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THE RELATIONSHIP BETWEEN NON-ATTACHMENT, COMPASSION AND
PROSOCIAL BEHAVIOUR AMONG UNDERGRADUATE STUDENTS IN MALAYSIA

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The Relationship Between Non-Attachment, Compassion and
Prosocial Behaviour Among Undergraduate Students in Malaysia

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This research project is submitted in partial fulfilment of the requirements for
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NON-ATTACHMENT, COMPASSION, PROSOCIAL BEHAVIOUR

DECLARATION

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

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NON-ATTACHMENT, COMPASSION, PROSOCIAL BEHAVIOUR

APPROVAL FORM

This research paper attached here, entitled “The Relationships Between Non-attachment, Compassion and Prosocial Behaviour Among Undergraduate Students In Malaysia” prepared and submitted by “Goh Kai Xuan, Low Wen Ze and Terry Tan” in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.



Supervisor

Dr. Siah Poh Chua

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Abstract

The present study's aim is to explore the correlation between non-attachment, compassion and prosocial behaviour and how these variables influence each other. The current study proposed three hypotheses suggesting that positive relationships exist between non-attachment, compassion and prosocial behaviour among undergraduate students in Malaysia, with the study's findings indicating a significant and positive relationship between non-attachment and prosocial behaviour, compassion and prosocial behaviour, as well as non-attachment and compassion. This study is a cross-sectional and quantitative research. The aggregate number of participants recruited was 162 via purposive sampling method and their responses were accumulated through the internet questionnaire. All participants were Malaysian, undergraduate students from local universities aged 19-20 and most of them were Chinese. The present study included three instruments which were: Non-attachment Scale-Short Form (NAS-SF), Compassion scale (CS), and Prosocialness Scale for Adults (PSA). Additionally, the relationships among these three variables was examined by using Pearson's Correlation. The present study's findings suggest that there is an expanded concept of virtue-meditation-wisdom and have addressed the gap, as there have been limited studies conducted to examine these three variables. Besides that, these findings also suggest that it can be embedded in the educational programs, counselling services and national youth development policy. In short, empirical support is provided by the present study on the relationships between non-attachment, compassion and prosocial behaviour.

Keywords: non-attachment, compassion, prosocial behaviour, undergraduate students, Malaysia

Subject Area: H1-99 Social Sciences (General)

Table of Contents

| | Page |
|------------------------|-------------|
| List of Tables | i |
| List of Figures | ii |
| List of Abbreviations | iii |
| Chapter | |
| 1 Introduction | 1 |
| Background of Study | 1 |
| Problem Statement | 3 |
| Conceptual Definition | 5 |
| Non-attachment | 5 |
| Compassion | 6 |
| Prosocial Behaviour | 6 |
| Operational Definition | 7 |
| Non-attachment | 7 |
| Compassion | 7 |
| Prosocial Behaviour | 7 |
| Research Objectives | 8 |
| Research Questions | 8 |
| Hypothesis | 8 |
| Significance of Study | 8 |

| | | |
|----------|---|----|
| 2 | Literature Review | 11 |
| | Non-attachment | 11 |
| | Compassion | 12 |
| | Prosocial Behaviour | 14 |
| | Non-attachment and Prosocial Behaviour | 15 |
| | Compassion and Prosocial Behaviour | 17 |
| | Non-attachment and Compassion | 19 |
| | Theoretical Framework | 23 |
| | Conceptual Framework | 26 |
| 3 | Methodology | 27 |
| | Research Design | 27 |
| | Sampling Method | 27 |
| | Location of the Study | 28 |
| | Ethical Clearance Approval | 28 |
| | Sample Size | 29 |
| | Participants | 29 |
| | Data Collection Procedure | 30 |
| | Research Instruments | 32 |
| | Nonattachment Scale-Short Form (NAS-SF) | 32 |
| | Compassion scale (CS) | 32 |
| | Prosocialness Scale for Adults (PSA) | 33 |
| | Data Analysis | 34 |
| | Pilot Study | 34 |
| | Actual Study | 35 |

| | | |
|----------|--|----|
| | Reliability of Pilot and Actual Study | 35 |
| 4 | Results | 36 |
| | Data Cleaning | 36 |
| | Missing Data and Disqualified Data | 36 |
| | Descriptive Statistics | 36 |
| | Demographic Statistics | 36 |
| | Data Transformation | 38 |
| | Topic-specific Characteristics | 38 |
| | Test of Normality | 41 |
| | Histogram | 41 |
| | Q-Q Plot | 41 |
| | Skewness and Kurtosis | 42 |
| | Kolmogorov-Smirnov Test | 42 |
| | Conclusion of Assumptions of Normality | 43 |
| | Reliability | 43 |
| | Pearson Correlation Coefficient (PCC) | 44 |
| | Hypotheses 1 | 44 |
| | Hypotheses 2 | 44 |
| | Hypotheses 3 | 45 |
| 5 | Discussion | 46 |
| | Background Knowledge | 46 |
| | Hypotheses 1 | 46 |
| | Hypotheses 2 | 48 |

NON-ATTACHMENT, COMPASSION, PROSOCIAL BEHAVIOUR

| | | |
|----------|---|-----------|
| | Hypotheses 3 | 50 |
| | Implication | 52 |
| | Theoretical Implication | 52 |
| | Practical Implications | 54 |
| | Limitations | 57 |
| | Recommendations | 58 |
| | Conclusion | 60 |
| 6 | References | 62 |
| 7 | Appendices | 84 |
| | Appendix A: Criterion Validity for NAS-SF | 84 |
| | Appendix B: Validity for Compassion Scale (CS) | 85 |
| | Appendix C: Categorization items to each subscale in Compassion Scale (CS) | 86 |
| | Appendix D: Sample Size Calculation | 88 |
| | Appendix E: Reliability of Pilot Study | 89 |
| | Appendix F: Ethical Clearance Approval | 90 |
| | Appendix G: Questionnaire (Online Survey) | 94 |
| | Appendix H: Poster | 101 |
| | Appendix I: Descriptive Statistics - Demographic | 102 |
| | Appendix J: Descriptive Statistics | 104 |
| | Appendix K: Histogram | 105 |
| | Appendix L: Q-Q Plot | 107 |
| | Appendix M: Skewness and Kurtosis | 109 |

NON-ATTACHMENT, COMPASSION, PROSOCIAL BEHAVIOUR

| | |
|---|-----|
| Appendix N: Kolmogorov-Smirnov Test | 110 |
| Appendix O: Cronbach's Alpha | 111 |
| Appendix P: Pearson Correlation Coefficient (PCC) | 112 |
| Appendix Q: Turnitin Originality Report | 113 |

List of Tables

| Tables | Page |
|--------|------|
| 3.1 | 35 |
| 4.2.1 | 37 |
| 4.4 | 40 |
| 4.5.3 | 42 |
| 4.5.4 | 43 |
| 4.7A | 44 |
| 4.7B | 44 |
| 4.7C | 45 |

List of Figures

| Figures | Page |
|---------|------|
| 1 | 26 |

List of Abbreviations

| | |
|------------|--|
| APU | Asia Pacific University of Technology & Innovation |
| C | Compassion |
| Covid-19 | Coronavirus Disease 2019 |
| CS | Compassion Scale |
| df | Degree of Freedom |
| FFMQ | Five Facets of Mindfulness Questionnaire |
| HAS | Helping Attitudes Scale |
| IABS | Internet Altruistic Behaviour Scale |
| KS | Kolmogorov Smirnov |
| LKM | Loving-Kindness Meditation |
| M | Mean |
| MMU | Multimedia University |
| NA | Non-Attachment |
| NAS-7 | Nonattachment Scales-7 |
| NAS-SF | Non-Attachment Scale-Short Form |
| PB | Prosocial Behaviour |
| PCC | Pearson Correlation Coefficient |
| PSA | Prosocialness Scale for Adults |
| Q-Q | Quantile-Quantile |
| QR | Quick-Response |
| SARS-CoV-2 | Severe Acute Respiratory Syndrome Coronavirus 2 |
| SCS-SF | Self-Compassion Scale--Short Form |
| SD | Standard Deviation |
| SEGi | SEGi University & Colleges |

| | |
|--------|--|
| SERC | Scientific and Ethical Review Committee |
| SPSS | Statistical Package for Social Sciences |
| TARUMT | Tunku Abdul Rahman University of Management and Technology |
| UTAR | Universiti Tunku Abdul Rahman |

Chapter I

Introduction

1.1 Background of Study

The concept of non-attachment originates from Eastern philosophy, particularly Buddhism (Soler et al., 2021). This concept has long been emphasized in Buddhism and recently has begun to be studied in psychology (Devine et al., 2022). Non-attachment is the process of engaging in life experiences without overly being fixated on or actively avoiding emotions, outcomes, or thoughts (Sahdra et al., 2010; Sahdra et al., 2016). In other words, non-attachment encourages people to let go of the fixation of thought or desire to achieve certain goals (Whitehead et al., 2018). It simply means that one needs to learn to let go of things rather than to escape from reality. Moreover, the previous study mentioned that non-attachment is positively related to prosocial behaviour; it is believed that adopting non-attachment might make people more sensitive to other's needs (Sahdra et al., 2015). This may be explained by the fact that the non-attachment individual might maintain an open mindset without relying on personal gain or loss, leading to prosocial behaviour.

