* < .01

3.2 Do country differences predict forgiveness and reasons for forgiving?

The previous subsection discussed how the difference of country (Portugal versus the United Kingdom) can serve as predictors for different dimensions of culture like uncertainty avoidance, masculinity, collectivism, and so on. This section discusses if country can be a predictor variable to understand forgiveness, meaning if the difference in country can affect forgiveness and reasons one forgives. The idea is to understand whether a person from Portugal is likely to forgive as compared to a person from the United Kingdom. This section checks if the reasons why someone from the United Kingdom or Portugal forgive can be different. In Table 3, the independent variables are country and gender, and the dependent variables are the TRIM-18, self-focus, relationship focus, and offender focus. The TRIM-18 serves as the prediction aspect for forgiveness and self-focus, relationship focus, and offender focus serve as the predicted dependent variables for forgiveness reasons.

Country was only a statical significant predictor of self-focus. For every unit in the country variable, there is a .21 difference in self-focus by B value. Besides, other variables are not statistical significantly different according to country and gender. In terms of the F value, self-focus is relatively higher at 5.03.

The R^2 values as identified for Table 2 are .01, .03, .01, and .00 respectively for the TRIM-18, self-focus, relationship focus and offender focus respectively. The coefficient of determination value at .01 for the regression between country, gender predictors, and the TRIM-18 (representative forgiveness) shows that only around 1% in variations in forgiveness changes with country. If one were to consider Portugal and the United Kingdom, then both countries differ by only 1% in how they show the difference in predictions of forgiveness, and therefore country cannot be a good predictor for forgiveness. On a similar note, gender is not a good predictor for forgiveness. For relationship focus, the R^2 values are 0.1 and for offender focus, the R^2 values at 0.00. Once again, neither country nor gender is good predictors for

whether forgiveness is meted out because one wants to respect the relationship or because one wants to do something good for the offender. It is, therefore, highly unlikely that country as a variable can be used to identify if a person forgives because of relationship-focus or offender-focus. The coefficient of determination value at .03 between country and gender, and self-focus is the highest relatively. About 3% of variations in self-focus can be explained by the predictor variables country and gender. However, once again, the difference between what can be explained with the predictor variable of country and gender with respect to self-focus and what cannot be explained in terms of relationship focus and offender focus are not that statical significant. Therefore, even if one can argue that predictor variables of country and gender offer an explanation for 3% variations in self-focus, the difference from other predicted-predictor relationships are not that different.

3.3 Do the dimensions of culture predict forgiveness and reasons for forgiving?

In this section, it is checked if the dimensions of culture can predict forgiveness or reasons for forgiving. For instance, this section will check which dimension of culture is best at predicting forgiveness and which is best at predicting forgiveness reasons, such as self-focus, offender focus, and relationship focus. The idea is to understand whether some dimensions are better than others and if so, in what aspects of forgiveness or reasons for forgiveness, are they better. In Table 4, the relationships being tested are between the independent variables of power distance, uncertainty avoidance, collectivism, masculinity, and long-term orientation. The dependent variables are the TRIM-18, self-focus, relationship focus, and offender focus.

According to table 4, self-focus can be predicted by collectivism (p < .05) and long-term orientation. In addition, the overall model for self-focus also showed a statical

significant effect. Otherwise, collectivism has a statical significant effect for relationship and offender focus. To sum up, the reasons why people forgive can be predicted by collectivism.

The B value is relatively high at .28 for collectivism and relationship focus. For every unit value of collectivism and relationship focus will increase by .28. The β value is relatively high at .14 between collectivism and relationship focus and offender focus and relatively low at -.13 between collectivism and self-focus. The coefficient of determination values is relatively high between the independent variables, and self-focus and relationship focus. About 4% of the variations in these independent variables can be predicted by the dependent variables. Therefore, this indicates that relatively speaking, dimensions of culture differences can have an effect on self-focus and relationship focus. In terms of the F value, self-focus is relatively higher than the rest at 2.60.

Besides, the TRIM-18, self-focus, relationship focus, and offender focus did not statistically significant different according to power distance, uncertainty avoidance, and masculinity. The *B* value is low for masculinity and self-focus. It is a negative value of .33. This means for every unit value of masculinity predictor variable; the self-focus will go down by .33. The *SE B* values are quite low between masculinity and offender focus, and the TRIM-18.