Besides, compassion is a basic human characteristic that affects people's emotional health and social interaction. It is a reaction toward others' pain or suffering that includes cognitive awareness, sympathy and action to decrease suffering (Addiss et al., 2022). Furthermore, compassion involves a feeling of warmth and generosity towards others' suffering; this motivates people in performing prosocial behaviour (Förster & Kanske, 2022). In simpler words, individuals high in compassion are more sensitive toward other's suffering and increase their likelihood of engaging in prosocial behaviour. This explains why past studies suggest that compassion has a positive correlate with prosocial behaviour among young adults (Chen et al., 2022; Lindsay & Wilkinson, 2024).

In addition, prosocial behaviour refers to the positive behaviours that individuals exhibit voluntarily and intentionally toward helping others, including sharing and cooperating (Kakulte & Shaikh, 2023; Putra et al., 2020). The capability to help other people is quite crucial in bringing about great psychological well-being and also fostering social cohesiveness among people (Kakulte & Shaikh, 2023; Wu & Hong, 2022). Previous research also hinted at the fact that prosocial behaviour can promote many positive mental states, such as psychological flourishing and life satisfaction (Miles et al., 2022). It is worth noting that there might be a lot of factors that could influence the probability of prosocial behaviour, including compassion and non-attachment (Sahdra et al., 2015; Förster & Kanske, 2022). This proves the fact that prosocial behaviour is quite complex and multilayered. Therefore, it is worth noting what factors increase prosocial behaviour, especially non-attachment and compassion, as those may give insight to acquire a deeper understanding of the correlation between non-attachment, compassion, and prosocial behaviour.

The reason researchers give for studying the correlation between non-attachment, compassion, and prosocial behaviour is that it is crucial to understand the root of positive social interaction and psychological well-being. As mentioned earlier, non-attachment can be understood as living in one's life without any fixation. On the other hand, compassion is the emotion that motivates people to care for or help others. These two variables may contribute to increased prosocial behaviour theoretically. However, limited studies have been conducted to investigate the relationship between compassion, non-attachment and prosocial behaviour. Thus, the present research aims to explore the interaction of these variables to provide new and valuable insight on the impact of Eastern philosophy on prosocial behaviour.

1.2 Problem statement

Technology and information improvements have made communication easier in today's society, enabling individuals to see the lives of people from other socioeconomic classes, regions, and worlds. In Malaysia, social media usage increasingly continues among young adults, especially generation Y and generation Z (Dalol et al., 2021; Siddharta, 2024). According to Howe (2024), WhatsApp, Facebook, Instagram, TikTok and Telegram are the top five social media platforms commonly used by Malaysians. Together with media marketing, contemporary young adults are becoming increasingly attached to aspects such as interpersonal relationships, success, and achievements, including the pursuit and obsession with material things like money (Franzen & Mader, 2022), technology (Pozharliev et al., 2021) and social media (Dedeoğlu et al., 2020).

Non-attachment refers to the release of excessive clutching to material goods, relationships, or fixed identities (Sahdra et al., 2010; Soler et al., 2021). However, the current study about non-attachment is poorly understood, particularly in collectivist countries like Malaysia. This could be explained by the fact that Buddhism is a minority religion in Malaysia, whereas Islam is practiced by the majority, which results in less focus on related studies. Although there is a limited study, it is often believed that non-attachment encourages human's prosocial behaviour. Hence, the present study would like to find more evidence about the relationship between non-attachment and prosocial behaviour.

In addition, the psychological and cultural factors usually impact human behaviour (Luetz et al., 2020; Neldner et al., 2020), it decides how people relate to each other's and contribute to society. Prosocial behaviour helps to build peaceful societies (Bähr et al., 2021), which includes deeds like collaboration, assisting, and charity that are meant to benefit others

(Pfattheicher et al., 2022). Prosocial behaviour is important because in modern times, conflicts and disaster are rampant throughout the world, appearing in different forms such as the Russian-Ukrainian War, it greatly and lastingly impacts the mental health of the Ukrainian population (Seleznova et al., 2023); another disaster such as Covid-19 pandemic increase social isolation (Sepúlveda-Loyola et al., 2020). Social isolation during Covid-19 pandemic era may affect social relationship, especially in collectivist society (Hussein, 2020). In addition, given that young adults must navigate through complex social, emotional, and cultural confinements, the cultivation of prosocial behaviours is especially imperative as it may impact on their quality of social relationship and mental health. Such dynamics are distinctly notable in Malaysia—a multicultural and diverse nation that presents an optimal context to examine determinants that influence prosocial conduct.

One important component is compassion, which may be described as a deep awareness of the suffering felt by others together with the desire to alleviate that suffering (Goetz et al., 2010). While research into compassion has gained some ground in recent years, it is still quite a new field of study in Malaysia, and the number of studies conducted is relatively limited compared to those done in other countries. Searching with keywords like "compassion" and "Malaysia" through Google and Google Scholar, it is only possible to know that most studies in Malaysia focus on self-compassion; therefore, a knowledge gap of compassion existing in Malaysia.

This research is even more relevant in view of the increased recognition of issues regarding mental health and wellbeing among young adults in Malaysia. The promotion of mindfulness, emotional regulation, and social skills has become rampant in both educational institutions and corporate environments. Examining the relationships among non-attachment,

compassion, and prosocial behaviour may benefit such initiatives and provide empirical strategies for young adults to lead more purposeful, socially accountable lives. Despite this, research addressing these variables has been scant in Malaysia over the past couple of decades.

Finally, the current study seeks to fill a noticeable gap in the existing literature by examining the relationships between non-attachment, compassion, and prosocial behaviours among undergraduate students in Malaysia. Therefore, the aim of this study is to contribute to a better understanding of the psychological and cultural factors that underlie prosocial tendencies and thus to create a platform for the promotion of a more compassionate and harmonious society within Malaysia and beyond.

1.3 Conceptual Definition

Non-attachment

Non-attachment is described as a detachment from craving or attachment, nurtured by an understanding that all phenomena and beings lack a permanent self, and that all experiences are impermanent (Khoury, 2020). It is also an ability to take part in experiences with flexibility without attachment to set goals (Whitehead et al., 2018). This helps the individual live their life without getting unduly trapped or obsessed with experiences (Elphinstone et al., 2020). Moreover, individuals that practice non-attachment would exhibit greater flexibility and adaptability in new situations, which is characterized by a lack of self-centeredness and low levels of anxiety.

Compassion

Compassion is defined as the positive reaction to other's struggles and suffering (Gerber & Anaki, 2020). An emotional response elicited by another person's struggles or suffering may catalyze a specific individual's tendency to extend help (Lains et al., 2024). As articulated by Malliarou (2022), the concept of compassion encompasses other vital principles, including respect, empathy, and sympathy. Nonetheless, it is important to acknowledge the distinctions that exist among compassion, empathy, and sympathy. For instance, empathy requires tuning one's emotions to another's or a comparable situation which the individual has experienced in the past, whereas sympathy entails a more generalized range of other's emotional states (Gallagher et al., 2024). While, on the other hand, compassion is described as action-whereby most of one time is spent with those in agony (Gallagher et al., 2024).

Prosocial behaviour

Prosocial behaviour is defined as voluntary actions taken to help others (Olmos-Gómez et al., 2023). Acts in this category include anything from helping, cooperating to comfort (Singh & Dangwal, 2024). It was theoretically assumed that prosocial behaviour leads to positive relationships at a social level besides constituting a means by which social change is brought about (Kakulte & Shaikh, 2023). Previous literature has associated prosocial behaviour with a series of factors such as compassion, empathy, and sympathy (Yue & Yang, 2021; Yin & Wang, 2022).

1.4 Operational Definition

Non-attachment

This study uses the Nonattachment Scale-Short Form (NAS-SF) developed by Chio et al. (2018) as an instrument to measure the level of non-attachment among participants. The short form is extracted from the original scale, that consists of 30 items and was constructed by Sahdra et al. (2010). NAS-SF has a total of 8 items, and in it, the 6-point Likert scale is employed, which ranges from 1, indicating 'disagree strongly, to 6, representing 'agree strongly.' A high score on the scale reflects a higher level of non-attachment.

Compassion

This study uses the Compassion Scale (CS) developed by Pommier et al. (2020) to measure the levels of compassion which participants directed towards others. The scale features 16 items divided among four subscales: kindness, common humanity, mindfulness, and indifference. This scale employs a 5-point Likert Scale to measure one's level of compassion directed towards other people, '1=almost never,' while '5= almost always'. A higher score on the scale means that the person has more developed empathy and a deep ability to love with caring, showing that the person displays great compassion towards others.

Prosocial Behaviour

The present study uses the Prosocialness Scale for Adults (PSA) which was developed by Caprara et al. (2005), to measure participants' prosocialness. This scale is a 16-item measure, based on a 5-point Likert scale: a score of 1 "almost never true" to a score of 5 "always true." The higher the score on this measure, the higher one's level of prosocialness.

1.5 Research Objectives

1. To explore the correlation between non-attachment and prosocial behaviour.
2. To explore the correlation between compassion and prosocial behaviour.
3. To explore the correlation between non-attachment and compassion.

1.6 Research Questions

1. Is there any significant correlation between non-attachment and prosocial behaviour?
2. Is there any significant correlation between compassion and prosocial behaviour?
3. Is there any significant correlation between non-attachment and compassion?

1.7 Hypothesis

1. There is a positive correlation between non-attachment and prosocial behaviour.
2. There is a positive correlation between compassion and prosocial behaviour.
3. There is a positive correlation between compassion and non-attachment.

1.8 Significance of Study

Understanding the relationship between non-attachment, compassion, and prosocial behaviour is important for both individual and societies. People who successfully practice non-attachment tend to experience greater happiness (Siah et al., 2020). As highlighted by Siah (2024), the primary aim of cultivating non-attachment and understanding pain is to achieve personal happiness while simultaneously contributing to the well-being of others. Current research has showed that compassion is associated with prosocial behaviour (Tendhar & Bueno de Mesquita, 2020). People with compassion are more likely to engage in prosocial behaviour like helping others (Karnaze et al., 2022), and prosocial behaviour

provided benefits in various areas, including empathy, social connectedness and positive emotion (Varma et al., 2023).

The significance of this study is important for psychologists, policy makers and educators. In psychology field, one of the theoretical contributions of this study is to advance knowledge in the field of psychology. Although non-attachment, compassion and prosocial behaviour have been widely studied in Western contexts, research on these concepts is still limited in non-Western countries like Malaysia. In addition, there are limited research for studying the correlation between these three variables. Thus, there exists knowledge gaps in these areas. By focusing on young Malaysians, this research offers a fresh perspective on the interplay of these psychological traits within a multicultural framework. Malaysia's diverse population serves as a unique setting to evaluate whether theories of non-attachment and compassion hold true across cultures. Furthermore, this study fills a gap in the literature by exploring the interactions between these traits rather than studying them as independent variables. This holistic perspective provides a deeper understanding of how inner psychological states drive outer behaviour.

Additionally, the findings from this study also have important influences in education and policy-making fields. Educators can use the study's results to include non-attachment and compassion training into education systems to provide students with tools for emotional, social development, and also promote prosocial behaviour in order to create harmonious societies. Particularly considering racial and religious conflicts, Malaysia's multicultural environment presents considerable difficulties for societal peace. To close these divides, advancing understanding, and building a feeling of community, compassion and prosocial behaviour are important. This study provides suggestions for the ways in creating a

community that comes together by highlighting the importance that compassion, and non-attachment play in promoting prosocial behaviour. At a policy level, insights from this study could inform national youth development strategies, such as policies that promote prosocial behaviour such as volunteering and civic engagement after concerning non-attachment and compassion training.

This study is also extremely relevant to current concerns confronting Malaysia's young adults. One of these is the increasing impact of materialism and consumerism, which frequently results in unhappiness and a lack of fulfilment (Amrilah, 2024). Therefore, practice of non-attachment is considered essential. It can be explained by emphasizing independence from excessive cravings (Elphinstone & Whitehead, 2019), which is contrary to these tendencies. Non-attachment, by encouraging satisfaction and mental stability, can help young people cope with the constraints of a materialistic society (Saliya, 2024). Non-attachment, which is based on mindfulness and Buddhist traditions, enables people to participate with life more freely and flexibly, minimizing ego-driven actions and improving emotional well-being (Mak et al., 2023). According to studies, non-attachment can lead to healthier relationships, better resilience, and better mental health (Ch'ng et al., 2024; Goswami et al., 2024; Nguyen et al., 2017).

Chapter 2

Literature Review

2.1 Non-attachment

The terminology of ‘attachment’ is common and sounds positive in Western Psychology (Sadhra et al., 2010). According to Naveed et al. (2020), attachment is the emotional link between infants and their caregivers. The formation of attachment styles depends on the relationship quality between children and parents (Naveed et al., 2020). For instance, secure attachment is formed when the caregivers are always emotionally accessible, responsive, and affectionate when interacting with infants, which helps develop wholesome interpersonal connections and positive self-concept (Martín Quintana et al., 2023; Newman & Newman, 2020). Various forms of insecure attachment, such as avoidant, ambivalent and disorganized, will be formed when children experience rejection and tense relationships with their caregivers (Li, 2023; Naveed et al., 2020). As a result, children with an insecure attachment will struggle with emotional regulation, social skills, and anxiety (Kerns & Brumatiu, 2013). However, Sadhra et al. (2010) mentioned that ‘attachment’ in Buddhism sounds negative because it involves relying on anything that might help to enhance one’s self-image, even if it is a false perception of reality that may lead to suffering. As a result, it might encourage an individual to attach to familiar items and relationships to escape from life’s uncertainty.

Sahdra and Shaver (2013) compared similarities and differences in their study's ideas of attachment theory and non-attachment. In terms of similarities, they point out that attachment theory and non-attachment emphasize the values of providing and receiving love, reducing nervous clinging, and repressing unhappy mental experiences. The main difference between the two constructs is the meaning of security in adulthood. For instance, security in

attachment theory is the foundation of the mental image of self that is consistently loved and cared for in an intimate relationship. Meanwhile, security in the non-attachment context is free from the fixed perspective of oneself and others and emphasis on subjective experience on ease and balance.

Moreover, non-attachment in the Buddhist concept refers to the involvement with experience with flexibility and without a concentration on achieving specific results (Whitehead et al., 2018). In other words, it means the relation of the mind, or an individual is not attached to people, things, or experiences and is equipped with the ability to let them go (Sahdra et al., 2010; Tremblay et al., 2024). People who apply unhealthy attachments such as over reliance on objects and people and inability to let go might threaten one's well-being and mental health. This is supported by past research that mentioned that applying the concept of non-attachment in the Buddhist context is able to improve one's mental health and psychological well-being (Sys et al., 2024). Past studies pointed out that non-attachment has a positive impact on mental health as a high level of non-attachment is able to decrease psychological stress among those with at least mild depressive symptoms (Sys et al., 2024; Whitehead et al., 2021). Besides, previous research also found that nonattachment is positively correlated with workplace flourishing (Tsoi et al., 2022). It shows that employees who apply non-commitment might have greater job performance and job satisfaction. The results above highlighted the significance of non-attachment in people's lives as it improves their life satisfaction and well-being.

2.2 Compassion

The Oxford English Dictionary states that the Latin word "compati," which means "to suffer with another," is where the word "compassion" comes from (Oxford University Press,

n.d.; Strauss et al., 2016). It could be defined as the feeling that occurs while observing another's suffering which forces a subsequent wish to help (Goetz et al., 2010). The study showed that environment's cultural and religious features have a significant impact on the idea of compassion (Ortega-Galán et al., 2021). In addition, compassion plays an important role in areas related to healthcare and hospital settings. Medical experts and health care providers today regard compassion as an essential component of great healthcare and a cornerstone of medical codes of ethics (Durkin et al., 2020; Sinclair et al., 2021).

In Buddhist perspectives, compassion openly emphasize its simultaneous importance to one's own and happiness of others (Quaglia et al., 2020). Buddhist compassion applied to the psychotherapy process of emotional distress (Chen et al., 2020). When unpleasant emotions appear, it is recommended to use the treatment points and processes proposed in the study to practice in a continuous cycle to slowly get rid of emotional troubles and achieve happiness by getting rid of suffering (Chen et al., 2020). Other than that, research on loving-kindness meditation showed that even a short practice might boost sentiments of connection and social connectivity with strangers (Hutcherson et al., 2008). Empathy and compassion are linked to more helpful conduct, less aggressiveness, more good intergroup views during disputes, and a greater willingness to reconcile after conflicts (Klimecki, 2019). Therefore, compassion trainings have been developed because compassion training has been shown to enhance altruistic behaviours (Ho et al., 2021). In other study, compassion meditation can reduce amygdala reactions to stimuli that are unpleasant while simultaneously increasing motivation to view visual pictures of suffering (Weng et al., 2018).

2.3 Prosocial Behaviour

Prosocial behaviour is typically characterized as behaviours intended to benefit others or helping others (Eisenberg et al., 2007; Grant & Berg, 2012; Manesi et al., 2017).

Cooperation, sharing, assisting, charity giving, and volunteering are all examples of prosocial behaviours (Brief & Motowidlo, 1986; Manesi et al., 2017). Some of the studies claimed that prosocial behaviour comes from individual's prosocial personality traits, orientation of social values and the ability of being socially mindful (Manesi et al., 2017); or greed. It motivates individuals to perform acts that benefit others, at least in part because action provides some advantages (Michael et al., 2020). Another study support Manesi (2017) study which prosocial behaviour is strongly influenced by personality, especially Big Five Personalities (Anwar et al., 2024). According to Anwar et al. (2024), prosocial behaviours is consistently positively correlated with agreeableness and conscientiousness, but neuroticism and extroversion produce different outcomes.