 Table 4

 Summary of Multiple Regression Analyses for Dimensions of Culture Predicting Forgiveness and Reasons for Forgiving (N = 300)

| Variable | the TRIM-18 | | | Self-focus | | | Re | lationship I | Focus | Offender Focus | | | |
|--------------------------|-------------|------|-----|------------|------|------|----------|--------------|-------|----------------|------|------|--|
| v arrabie | В | SE B | β | В | SE B | β | В | SE B | β | В | SE B | β | |
| Power Distance | 0.07 | 0.15 | .03 | -0.12 | 0.13 | 05 | 0.15 | 0.18 | .05 | -0.06 | 0.16 | 02 | |
| Uncertainty Avoidance | 0.14 | 0.10 | .09 | 0.13 | 0.09 | .08 | 0.01 | 0.13 | .00 | 0.06 | 0.11 | .03 | |
| Collectivism | -0.02 | 0.10 | 01 | -0.20* | 0.09 | 13* | 0.28* | 0.13 | .14* | 0.25* | 0.11 | .14* | |
| Masculinity | -0.06 | 0.05 | 08 | -0.33 | 0.04 | 04 | 0.23 | 0.06 | .02 | 0.01 | 0.05 | .01 | |
| Long-term Orientation | 0.11 | 0.09 | .08 | 0.18* | 0.08 | .14* | 0.15 | 0.11 | .08 | 0.02 | 0.09 | .01 | |
| R^2 | .02 | | | .04 | | | .04 | | | .02 | | | |
| $Adj R^2$ | .01 | | | .03 | | | .02 | | | .01 | | | |
| F | 1.31 | | | 2.60* | | | 2.18 | | | 1.42 | | | |
| df | (5, 294) | | | (5, 294) | | | (5, 294) | | | (5, 294) | | | |

^{*} *p* < .05

3.4 Do the dimensions of culture predict forgiveness and reasons for forgiving after taking age and gender into account?

The last analyses tests whether the dimensions of culture offer similar prediction capability for forgiveness and reasons for forgiving when age and gender are included as independent variables. Table 5 is similar to Table 3, but it includes the independent variables age and gender to the set. The dependent variables are the TRIM-18, self-focus, relationship focus, and offender focus

According to the table 5, collectivism has a statical significant effect for relationship and offender focus, and long-term orientation has a statical significant effect for self-focus. In addition, the overall models for self-focus and relationship focus also showed a statical significant effect. Therefore, after taking age and gender as the independent variables with dimensions of culture, reasons for forgiving can still be predicted by collectivism and long-term orientation.

The B value is relatively high at .33 and .27 between collectivism and relationship focus and offender focus respectively. The β value is relatively high at .15 between collectivism and offender focus. Besides, the β value is at .16 between collectivism and relationship focus. Both of relationship focus and offender focus had statistically significant difference according to collectivism. The coefficient of determination values is high between the independent variables and the dependent variables at .06 (self-focus). This means about 6% of the variations in self-focus can be predicted by the independent variables. About 7% of variations of relationship focus and 4% in variations of the TRIM-18 and offender focus can be attributed to the dependent variables. Therefore, this indicates that relatively speaking, dimensions of culture differences can have an effect on self-focus and relationship focus. In terms of the F value, self-focus and relationship focus are relatively higher at 2.60 and 2.94 respectively.

Table 5

Summary of Multiple Regression Analyses for Dimensions of Culture, Age and Gender Predicting Forgiveness and Reasons for Forgiving (*N* = 300)

| Variable | the TRIM-18 | | | Self-focus | | | Relationship Focus | | | Offender Focus | | |
|--------------------------|-------------|------|-----|------------|------|------|--------------------|------|------|----------------|------|------|
| | В | SE B | β | В | SE B | β | В | SE B | β | В | SE B | β |
| Power Distance | 0.11 | 0.15 | .04 | -0.09 | 0.13 | 04 | 0.20 | 0.18 | .07 | -0.02 | 0.16 | 01 |
| Uncertainty Avoidance | 0.15 | 0.10 | .09 | 0.13 | 0.09 | .08 | 0.01 | 0.13 | .01 | 0.07 | 0.11 | .04 |
| Collectivism | -0.00 | 0.10 | 00 | -0.17 | 0.09 | 11 | 0.33* | 0.13 | .16* | 0.27* | 0.11 | .15* |
| Masculinity | -0.07 | 0.05 | 08 | -0.03 | 0.05 | 04 | 0.03 | 0.06 | .03 | 0.00 | 0.05 | .00 |
| Long-term Orientation | 0.13 | 0.09 | .10 | 0.21* | 0.08 | .16* | 0.20 | 0.11 | .11 | 0.04 | 0.09 | .03 |
| Age | 0.01 | 0.01 | .10 | 0.01 | 0.00 | .07 | 0.01 | 0.01 | .11 | 0.01 | 0.01 | .11 |
| Gender | -0.09 | 0.10 | 05 | -0.17 | 0.09 | 11 | -0.24 | 0.12 | 11 | -0.10 | 0.11 | 10 |
| R^2 | .04 | | | .06 | | | .07 | | | .04 | | |
| $Adj R^2$ | .01 | | | .04 | | | .04 | | | .02 | | |
| F | 1.54 | | | 2.60** | | | 2.94** | | | 1.78 | | |
| df | (7, 292) | | | (7, 292) | | | (7, 292) | | | (7, 292) | | |