It is important for individuals to perform prosocial behaviour. All human communities encourage prosocial activity, the manifestation of prosocial behaviours is an intrinsic part of humanity in all societies, and it has an important role for building and maintaining harmonious relationships (Padilla-Walker & Carlo, 2014). One Malaysia study showed that there is a weak positive correlation between prosocial behaviour and psychological well-being among Malaysian college students, which states that prosocial behaviour helps to improve and maintain the overall mental health of Malaysian college students (Rosli & Perveen, 2021). In addition, another Malaysia study also states that prosocial behaviour benefits young adults because it helps develop and improve their healthy emotional regulation skills (Tee et al., 2023).

2.4 Non-attachment and Prosocial Behaviour

There is a limited study conducted to investigate the correlation between non-attachment and prosocial behaviour, which was causing researchers to have difficulty in further examining the correlation between these 2 variables. This is because the concept of non-attachment has only recently been studied in the psychological field even though it has been long emphasis in Eastern philosophy (Devine et al., 2022). Most of the studies were only focused on investigating the meaning of non-attachment and its impact on psychological well-being, such as happiness, rather than the relationship between non-attachment and prosocial behaviour (Ho et al., 2022; Ali et al., 2023; Siah, 2024; Tremblay et al., 2024; Whitehead et al., 2018). However, previous studies mentioned that mindfulness is positively and closely correlated to non-attachment (Ho et al., 2022). This is supported by another study that mentions that non-attachment has a positive relationship with all 5 dimensions of mindfulness even though they are two different constructs (Sahdra et al., 2016). In addition, non-attachment significantly overlaps the definition of mindfulness especially in terms of non-judging and non-reactivity (Tremblay et al., 2024). Hence, we would like to substitute the term non-attachment with ‘mindfulness’ as it is expected to have a similar effect on prosocial behaviour.

Research conducted by Lv et al. (2021) to explores the correlation between mindfulness and virtual prosocial behaviour in China. The total number of participants involved in this study is 674 college students with inclusion criteria participants who do not have experience or exposure to mindfulness or other similar training. They measure mindfulness by using the Five Facets of Mindfulness Questionnaire (FFMQ) with 39 items. Each item in the particular scale is rated by a 5-point Likert scale, which ranges from 1 indicating “very rarely true” to 5 “always true”. The online behaviour is measured by using

the Internet Altruistic Behaviour Scale (IABS), which consists of 24 items with 4-point (1-never to 4 -always). This study's results show that mindfulness is a predictor of online prosocial behaviour, with empathy as a mediator. They explain that although it is the virtual mode, mindfulness practices might increase one's sensitivity to others' needs and encourage individuals to provide help. This study also pointed out that individuals with high mindfulness are more likely to provide help to others. Hence, there is a positive correlation between mindfulness and action on helping others.

Another research was also conducted to explore the correlation between mindfulness and prosocial behaviour (Schindler & Friese, 2022). This study is conducted by reviewing related articles to find empirical evidence. In their study, they found out that the correlation between mindfulness and prosocial behaviour can be explained in two ways; where mindfulness increases empathy in an individual and enhances executive function in the brain. This might explain why people with high mindfulness will increase their non-attachment and prosocial behaviour indirectly.

As mentioned earlier, there is a lack of studies exploring the correlation between non-attachment and prosocial behaviour, which highlights the importance of the following study. A cross-sectional study is conducted by Sahdra et al. (2015) in New South Wales and Queensland Australia to examine the prediction of prosocial behaviour by non-attachment. The total number of participants involved in this research was 1831 adolescents from Grade 10 from 16 high schools. They use a shortened version of Nonattachment Scales (NAS-7), which consist of nine items, while measuring peer nomination of prosociality and liking by using the identical items used by Ciarrochi & Heaven (2009). The results of this study showed that non-attachment predicted prosocial behaviour in terms of helpfulness and

kindness. This conveyed to researchers that applying non-attachment might encourage individuals to perform prosocial behaviour due to a high level of empathy (Sahdra et al., 2010). In other words, an individual with high non-attachment will have greater generosity or empathy in helping others. This study explained the result by pointing out that when individual with non-attachment lends help to others, it actually reflects the person giving up to self-enhancement. Hence, there is a positive correlation between non-attachment and prosocial behaviour.

2.5 Compassion and Prosocial Behaviour

Compassion and prosocial behaviours are often thought to be related. Compassionate people are often more willing to display prosocial behaviours, such as helping others, while people who display prosocial behaviours are generally considered to have higher compassion. This viewpoint is reinforced by various early research (Eisenberg et al., 2010; Gilbert, 2017; Leiberg et al., 2011).

A study of Americans during the Covid-19 pandemic shows people who have high compassion aspirations are more likely to feel empathy and sympathy with others during the Covid-19 epidemic (Yue & Yang, 2021). As Covid-19's impact on the United States increased, Americans began to show higher degrees of compassion (Yue & Yang, 2021). The study argued that solidarity is an important mediator between compassionate goal and donating. This is because solidarity has a crucial function in promoting prosocial behaviours by creating a sense of shared fate among individuals. Thus, helping others means benefiting oneself (Yue & Yang, 2021). Another similar research carried out during the SARS-CoV-2 outbreak found that more compassionate people engage in more prosocial acts due to concern for others (Karnaze et al., 2022). The findings indicated that compassion was associated with

more health-promoting behaviours, beneficial to public health, while empathy was associated with stronger prosocial attitudes toward other people (Karnaze et al., 2022).

Moreover, research targeting young diasporic Chinese people during the Covid-19 pandemic showed that compassion was one of the prominent proximal predictors of prosocial behaviours among adolescents and young adults. Additionally, it pinpointed the critical role of perceived prejudice in shaping teenage prosociality since it was found to independently forecast volunteering behaviour and could enhance the link between compassion and charitable donations (Chen et al., 2022). This implies that the epidemic could present a chance to foster and broaden global compassion and reinforces the notion that compassion can be a strong incentive for young people to help others (Peplak & Malti, 2021). According to some academics, a disaster compassion is the cause of this prosocial behaviour (Wider et al., 2022). In order to characterize how individuals react to widespread tragedies by acting philanthropically for others, the phrase "disaster compassion" was created (Wider et al., 2022). Explaining how individuals react to widespread calamities by acting philanthropically is the goal (Zaki, 2020).

Compassion and prosocial conduct also exist in children. According to research, when young children observe others in distress (such as adults or classmates), they frequently demonstrate empathic concern and participate in good prosocial acts such as comforting, helping, or sharing (Shoshani, 2024; Song, 2022; Williams et al., 2014). According to an experimental study conducted with preschoolers (ages 3–6), children who were around extremely distraught peers or adults showed more prosocial actions and more empathetic concern, and it was believed that these actions were early signs of compassion (Shoshani, 2024). These elements have been successfully included into several preschool programs. For

example, via art-based activities, the Creating Compassion program focuses on behavioural modelling of empathy and prosocial acts (Morizio et al., 2022). According to Maratos and Harvey (2024), compassion training and education proactively prioritize children's well-being and promote and integrate prosocial behaviours. In addition, compassion may have developed as an adaptive trait that improves humans' capacity to adequately care for their children while encouraging cooperation and prosocial behaviours (Di Bello et al., 2020; Gilbert, 2020).

2.6 Non-attachment and Compassion

There is a lack of recent literature examining the direct relationship between non-attachment and compassion. This may be due to the difference between attachment theory from Western Psychology and non-attachment from Buddhism having similar but distinct concepts, with meaning of security being the determining factor (Sahdra et al., 2010). While there is limited direct evidence linking the two constructs, related constructs like self-compassion may offer a potential link in understanding how non-attachment may have a role in an individual's compassion toward others.

Non-attachment refers to the ability to maintain a balanced, flexible and non-clinging attitude towards one's experience, whether it be pleasure or suffering with full presence and emotional openness without over-identification (Sahdra et al., 2010; Sahdra et al., 2016; Siah et al., 2020). A relevant area that non-attachment appears to have an association with is self-compassion, which involves how individuals treat themselves during instances of perceived failure or suffering that contains three components of self-kindness, sense of common humanity and mindfulness, where individuals acknowledge their pain and suffering with kindness, recognize suffering is a shared human experience, and mindful awareness of painful thoughts or emotions without becoming overly attached or identified with them (Neff,

2023). Both these constructs share the same emphasis on acceptance and mindfulness of one's experiences without judgment or over-identification.