^{*} *p* < .05. ** *p* < .01

4 Discussion

In this study, the researcher tried to connect cross-cultural psychology and forgiveness through this research to understand multi-cultural forgiveness deeply and to provide more value for future studies. Building on the previous researches, the purpose of current research aims to examine the association between culture and forgiveness taking into account the measure of forgiveness and culture. By overcoming the major weakness of past studies, this research offered the CVSCALE, the TRIM-18, and the FFS to measure dimensions of culture, forgiveness, and reasons for forgiving respectively.

According to the results of this research, the most important key findings can be found in the following summary. Country is served as an effectual prediction of collectivism, masculinity, long-term orientation in one's dimensions of culture. It also is a prediction of self-focus in reasons for forgiving. In addition, reasons for forgiving, such as self-focus, relationship focus, and offender focus, can be predicted well, by collectivism and long-term orientation.

4.1 Do country differences predict dimensions of culture?

Firstly, dimensions of culture were measured within two countries, Portugal and the United Kingdom. According to the statistics data from the Hofstede Insights (2010), Portugal and the United Kingdom were recruited to represent the cultures of collectivism and individualism respectively in this study. The researcher tries to examine could country be a predictor for culture or not through this analysis.

The concept of forgiveness is either a voluntary or intentional emotion (Doka, 2017). While the reasons for forgiving are based on context, or as a form of emotional regulation as claimed by Strelan and Covic (2006), and Worthington and Scherer (2004), it cannot be refuted

that it is a universal emotion. However, does this aspect of being a universal emotion make it the same in all countries? Countries are different based on many aspects, and one of the foremost researched ones is culture. Therefore, one of the first questions that this research tried to analyse for was whether country differences predict dimensions of culture. Besides, gender also serves as a good predictor variable for the collectivism dimension and masculinity dimension. Dimensions of culture as presented by Hofstede (1980) are power distance, collectivism, masculinity uncertainty avoidance, and long-term orientation.

One of the key findings in this study, country is served as a very good prediction of collectivism. Differences between countries can therefore be studied with the collectivism dimension. Similarly, country also serves as a good predictor of the dimension of masculinity (masculinity/femininity). For all other dimensions like uncertainty avoidance, power distance, and long-term orientation, the predictor variables of country and gender are relatively not good.

If one has to work on assessing how forgiveness changes with country, then it is critical to check them with dimensions of culture. In particular, it would be better to know what dimensions of culture serve as more strong differentiators. For instance, if a country changes, what dimensions are affected the most. The results showed that if the country (Portugal and the United Kingdom) changes, and then the dimensions of masculinity versus femininity and collectivism versus individualism are what changes first.

4.2 Do country differences predict forgiveness and reasons for forgiving?

In addition, the research was aimed at directly understanding if the country's difference is helpful for predicting forgiveness and reasons for forgiving. Forgiveness as presented earlier was coded based on the TRIM-18 and the FFS.

Why people forgive is largely different. In the thematic analysis of forgiveness, it was identified that self-focus was one of the reasons that people tend to forgive because it would help them to forgive as a form of emotional regulation (Strelan & Covic, 2006; Worthington & Scherer, 2004). They feel a positive outcome when they forgive and therefore, there is the self-interest of self-focus here (Younger et al., 2004). When people are in a relationship, they tend to forgive because they want their relationship to be good, and this considered as relationship focus (Strelan, Mckee, Calic, Cook, & Shaw, 2013). There is also an offender focus, where people forgive the offender because they want it to be of some good to the offender (Matsumoto & Juang, 2017). Here the focus of forgiveness is the goodwill of the offender. Now the results from the research showed that self-focus was one of the primary reasons for forgiveness. Country and gender serve as good predictors for identifying the self-focus of an individual when it comes to forgiveness. Hence, it is inferred that people tend to forgive for self-focus because they want to improve their emotional state, or emotional regulation, or they want to move on. Offender focus might come as a close second, but more tests have to be run with this point.