In a study by Li et al. (2024), the relationship between self-compassion profiles and psychological well-being in adolescents of different genders was explored, showing that non-attachment played a mediating role. Higher non-attachment levels in both genders were positively associated with greater self-compassion, especially in those with more compassionate self-relating profiles, characterized as having high scores in subscales of self-kindness, common humanity and mindfulness, with subsequent low scores in self-judgement, isolation and over-identification (Li et al., 2024). This suggests that the mediation of non-attachment helps in reducing self-judgement and over-identification, which are barriers to the components of self-compassion of self-kindness and mindfulness, allowing individuals to have a more balanced awareness of their present selves that they can approach with kindness, even in the face of emotional distress (Neff, 2023).

A study by Xie (2023) on the mediating role of non-attachment between the relationship of self-compassion and mindfulness with peace of mind among adults in China further supports the relationship between non-attachment and self-compassion with evidence from the study suggesting that self-compassion and dispositional mindfulness were associated with higher non-attachment. The study found that self-compassion can further promote non-attachment due to how self-compassionate individuals adopt a more balanced view of their experiences, reducing the likelihood of them being overly identified with or too absorbed in their experiences as result of viewing suffering and difficulties as a common human experience, and to treat themselves with kindness (Xie, 2023; Neff, 2023). This finding

further supports the relationship between non-attachment and self-compassion by highlighting how self-compassion also cultivates a non-attached view of one's experiences.

Having established a link between non-attachment and self-compassion, it is important to examine how self-compassion may be related with compassion. Compassion, often referred to as compassion for others, is an emotional response that occurs when recognizing another's suffering and feeling the motivation or desire to help alleviate it (Goetz et al., 2010). Compassion, which is distinct from self-compassion, where instead of extending kindness and understanding towards oneself, compassion involves an outward focus towards others (Neff, 2023). Although distinct in the direction of which it focuses on, both constructs put an emphasis on kindness, empathy and emotional awareness (Goetz et al., 2010; Neff & Pommier, 2013; Neff, 2023).

The relationship is further explored by García-Campayo et al. (2023) in their study on the role of psychological distress and well-being in exploring the relationship between self-compassion and compassion for others as self-compassion and compassion for others are constructs that are related but distinct, where the relationship is moderated by the individual's mental well-being. The study found that participants with higher psychological well-being exhibited greater correlation between self-compassion and compassion with others, while although participants with higher psychological distress showed weaker or even absent correlations between self-compassion and compassion for others as opposed to those with lower psychological distress showing greater correlations between the two constructs, only self-compassion exhibited association with decreased psychological distress (García-Campayo et al., 2023). This suggests that mental health has a moderating role in determining how the constructs of self-compassion and compassion overlap and reinforce each other as

individuals with better mental health are more likely to exhibit self-compassion and compassion to others (García-Campayo et al., 2023).

Another study on the connection between self-compassion and compassion for others, specifically to those within one's social network that was done by Cha et al. (2023) found that personal values, specifically self-transcendence values of encompassing universalism, self-direction and benevolence acted as a key mediating role in the relationship. Self-compassion could enhance an individual's compassion for others through the mediation of personal values of self-transcendence, where values focused on the welfare of others were more likely to be adopted by individuals with higher self-compassion, which positively influenced their compassionate tendencies for others (Cha et al., 2023). In other words, self-compassionate individuals are more likely to prioritize other people's well-being through the cultivation of transcendent values that emphasize connection and care. Additional mediators were identified in a study by Ma & Xiao (2024) among college student in China which was psychological resilience and perceived social support. The study highlighted how self-compassion was moderately positively correlated with compassion for others when mediated through psychological resilience and perceived social support, where individuals with higher self-compassion fostered greater resilience while increasing one's perception and awareness of social support and as a result enhancing the positive connections one can establish between oneself and others, improving an individual's capacities of compassion for others (Ma & Xiao, 2024).

While recent literature on the direct study on the correlation between non-attachment and compassion is limited, examining the relationship through the mediating role of self-compassion provides a reasonable perspective into how these constructs could be related. It

could be proposed that the constructs of non-attachment and self-compassion are able to reinforce each other, by promoting qualities that define each construct such as emotional regulation and reduced self-focused attachments (Xie, 2023; Li et al., 2024). Through studies by García-Campayo et al. (2023), Cha et al. (2023) and Ma and Xiao (2024) suggest that due to an individual's mental health, personal values of transcendence, psychological resilience and their perceived social support, self-compassion can in turn positively correlate with greater compassion for others. Through self-compassion's mediating role on the correlation between non-attachment and compassion, it is reasonable to propose that non-attachment may be able to indirectly lead to cultivation of compassion by facilitating conditions that support the development of compassion.

2.7 Theoretical Framework

The relationship between non-attachment, compassion and non-attachment can be explained through the Buddhist concept of virtue-meditation-wisdom clarified by Yun (2007a), Yun (2007b), Yun (2007c), also known as the Three Trainings, of each being Virtue, Meditation and Wisdom, encompasses ethical conduct and moral integrity as a foundational guideline for harmonious living for the self and others, as well as self-regulation with adherence to principles of compassion, selflessness and honesty in one's conduct through the aspect of Virtue; mental clarity and emotional regulation to remain unaffected by external distractions and achieve a calm and attentive state of awareness through the aspect of Meditation; and transformative understanding of reality, its impermanence, suffering and non-self as the culmination of the Three Trainings in recognizing the interconnectedness of all beings through Wisdom. The Three Trainings are interdependent, with each aspect reinforcing and supporting each other in the pursuit of liberation, as virtue provides a moral framework, meditation refines the focus toward mental discipline that enables the deeper

understanding needed for wisdom, while wisdom acts as a guiding light that aligns virtuous conduct and mental stability with a profound understanding of reality to establish a cycle of growth, ethical living and transformation (Yun, 2007a).

The relationship between non-attachment and compassion can be explained by the virtue-meditation-wisdom concept as non-attachment can be fostered through the aspect of meditation that cultivates mental discipline like resilience against external distractions and reduced impulsivity to attain a calm and focused state of awareness (Yun, 2007b). This mental clarity helps reduce aversion and craving to self-centered thoughts and emotions, a key component of non-attachment, that enables individuals to let go of clinging to experiences (Sahdra et al., 2010; Sahdra et al., 2016; Siah et al., 2020). Through wisdom, non-attached individuals can perceive suffering with full emotional openness without being overly fixated due to understanding the impermanence of present thoughts and emotions (Yun, 2007c). The aspect of wisdom then highlights the interconnectedness of life, directing non-attachment to a sense of awareness of other's suffering, recognizing the shared nature of suffering and fostering empathy and concern for others. Compassion naturally arises from this understanding, with the aspect of virtue channelling this awareness of others into ethical and selfless actions aimed at alleviating the suffering of others, aligned with moral conduct to ensure social harmony (Goetz et al., 2010; Yun, 2007a).

For the relationship between non-attachment and prosocial behaviour, as mentioned before, non-attachment that is cultivated by meditation and directed by wisdom, reduces self-centeredness and ego-driven desires, while also places emphasis on empathy and concern for others due to understanding of shared sense of humanity and suffering can motivate actions that benefit others without anything in return (Yun, 2007b; Yun, 2007c). This motivation for

altruistic intention is reinforced by the aspect of virtue that places importance in moral conduct that guides individual to act ethically and selflessly to promote social harmony (Yun, 2007a). As a result, non-attachment can lead to genuine altruistic prosocial behaviour, where the welfare of others is prioritised without attachment to personal outcomes to maintain harmonious living (Yun, 2007a).

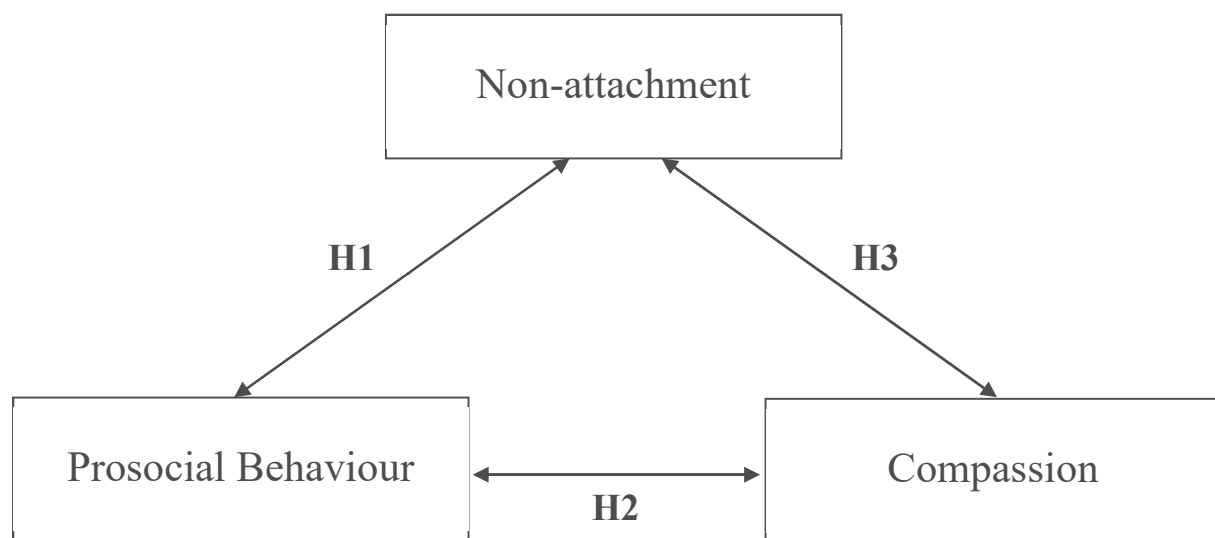
The relationship between compassion and prosocial behaviour can be explained where compassion is fostered from the aspect of wisdom due to understanding the nature of suffering and its interconnectedness with all beings; and from the aspect of virtue that emphasises harmonious living with others, which aligns with how compassion is the feeling of wanting to help alleviate the suffering of others after observing it. (Goetz et al., 2010; Yun, 2007a; Yun, 2007c). Meditation helps individuals have emotional clarity and profound awareness of the suffering of others to foster empathy for compassion and translate their compassionate intentions into stable and sustained actions that are not affected by ego-driven desires, while virtue helps ensure that actions as a result of their compassionate intentions are prosocial behaviours that are for the purpose of benefiting others and ensuring social harmony while following moral principles of compassion, honesty and selflessness (Olmos-Gómez et al., 2023; Yun, 2007a; Yun, 2007b). As a result, compassion that is rooted in wisdom and supported by meditation and virtue, motivates and sustains prosocial behaviour that benefits others and alleviates their suffering voluntarily.

2.8 Conceptual framework

The conceptual framework is proposed based on the theoretical framework in the earlier section. In this study, non-attachment and compassion play a role as independent variables whilst prosocial behaviour is the dependent variable. This study examines not only the correlation between independent variables and dependent variables but also the relationship between two independent variables. Thus, the current study would like to investigate the relationship between non-attachment, compassion, and prosocial behaviour.

Figure 1

The relationship between Non-attachment, Compassion and Prosocial behaviour



Chapter 3

Methodology

3.1 Research Design

This study was conducted in a quantitative method which was a cross-sectional study. The cross-sectional study is meant as an observational approach that allows researchers to collect data from a target population at one moment in time (Wang & Cheng, 2020). This research design was used because it is easy to apply and aids the present study researchers in collecting data from a large number of samples quickly while saving costs (Cvetković Vega et al., 2020; Wang & Cheng, 2020; Zuleika & Legiran, 2022). Additionally, this research design allows researchers to investigate the correlation among these variables and aid in gathering preliminary data to plan future studies as there are limited studies examining the correlation between non-attachment, compassion, and prosocial behaviour (Cvetković Vega et al., 2020; Wang & Cheng, 2020; Zuleika & Legiran, 2022). The current research also used a quantitative method, as it analyzes collected numerical data using statistical software and a mathematical model, which helps researchers understand how the variables in the present study influence each other (Ghanad, 2023; Lim, 2024). Data collection was conducted through the distribution of an online questionnaire.

3.2 Sampling Method

The current study recruited participants by using a non-probability purposive sampling method. A purposive sampling method refers to researchers selecting a sample that consists of the characteristics related to the study (Andrade, 2020). This means that researchers of the current study recruited the participants based on present study's inclusion and exclusion criteria. This helps increase the reliability of the data and methodology rigour in the study (Campbell et al., 2020). Additionally, utilising this sampling method aids the present research

in collecting responses from the large group of samples easily in a short time and being cost saving as the present study focuses on specific target samples.

3.3 Location of the Study

This study was conducted in Malaysia. This indicates that the researchers of the present study collected data from different states in Malaysia and the participants selected must be in Malaysia during the data collection time frame. The questionnaire was distributed via online social platforms like Little Red Book, Facebook, Instagram, WhatsApp, WeChat, and Microsoft Teams. The researchers also collected data physically by showing the questionnaire's Quick-Response (QR) codes to selected participants.

3.4 Ethical Clearance Approval

First, the present study researchers submitted a prepared research proposal to the supervisor of this study, Dr. Siah Poh Chua. After review and getting approval from the supervisor, the example of the questionnaire, which consists of informed consent, the instruments used, and the information demographic that will be collected in this study, was submitted to Universiti Tunku Abdul Rahman's Scientific and Ethical Review Committee (UTAR SERC) (refer to Appendix F) to gain ethical clearance approval. The approval from UTAR SERC is essential to ensure that this study does not violate any ethical standards and guidelines. After getting ethical approval from the UTAR SERC with the code of U/SERC/78-418/2024, the researchers distributed the questionnaire through physical and online social media platforms

3.5 Sample Size

The sample size of the present research was computed by utilizing the G*Power 3.1.9.7 software. The estimated correlation p H0 was 0.3. While 0.95 was set in the power analysis, which means that the probability of the outcome being significant is 95% and the error margin for this study was 0.05. After the calculation, the sample size of the present study was 115 participants (refer to Appendix D). However, present study's researchers decided to increase the desired sample size to 150, to account and compensate for potential invalid data, including missing data, incomplete data and straight lining data. The total sample size that was achieved in the current study was 162 participants with a response rate of 72.65%.

3.6 Participants

This study's target sample are undergraduate students pursuing their studies in a bachelor's degree program in Malaysia. There are two inclusion criteria for participants in this study: (1) Participants are Malaysian, and (2) The participants are undergraduate university students. The exclusion criteria in this study were: (1) filling out disagreements in the informed consent form provided, (2) incomplete survey questions, and (3) providing a straight-lining response. The participants who meet the inclusion criteria can continue to answer the online survey and their data were used for analysis. The data of participants who did not met the inclusion criteria or met the exclusion criteria were removed as it is considered invalid data. Additionally, participants were required to provide their agreement in informed consent by acknowledging that their data would be further used for data analysis.

3.7 Data Collection Procedure

The researchers of the present study created and prepared the online questionnaire using Qualtrics. After that, an ethical approval application to conduct research was submitted to Universiti Tunku Abdul Rahman's Scientific and Ethical Review Committee (UTAR SERC) before data collection. At the same time, the example of the questionnaire, which consists of informed consent, demographic information and instruments used (refer to Appendix G) were also submitted to UTAR SERC for review purposes. This stage is essential to ensure that the current study adheres to the existing ethical standards and guidelines that emphasise data protection and protect participant wellness while conducting research.

After getting ethical approval from UTAR SERC (Appendix F), the present study tested the instruments' reliability by conducting a pilot study with 30 participants. Then, the actual study was conducted by using the suggested sample of 150.

The present study's researchers had recruited participants face-to-face and online. The present study's researcher recruited participants via social media platforms (online) in two ways. The first way is that the present study's researcher created a poster (refer to Appendix H) which consists of the research title, research objective, inclusion criteria, and the QR code to promote it on online social platforms such as Little Red Book, Facebook, and Instagram which can help the present's study to recruit more participants from different states in Malaysia. The second way is that the present study researchers distributed the online questionnaire by sending the link or QR codes to their online social friends, for instance, Messenger, WeChat, Snapchat, and WhatsApp. At the same time, the present study researchers also recruited or approached participants face-to-face. For instance, the present

study's researchers provided participants with brief information on this study and questioned their interest to take part in this study. If they wish to be involved in this study, then the present study's researchers showed them the QR code of the questionnaire. Recruiting participants physically and online increased the accessibility and participation in this study.

After participants accessed the questionnaire by scanning QR codes or the link shared, they were directed to the first page of the internet survey. The questionnaire's first page is Section A, which is this study's introduction and informed consent. It is used to introduce the research title, research objective, study description, study's inclusion criteria, and the rights of the participants, such as confidentiality. The information about the present study's researcher was included, as participants can contact the researcher if needed. Inclusion criteria for participants in the present study were: (1) Participants are Malaysians, and (2) The participants are undergraduate university students. The exclusion criteria in this study were: (1) filling out "disagree" in the informed consent form provided, (2) incomplete survey questions, and (3) providing a straight-lining response. The participants who have met the inclusion criteria and provided an agreement in informed consent can answer the questionnaire, and their data were further analysed. In contrast, responses from participants who failed to meet the inclusion criteria and met the exclusion criteria were removed as it is considered invalid data.

A total of five sections was included in this online questionnaire which are Section A for introduction and informed consent, Section B is used to collect relevant demographic information of participants, Section C is for Non-Attachment Scale Short-Form (NAS-SF), Section D is the Compassion Scale (CS), Section E is for the Prosocialness Scale for Adults (PSA). The total items included in this questionnaire were 40 items, and it approximately

takes 15-20 minutes. The duration for data collection started from 9th January 2025 until 25th March 2025.