4.3 Do the dimensions of culture predict forgiveness and reasons for forgiving?

Thirdly, the research work was to analyse if dimensions of culture can predict forgiveness and reasons for forgiving. Can one be more or less forgiving because of their cultural influences is the reasoning behind this section of the experimentation. Independent variables or the predictor variables are power distance, uncertainty avoidance, collectivism, masculinity, and long-term orientation. The dependent variables are once again the TRIM-18, self-focus, relationship focus, and offender focus. Most existing current research on cultural aspects does support this philosophy. For instance, the work of Joo et al. (2019) on cultural effects on forgiveness presented that contributors to forgiveness vary based on culture. West European heritage and East Asian heritage were considered as so different that forgiveness and forgiveness motivation differs as the current study.

The cultural dimensions indicated a relatively close link between the cultural dimensions of masculinity and relationship focus. However, the same cultural dimensions are weakly associated with self-focus. Masculinity and offender focus are also weakly associated. However, the results are high between collectivism and offender focus and low between collectivism and self-focus. If all cultural dimensions have a relatively high correlation with self-focus and relationship focus.

The inferences in terms of dimensions of culture as predictors for forgiveness and reasons for forgiving are quite mixed. If only the correlation coefficient at the end is considered, then it shows that cultural dimensions serve as relatively good predictors for forgiveness as associated with self-focus and relationship-focus. A person and his cultural background could influence how much he wants to forgive another for his own emotional regulation or self-good. Similarly, a person's cultural background can affect how much he/she wants to forgive on account of keeping or sustaining a current relationship he/she involved in.

4.4 Do the dimensions of culture predict forgiveness and reasons for forgiving after taking age and gender into account?

Finally, age and gender are often observed to have confounding effects on attitude and cultural impact. Age creates generational differences. What is revered in one generation might be perceived differently in another? Therefore, age can have an effect on forgiveness. When age and gender constructs were included as independent variables or predictor variables, along with the dimensions of culture, the following results were obtained.

The highest prediction is with respect to self-focus and when comparing these results with the previous discussion that did not include age and gender, it can be said that results are in the same direction. A notable point here is that more of the self-focus variable can be predicted by the predictor variable here. This is an improvement from the previous parts. This could mean that age and gender have a very positive effect on improving the strength of correlation between country dimensions and self-focus. In terms of relationship focus, the correlation strength is the same as when age and gender were not included. It could be argued thus that age and gender have some form of confounding influence on the correlation between cultural dimensions and self-focus.

It is interesting to note that self-focus is the only reason why people would forgive others. Even people from different cultures are focused on their own needs when they forgive and not the offender. Researchers like Fehr, Gelfand, and Nag (2010) discuss many situational correlates for forgiveness in the form of responsibility and intent, harm severity, and rumination. Each of these situational correlates might actually help understand forgiveness with a much deeper perspective. However, it is interesting that in current research, much of the focus is on the self. The intent of offender or offender focus in any manner does not appear to show a strong positive correlation (with or without the demographic variable).

4.5 Strength

The primary strength of this research work is that it has considered a more holistic perspective on forgiveness. Different from other studies, more variables related to cross-cultural backgrounds are involved in this research. Forgiveness is a very complex concept. When a person forgives, they might undergo some positive release which protects them from vengeance and resentment (Doka, 2017). There are also functional protectives associated with forgiveness as presented by Strelan et al. (2013). People forgive because they have a self-need. They do it for their own goodwill or might do it in order to maintain a relationship. Some might even consider the context, and the nature of the offender and then decide whether or not to forgive. In addition to these, there are other influential concepts of why people from some cultures might possess the disposition to forgive more and why some less. Such a complex construct like forgiveness cannot thus be analyses with simple variables. It required a more complex structure within method with all aspects included in it, like cultural dimensions, self-focus, offender focus, and so on. This work in considering the complexity of the construct of forgiveness has attempted to capture a more holistic working of forgiveness.

Secondly, the primary research work also checks for confound variables as influences. A confounding variable is basically a third variable that links a cause and effect. The research work includes demographic variables to understand if causal connections being investigated between cultural dimensions and forgiveness are in any way impacted by them. The demographic variable like gender and its effect on forgiveness has been presented in existing research as a key point of interest. Previous research works analyse if forgiveness is a gender trait. According to the research by Miller et al. (2008), women are usually considered as being more empathetic than others. This could influence forgiveness. Secondly, they are more relational than others. They tend to give importance to relationships and this consequentially means that they also have a greater tendency to forgive. However, this is not a very fixed

standpoint, and in fact, there have been many concerns raised on the gender empathy variable. Therefore, including aspects like gender and age creates some interesting insights in the analysis. Similarly, age has also been considered to check how these variables influence the correlational analysis. Some of these very aspects being discussed as strengths also challenge the research design and these are discussed as limitations in the next section.

4.6 Limitations

Forgiveness is indeed a complex construct, and even using aspects like dimensions, the TRIM-18, and others do not do justice towards measuring this concept efficiently. For instance, there is a need to consider the cognitive effect and or constraints mentioned in their research. Fehr, Gelfand, and Nag (2010) presents how cognitive correlates of forgiveness have multiple effects on forgiveness. A person who forgives someone in one state need not always do so. For instance, if offenders see an offense as severe and intentional, they might be less likely to forgive. Alternatively, if they ruminate over an event more than necessary, then they are less likely to forgive again. Forgiveness changes based on many aspects. Therefore, even if the cultural dimension and influence are proven, and if age and gender were moderators, there can be many more factors that affect forgiveness like the cognitive behavior of the person who wants to forgive. This leads one to question if forgiveness can be measured at all. Another limitation of this research is the focus on using only some dimensions from others like Hofstede for identifying culture, rather than comparing countries based on many more dimensions. Researchers have tried to define dimensions in many more ways, and inclusion of a much more complex set for measurement and analysis would have been better.

Another major limitation is how demographic variables like age have been considered. First of all, limitation is that we found many intra country differences because we measured at the individual level from Portugal and the United Kingdom. So, the limitation is that the cross-

national differences were not as great as expected. In addition, gender has been considered as either male or female, but age has just been considered in terms of quantitative aspects, like at what age does one become more forgiving based on self-aspects or based on offender aspects. Research evidence suggests that age has to be treated in a very critical way when considering its impact on forgiveness. Based on the research outcomes from Silton, Flannelly and Lutjen (2013), people who are unforgiving when they are young, will usually mellow down when they age. They become more reflective and relaxed as they. Age differences are, therefore, a function of time (Cheng & Yim, 2008). When they become older, they might value forgiveness as a form of short-term hedonic reward than when they were younger. Their motivations towards forgiveness change as they become older as well. They try to derive as more effective meaning from their forgiveness as their age increase.

4.7 Future implications

This research work showed that forgiveness is usually a trait associated with self-aspects or self-focus. People tend to forgive because they want to move on or want some self-peace or emotionally regulate themselves, and so on. As compared to offender-focus and relationship-focus, which is more externally driven forgiveness, self-focus is more internally driven. Forgiveness is thus understood as a trait that one indulges in for the self and has (relatively) less to do rather than the others. Secondly, the research work showed that aspects of collectivism/individualism and masculinity/femininity were correlated to forgiveness (self-focus) more than the other dimensions.

This research work was more of a higher-level analysis of forgiveness by taking cultural difference into account. It did operate at a very basic level to understand how forgiveness is motivated and/or constructed in people. In attempting to present forgiveness as a complex construct, many aspects were included, but then the research in the future should focus more

on depth. For instance, future studies can focus on understanding the cognitive and affective reasons why forgiveness varies. While dimensions of culture are one of the researches into it, the research needs some form of behavioral introspection in it, because forgiveness appears to be so personal. If it is so motivated by self-focus, then forgiveness is better researched as a more personal variable than as a country-level variable.

Future studies can use the insights generated in this study to explore some of the moderating variables like trying to replicate and exploring other moderating variables and their impact on forgiveness. Having a more large and diverse data set or a stratified or convenience sample would also be beneficial. Finally, future studies must attempt to include some qualitative analysis aspects of research. This research investigation is largely quantitative. While the quantitative analysis was good to understand correlations and causal strength, qualitative analysis can offer a richer exploration of the phenomenon of forgiveness. For instance, during this ongoing pandemic situation, people are more humane than ever and forgiving and amiable. Such situations can be used to elicit more qualitative data and that could reveal more on how cognitive affects influence forgiveness.