3.8 Research Instruments

Nonattachment Scale-Short Form (NAS-SF)

Chio et al. (2018) had developed NAS-SF to measure people's non-attachment levels. It is an abbreviated version of the Non-attachment Scale, with 30 items created by Sahdra et al. (2010). The total number of items included in NAS-SF is eight (see Appendix G). The scoring system of this scale was adopted as a 6-point Likert scale, which was: 1= 'Totally Disagree', 2 = 'Average Disagree', 3 = 'Kinda Disagree', 4= 'Kinda Agree', 5 = 'Average Agree', 6 = 'Totally Agree'. The non-attachment level was determined by summing the scores from each item. Higher scores indicate a high level of non-attachment, while lower scores indicate a low level of non-attachment. The reliability of this scale is measured by Cronbach's alpha, which is 0.91. It is considered high reliability as it falls within 0.80-1.00 (Atar et al., 2022). The scale's validity is measured by criterion validity, and it has a significant relationship with other measurements. For instance, Mindfulness ($r = .54$), Describing ($r = .30$), Acting with awareness ($r = .23$), and others (refer to Appendix A).

Compassion scale (CS)

Pommier et al. (2020) had created the CS to examine the compassion level a person has for others. The total number of items included in CS is 16 with four subscales which were kindness, common humanity, mindfulness and indifference. This research categorised the 16 items on the scale into their corresponding category (refer to Appendix C).

Each item on this scale was measured by a 5-point Likert Scale, which ranged from 1 = ‘Very Seldom’, 2 = ‘Seldom’, 3 = ‘Occasionally’, 4 = ‘Frequent’, 5 = ‘Very Frequent’. Additionally, a total of 4 items categorized as indifference are reversed items. Thus, the scoring of these items’ responses were reverse-coded. For example, the response of 1 score was reversed to a 5 score, and so on. The overall means of 16 items indicated total compassion score (Sek-yum Ngai et al., 2025). Higher scores indicate that compassion for others is high, whilst lower scores indicate that compassion for others is low (Sek-yum Ngai et al., 2025). The Cronbach’s alpha was used to rate the reliability of the scale and it was considered as good. The Cronbach alpha values across the sample fall within 0.76-0.90. The scale’s validity is measured by construct, convergent, discriminant, and known-group validity. The above-mentioned validity is considered good and supported by evidence (refer to Appendix B). For instance, the discriminant validity of the scale is high, which means it can differentiate from similar concepts: social desirability, secure attachment, and submissive compassion.

Prosocialness Scale for Adults (PSA)

Caprara et al. (2005) had created the PSA to evaluate the adults’ prosocialness. The total items of this scale is 16 (refer to Appendix G). The 5-point Likert Scale rates items of the scale: 1 = ‘Seldom true’, 2 = ‘Rare true’, 3 = ‘Periodically true’, 4 = ‘Frequently true’, 5 = ‘Habitually true’. Then, the score of each item is summed up, and the overall PSA score is obtained by calculating the mean scores (Addiction Research Center, n.d.). Higher scores indicate the prosocialness level is high, whereas the lower scores means the prosocialness level is low (Zhan et al., 2023). The Cronbach’s alpha is used to measure the scale’s reliability, and the value for this scale is $\alpha = 0.91$, which is considered good reliability. The construct and content validity measured the validity of the scale. The construct validity in this

scale is considered high as Caprapra et al. (2005) utilised the ratio 5:1 to prove that PSA was demonstrated as a single construct. The content validity of this scale is considered good as the scale's items covered the key elements of prosocial behaviour, which were sharing, kind, empathy and exhibiting helping behaviour.

3.9 Data Analysis

After the data collection, the data underwent data analysis. The data collected was analysed by IBM SPSS Statistic. The collected data was screened by running descriptive statistics. In addition, the present study investigated the relationships between non-attachment, compassion and prosocial behaviour by utilising the Pearson Correlation Coefficient (PCC). Cronbach's Alpha was used to test the reliability. Meanwhile, the present study also carried out the Q-Q plot, histogram, Kolmogorov Smirnov test (KS test), Skewness and Kurtosis to examine the normality.

3.10 Pilot Study

A pilot study is defined as a smaller scale of the main study (Sim, 2021). The pilot study plays an essential role as it might help the researchers in examining the study's methodology and access research instruments to improve the data's reliability that collected from the main study (Muasya & Mulwa, 2023). Additionally, it also helps to identify challenging problems of the study, create a plan of corrective action such as adjustment on the instrument used and determine whether the main study should be conducted (Muasya & Mulwa, 2023; Kunselman, 2024). The pilot study of the present study started from 3rd December 2024 until 9th January 2025 with 30 participants. Cronbach's alpha was conducted to examine each instruments' reliability. The reliability for NAS-SF is 0.703, while CS scale is 0.791. Lastly, the reliability for PSA is 0.904 (refer to Appendix E).

3.12 Actual Study

After Ethics Approval was obtained, actual study had begun the procedure of data collection from 9th January 2025 until 25th March 2025. According to the calculation of G*Power software, the present study's desired sample size is 150, while there are 162 of participants who have been involved in the actual study.

3.13 Reliability of Pilot and Actual Study

A reliability test was conducted for the pilot study ($N=30$) and an actual study ($N=162$). According to Atar et al. (2022), a reliability range within 0.60-0.80 is considered quite reliable, while a range within 0.80-1.00 is considered high reliability.

Table 3.1

Cronbach's Alpha value for NAS-SF, CS, PSA in pilot study with $N=30$ and actual study with $N=162$

| Instrument Used | Items | Pilot Study ($N=30$) | Actual Study ($N=162$) |
|-------------------------------|-------|---------------------------|-----------------------------|
| NAS-SF (Chio et al., 2018) | 8 | 0.703 | 0.833 |
| CS (Pommier et al., 2020) | 16 | 0.791 | 0.731 |
| PSA (Caprara et al., 2005) | 16 | 0.904 | 0.906 |

Chapter 4

Results

4.1 Data Cleaning

Data cleaning involves the processing of raw data gathered from one or several sources to suit the required quality for proper usage in applications (Ganti & Sarma, 2013). In this study, 223 responses were gathered from students in different universities.

4.1.1 Missing Data and Disqualified Data

The study collected responses from 223 university students. However, some invalid responses were identified in the dataset. Therefore, data cleaning is important before proceeding to data analysis. Among the 223 collected responses, 37 participants did not complete the questionnaire. Additionally, 16 students did not meet the inclusion criteria, which required participants to be Malaysia's undergraduate students studying at a university in Malaysia. Six students did not provide consent by disagreeing with the informed consent form, one case of straight lining and one case of extreme score were identified during the data cleaning process. Therefore, total of 61 (27.35%) invalid data was removed from the study, and the total number of valid data will be 162 participants.

4.2 Descriptive Statistics

4.2.1 Demographic Statistics

Based on table 4.2.1, the total number of 162 undergraduate students has been involved in this study. Majority of participants were found to be female with 74.1% ($n=120$) from the total of participants. While the male participants that were involved in the present study only 25.9% ($n = 42$), making them the minority in this study (refer to Appendix I). Similarly, in terms of racial groups, Chinese undergraduate students were overwhelmingly

dominant, representing 97.5% ($n = 158$) of the sample, followed by Malay students at 1.9% ($n = 3$), and Indian students at 0.6% ($n = 1$). Participants were from various universities in Malaysia, the highest number of participants from a single university were Universiti Tunku Abdul Rahman with 46.9% ($n = 76$), while 53.1% ($n = 86$) students were from other universities such as TARUMT, MMU, APU, SEGi and others.

Table 4.2.1

Demographic Statistics (N = 162)

| | <i>n</i> | <i>%</i> | <i>M</i> | <i>SD</i> |
|---------------|----------|----------|-------------|------------|
| Gender | | | 1.74 | .44 |
| Male | 42 | 25.9 | | |
| Female | 120 | 74.1 | | |
| Age | | | | |
| 19 | 5 | 3.1 | | |
| 20 | 12 | 7.4 | | |
| 21 | 36 | 22.2 | | |
| 22 | 61 | 37.7 | | |
| 23 | 27 | 16.7 | | |
| 24 | 10 | 6.2 | | |
| 25 | 2 | 1.2 | | |
| 26 | 1 | .6 | | |
| 27 | 0 | 0 | | |
| 28 | 2 | 1.2 | | |
| 29 | 2 | 1.2 | | |
| 30 | 0 | 0 | | |

| | | | | |
|-----------------------|-----|------|-------------|--------------|
| Race | | | 1.99 | .157 |
| Malay | 3 | 1.9 | | |
| Chinese | 158 | 97.5 | | |
| Indian | 1 | .6 | | |
| Others | 0 | 0 | | |
| Nationality | | | 1.00 | .000 |
| Malaysian | 162 | 100 | | |
| Universities | | | 2.06 | 1.001 |
| UTAR | 76 | 46.9 | | |
| Others | 86 | 53.1 | | |
| Level of Study | | | 2.00 | .000 |
| Undergraduate | 162 | 100 | | |

Note. n = number of cases; % = percentage; M = mean; SD = standard deviation

4.3 Data Transformation

Since CS consists of reverse-scored items, the researchers of the present research had conducted data transformation. In fact, items 3, 7, 11, and 15 were reverse-coded. Scoring on these items was altered as follows: “1” was substituted by “5”, “2” was substituted by “4”, “3” remains unchanged, “4” was substituted by “2” and “5” was substituted by “1”.