4.8 Conclusion

The purpose of current research is to identify the relationship between culture and forgiveness by considering new variables. Different from the previous research, more variables related to cross-cultural backgrounds are involved in this research, such as country. The contributions of the study outcomes can be explored in three parts. Firstly, it is identified that country (Portugal and the United Kingdom) differences will influence cultural dimensions like masculinity and collectivism. Secondly, country (Portugal and the United Kingdom) and gender serve as good predictors for identifying the self-focus of an individual when it comes to forgiveness. Thirdly, cultural dimensions of masculinity and relationship focus are correlated. This holds good even in the presence of introducing gender and age variables. In fact, the relationship strength is improved. Such results cover part of the research gaps in the field of forgiveness. However, there still has some weaknesses in this study. Therefore, we look forward to having more discussions and revisions in this part in the near future.

References

- Beck, G. L., Dorff, E. N., & Hallisey, C. (2000). Religious perspectives on forgiveness. In M.
 E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), Forgiveness: Theory, Research,
 and Practice (pp. 17-40). New York, NY: Guilford Press.
- Beilmann, M., Kööts-Ausmees, L., & Realo, A. (2018). The Relationship Between Social Capital and Individualism–Collectivism in Europe. *Social Indicators Research*, *137*(2), 641-664. doi: 10.1007/s11205-017-1614-4
- Belicki, K., Decourville, N., Kamble, S. V., Stewart, T., & Rubel, A. (2020). Reasons for Forgiving: Individual Differences and Emotional Outcomes. *SAGE Open*, 10(1), 215824402090208. doi: 10.1177/2158244020902084
- Berry, J. W., & Worthington, E. L. (2001). Forgivingness, relationship quality, stress while imagining relationship events, and physical and mental health. *Journal of Counseling Psychology*, 48(4), 447-455. doi: 10.1037/0022-0167.48.4.447
- Berry, J. W., Worthington, E. L. Jr., Parrott, L., O'Connor, L. E., & Wade, N. G. (2001).
 Dispositional forgivingness: Development and construct validity of the Transgression
 Narrative Test of Forgivingness (TNTF). Personality and Social Psychology Bulletin, 27,
 1277-1290. doi: 10.1177/01461672012710004
- Bigoness, W. J., & Blakely, G. L. (1996). A cross-national study of managerial values. *Journal of International Business Studies*, 27(4), 739-748. doi: 10.1057/palgrave.jibs.8490151
- Bloom, J. (2018, January 19). Forgive us our what? Three ways we say the Lord's prayer [Blog post]. Retrieved from https://www.desiringgod.org/articles/forgive-us-our-what
- Carlisle, J. B. (2012). The analysis of 168 randomised controlled trials to test data integrity.

 Anaesthesia, 67(5), 521-537. doi: 10.1111/j.1365-2044.2012.07128.x
- Cheng, S.-T., Yim, Y.-K. (2008). Age differences in forgiveness: the role of future time perspective. *Psychology and Aging*, 23(3), 678-680.

- Clark, M. S., Ouellette, R., Powell, M. C., & Milberg, S. (1987). Recipient's mood, relationship type, and helping. *Journal of Personality and Social Psychology*, *53*, 94-103. doi: 10.1037/0022-3514.53.1.94
- Davis, D. E., Hook, J. N., & Worthington Jr., E. L. (2008). Relational spirituality and forgiveness: The roles of attachment to God, religious coping, and viewing the transgression as a desecration. *Journal of Psychology & Christianity*, 27(4), 293-301.
- Doka, K. J. (2017). Grief is a journey: finding your path through loss. New York, NY: Atria Paperback.
- Farrow, T. F. D., Zheng, Y., Wilkinson, I., & Spence, S. A. (2001). Investigating the functional anatomy of empathy and forgiveness. *Neuroreport*, *12*(11), 2433-2438.
- Fehr, R., Gelfand, M. J., & Nag, M. (2010). The road to forgiveness: A meta-analytic synthesis of its situational and dispositional correlates. *Psychological Bulletin*, *136*(5), 894-914. doi: 10.1037/a0019993
- Fiske, A.P. (1992). The Four Elementary Forms of Sociality: Framework for a Unified Theory of Social Relations. *Psychological Review* 99, 689-723. doi: 10.1037/0033-295X.99.4.689
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74(6), 1464–1480. doi: 10.1037/0022-3514.74.6.1464
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values.*Beverly Hills, CA: Sage.
- Hofstede, G. (1991). *Culture's consequences: international differences in work-related issues.*Beverly Hills, CA: Saga.
- Hofstede, G., Hofstede, G., & Minkov, M. (2010). *Cultures and organizations*. New York, NY: McGraw-Hill.

- Hofstede, G., & Minkov, M. (2013). Values Survey Module 2013. Retrieved from https://geerthofstede.com/research-and-vsm/vsm-2013/
- Hofstede Insights. (2010). National Culture. Retrieved from https://www.hofstede-insights.com
- Hofstede Insights. (2020). National Culture. Retrieved from https://www.hofstede-insights.com
- Joo, M., Terzino, K. A., Cross, S. E., Yamaguchi, N., & Ohbuchi, K. I. (2019). How Does Culture Shape Conceptions of Forgiveness? Evidence from Japan and the United States. *Journal of Cross-Cultural Psychology*, 50(5), 676-702. doi: 10.1177/0022022119845502
- Kadima Kadiangandu, J., Gauché, M., Vinsonneau, G., & Mullet, E. (2007).
 Conceptualizations of Forgiveness. *Journal of Cross-Cultural Psychology*, 38(4), 432-437. doi: 10.1177/0022022107302312
- Karremans, J., Regalia, C., Paleari, F. G., Fincham, F. D., Cui, M., Takada, N., Ohbuchi, K., Terzino, K. Cross, S. E., & Uskul, A. K. (2011). Maintaining Harmony Across the Globe. Social Psychological and Personality Science, 2(5), 443-451. doi: 10.1177/1948550610396957
- Karremans, J. C., & Van Lange, P. A. M. (2004). Back to caring after bring hurt: the role of forgiveness. *European Journal of Social Psychology*, 34(2), 207-227. doi: 10.1002/ejsp.192
- Lennon, R. E. (2013). A meta-analysis of cultural differences in revenge and forgiveness.

 University of North Florida.
- Luhtanen, R., & Crocker, J. (1992). A collective selfesteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302-318. doi: 10.1177/0146167292183006

- Macionis, J. J., & Gerber, L. M. (2011). Sociology. Toronto: Pearson Prentice Hall.
- Matsumoto, D. R., & Juang, L. P. (2017). *Culture and psychology*. Australia: Cengage Learning.
- McCullough, M. E., Fincham, F. D., & Tsang, J. (2003). Forgiveness, forbearance, and time:

 The temporal unfolding of transgression-related interpersonal motivations. *Journal of Personality and Social Psychology*, 84(3), 540-557. doi: 10.1037/0022-3514.84.3.540
- McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Brown, S. W., & Hight,
 T. L. (1998). Interpersonal forgiving in close relationships: II. Theoretical elaboration
 and measurement. *Journal of Personality and Social Psychology*, 75, 1586-1603.
- McCullough, M. E., Root, L. M., & Cohen, A. D. (2006). Writing about the benefits of an interpersonal transgression facilitates forgiveness. *Journal of Consulting and Clinical Psychology*, 74, 887-897. doi: 10.1037/0022-3514.75.6.1586
- McCullough, M. E. (2008). Beyond revenge: the evolution of the forgiveness instinct. San Francisco, CA: Jossey-Bass.
- Mellor, D., Fung, S. W. T., & Binti Mamat, N. H. (2012). Forgiveness, empathy and gender-a Malaysian perspective. *Sex Roles*, 67(1-2), 98-107. doi: 10.1007/s11199-012-0144-4
- Miller, A. J., Worthington Jr, E. L., & McDaniel, M. A. (2008). Gender and forgiveness: A meta-analytic review and research agenda. *Journal of Social and Clinical Psychology*, 27(8), 843-876. doi: 10.1521/jscp.2008.27.8.843
- Pietro P., Furey, M. L., Ricciardi, E., Gobbini, M. I., Wu, C. W. H., Cohen, L., Guazzelli, M., & Haxby, J. V. (2004). Beyond sensory images: object-based representation in the human ventral pathway. *PNAS*, *101*(15), 5658-5663. doi: 10.1073/pnas.0400707101
- Rye, M. S. (1998). Evaluation of a secular and a religiously integrated forgiveness group therapy program for college students who have been wronged by a romantic partner.

- Unpublished doctoral dissertation, Bowling Green State University, Bowling Green, OH.
- Rye, M. S., Loiacono, D. M., Folck, C. D., Oiszewski, B. T., Heim, T. A, & Media, B. P. (2001).

 Evaluation of the psychometric properties of two forgiveness scales. *Current Psychology*, 20, 260-277.doi: 10.1007/s12144-001-1011-6
- Sandage, S. J., Hill, P. C., & Vang, H. C. (2003). Toward a multicultural positive psychology: Indigenous forgiveness and Hmong culture. *The Counselling Psychologist*, *31*(5), 564-592. doi:10.1177/0011000003256350
- Santelli, A. G., Struthers, C. W., & Eaton, J. (2009). Fit to forgive: Exploring the interaction between regulatory focus, repentance, and forgiveness. *Journal of Personality and Social Psychology*, 96(2), 381–394. doi: 10.1037/a0012882
- Silton, N. R., Flannelly, K. J., & Lutjen, L. J. (2013). It Pays to Forgive! Aging, Forgiveness, Hostility, and Health. *Journal of Adult Development*, 4(1), 1-10. doi: 10.1007/s10804-013-9173-7
- Strelan, P., & Covic, T. (2006). A review of forgiveness process models and a coping framework to Guide future research. *Journal of Social and Clinical Psychology*, 25(10), 1059-1085. doi: 10.1521/jscp.2006.25.10.1059
- Strelan, P., Mckee, I., Calic, D., Cook, L., & Shaw, L. (2013). For whom do we forgive? A functional analysis of forgiveness. *Personal Relationships*, 20(1), 124-139. doi: 10.1111/j.1475-6811.2012.01400.x
- Swidler, A. (1986). Culture in action: Symbols and strategies. *American Sociological Review*, 51(2), 273-286.
- Terzino, K. (2007). *Culture and forgiveness: a prototype perspective*. Retrieved from https://lib.dr.iastate.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=15658&context=rtd

- Thompson, L., & DeHarpport, T. (1998). Relationships, goal incompatibility, and communal orientation in negotiations. *Basic and Applied Social Psychology*, 20(1), 33-44. doi: 10.1207/s15324834basp2001_4
- Wade, S. H. (1989). *The development of a scale to measure forgiveness*. Unpublished doctoral dissertation, Fuller Graduate School of Psychology, Pasadena, CA.
- Walker, R. F., Hughes, I. A., Riad-Fahmy, D. & Read, G. F. (1978). Assessment of ovarian function by salivary progesterone. *Lancet*, *312*(8089), 585. doi: 10.1016/S0140-6736(78)92931-8
- Witvliet, & McCullough. (2007). Forgiveness and health: A review and theoretical exploration of emotion pathways. Altruism and Health. In Post, S. G. Thaut (Eds.), Altruism and health: Perspectives from empirical research (pp. 259-276). New York, NY: Oxford University Press.
- Witvliet, C. O., Ludwig, T. E., Laan, K. L. V. (2001). Granting forgiveness or harboring grudges: implications for emotion, physiology, and health. *Psychological Science*, 12(2), 117-123. doi: 10.1111/1467-9280.00320
- Worthington, E. L., Lavelock, C., Witvliet, C. V., & Rye, M. S. (2015). Measures of forgiveness. In G. Boyle, D. Saklofske, & G. Matthews (Eds.), *Measures of Personality and Social Psychological Constructs* (pp. 474-502). San Diego: Elsevier Science & Technology.
- Worthington, E. L., & Scherer, M. (2004). Forgiveness is an emotion-focused coping strategy that can reduce health risks and promote health resilience: theory, review, and hypotheses. *Psychology & Health*, *19*(2), 285-405. doi: 10.1080/0887044042000196674
- Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's Five Dimensions of Cultural Values at the Individual Level: Development and Validation of CVSCALE.

- Journal of International Consumer Marketing, 23(3), 193-210. doi: 10.1080/08961530.2011.578059
- Young, E. A, Abelson, J., & Lightman, S. L. (2004). Cortisol pulsatility and its role in stress regulation and health. *Frontiers in neuroendocrinology*, 25(2), 69-76. doi: 10.1016/j.yfrne.2004.07.001
- Younger, J. W., Piferi, R. L., Jobe, R. L., & Lawler, K. A. (2004). Dimensions of forgiveness: The view of laypersons. *Journal of Social and Personal Relationships*, 21, 837-855. doi: 10.1177/0265407504047843
- Zourrig, H., Chebat, J. C., & Toffoli, R. (2009). Exploring cultural differences in customer forgiveness behavior. *Journal of Service Management*. *1*(2), 1. doi: 10.1108/09564230910978502