4.4 Topic-specific Characteristics

The Non-attachment Scale-Short Form (NAS-SF) applies a 6-point Likert scale to rate each item, with: 1= ‘Totally Disagree’, 2 = ‘Average Disagree’, 3 = ‘Kinda Disagree’, 4= ‘Kinda Agree’, 5 = ‘Average Agree’, 6 = ‘Totally Agree’. Chio et al. (2018) indicate that

total non-attachment scores are obtained by adding the score of all items. A higher score in this scale was referred to as a high non-attachment, whereas the lower score was referred to as low non-attachment.

The Compassion Scale (CS) consists of 16 items, divided into four subscales: Kindness (items 2, 6, 10, and 14), Common Humanity (items 4, 8, 12, and 16), Mindfulness (items 1, 5, 9, and 13), and Indifference (items 3, 7, 11, and 15), which also called reverse score (Pommier et al., 2020). The scale adopts a 5-point Likert scale, which ranged from 1 = 'Very Seldom', 2 = 'Seldom', 3 = 'Occasionally', 4 = 'Frequent', 5 = 'Very Frequent'. To provide a score on the Compassion Scale, each of the subscales are scored by taking the average of the four items assigned to it. To calculate the overall Compassion Score, the responses to all 16 items are averaged. But before this calculation, the items of the Indifference subscale should be reverse-scored first so the higher total scores would always reflect a high compassion level.

The Prosocialness for Adults (PSA) consists of a total of 16 items. Each item is evaluated by a 5-point Likert scale, with: 1 = 'Seldom true', 2 = 'Rarely true', 3 = 'Periodically true', 4 = 'Frequently true', 5 = 'Habitually true'. All of the items are added and the items' average is calculated to derive the total PSA score. Increased average scores represent a higher inclination toward prosociality, while lower scores represent a lower degree of prosocialness (Caprara et al., 2005).

Since the original authors of the Non-Attachment Scale – Short Form (NAS-SF), Compassion Scale (CS) and Prosocialness Scale for Adults (PSA) did not provide specific score categorizations, this study adopted a percentile-based approach to classify the scores.

Specifically, the 33rd, 66th, and 100th percentiles were used as cut-off points to group participants into low, moderate, and high scoring categories. For the Non-Attachment Scale – Short Form (NAS-SF), the corresponding scores at the 33rd, 66th, and 100th percentiles were 21.33, 34.66, and 48. For the Compassion Scale (CS), the corresponding mean scores at the 33rd, 66th, and 100th percentiles were 2.33, 3.66, and 5. Lastly, the corresponding mean scores of the Prosocialness Scale for Adults (PSA) at the 33rd, 66th, and 100th percentiles were also 2.33, 3.66, and 5.

According to table 4.4, most undergraduate students reported either moderate ($n = 79$, 48.8%) or high ($n = 79$, 48.8%) levels of non-attachment, while only 2.5% undergraduate students reported low levels ($n = 4$). On the Compassion Scale, a low level of compassion was only reported by 0.6% of the undergraduate students ($n = 1$). Conversely, the greatest extent of compassion was most commonly reported, with 59.9% of the students ($n = 97$) falling into this category, higher than the 39.5% ($n = 64$) who indicated a moderate level of compassion. In terms of prosocial behaviour, a high level was slightly more prevalent, with 53.7% ($n = 87$) of students falling into this category, compared to 43.8% ($n = 71$) who reported a moderate level. Only 2.5% ($n = 4$) of undergraduate students reported a low level of prosocial behaviour.

Table 4.4

Topic-Specific Characteristics' Frequency Distribution (i.e., Non-Attachment, Compassion, Prosocial Behaviour) (N = 162)

| | <i>n</i> | <i>%</i> | <i>M</i> | <i>SD</i> | Min | Max |
|---------------------------------------|----------|----------|----------------|----------------|-----------|-----------|
| Non-Attachment | | | 34.2654 | 6.12377 | 16 | 48 |
| Low ($8 < \text{score} \leq 21.33$) | 4 | 2.5 | | | | |

| | | | | | | |
|--|----|------|---------------|---------------|-------------|-------------|
| Moderate ($21.34 < \text{score} \leq 34.66$) | 79 | 48.8 | | | | |
| High ($34.67 < \text{score} \leq 48$) | 79 | 48.8 | | | | |
| Compassion | | | 3.7674 | .39321 | 2.31 | 4.88 |
| Low ($1 < \text{score} \leq 2.33$) | 1 | .6 | | | | |
| Moderate ($2.34 < \text{score} \leq 3.66$) | 64 | 39.5 | | | | |
| High ($3.67 < \text{score} \leq 5$) | 97 | 59.9 | | | | |
| Prosocial Behaviour | | | 3.6682 | .60401 | 1.88 | 5 |
| Low ($1 < \text{score} \leq 2.33$) | 4 | 2.5 | | | | |
| Moderate ($2.34 < \text{score} \leq 3.66$) | 71 | 43.8 | | | | |
| High ($3.67 < \text{score} \leq 5$) | 87 | 53.7 | | | | |

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

4.5 Normality Test

4.5.1 Histogram

Based on the observations from Appendix K, the histograms for the variables: non-attachment, compassion, and prosocial behaviour are shown no violations of normality.

4.5.2 Q-Q Plot

Based on the Appendix L, the Q–Q plots for all variables, which are non-attachment, compassion, and prosocial behaviour were not violated on the normality. The data points for each variable were largely aligned along the diagonal line, indicating that the distributions closely follow a normal pattern.

4.5.3 Skewness and Kurtosis

Based on Appendix M, there were no violations of skewness and kurtosis for variables non-attachment, compassion and prosocial behaviour. This is due to the fact that the values of these variables are within the acceptable ± 2 limit (George & Mallery, 2010).

Table 4.5.3

Skewness and Kurtosis

| Scale | Skewness | Kurtosis |
|---------------------|----------|----------|
| Non-attachment | -.172 | -.045 |
| Compassion | -.296 | .734 |
| Prosocial Behaviour | -.308 | -.273 |

4.5.4 Kolmogorov-Smirnov Test

As presented in Appendix N, the outcomes of Kolmogorov–Smirnov tests indicated no violation of normality for the three variables: non-attachment, $D(160) = .051, p = .200$; compassion, $D(160) = .069, p = .056$; and prosocial behaviour, $D(160) = .060, p = .200$. Since all the p-values were greater than .05, this means that among the sample distributions in this research, there was no difference in statistical significance with the normal distribution, thus verifying normality assumption (Riffenburgh, 2012; Schoder et al., 2006).

Table 4.5.4*Kolmogorov-Smirnov Test*

| Scale | Statistic | df | <i>p</i> -value |
|---------------------|-----------|-----|-----------------|
| Non-attachment | .051 | 160 | .200 |
| Compassion | .069 | 160 | .056 |
| Prosocial Behaviour | .060 | 160 | .200 |

* Violate Kolmogorov-Smirnov Test

4.5.5 Conclusion of Assumptions of Normality

In conclusion, all these variables: non-attachment, compassion, and prosocial behaviour did not violate the assumption of normality, as the results from the histogram, Q–Q plot, skewness and kurtosis values, and the Kolmogorov–Smirnov test indicate. All the variables met the normality requirements in at least three of these tests. Therefore, the assumption of normality was considered to be fulfilled for all three variables.

4.6 Reliability

According to Appendix O, Cronbach's alpha was used to test each variables' reliability. It is found that NAS-SF with 8 items is reliable with the value of .833, exceeding the commonly accepted threshold of .70. The CS with 16 items had a Cronbach's alpha of .731, this was indicated acceptable reliability since it barely meets the .70 requirement. Similarly, the Cronbach's alpha value for PSA with 16 items was .906, this value is considered as the excellent reliability. Prabhakar et al. (2022) stated that the Cronbach's alpha value of over .70 is acceptable, and values above .80 show good reliability.

4.7 Pearson Correlation Coefficient (PCC)

H1: There is a positive correlation between non-attachment and prosocial behaviour.

Table 4.7A

Correlation between Non-attachment and Compassion

| Variable | Compassion |
|----------------|------------|
| Non-attachment | .157* |

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

The table above showed the correlation between non-attachment and prosocial behaviour. In this study, Pearson's correlation of non-attachment and compassion was $r(160) = .157, p = .023$. Since the correlation was statistically significant which is lower than the standard threshold of .05. This means there is a relationship between non-attachment and compassion.

H2: There is a positive correlation between compassion and prosocial behaviour.

Table 4.7B

Correlation between Compassion and Prosocial Behaviour

| Variable | Prosocial Behaviour |
|------------|---------------------|
| Compassion | .443** |

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

Next, the Pearson correlation of compassion and prosocial behaviour was $r(160) = .443, p < .001$ (refer to Table 4.7B). This is a positive and statistically significant correlation, suggesting a positive relationship between compassion and prosocial behaviour.

H3: There is a positive correlation between compassion and non-attachment.

Table 4.7C

Correlation between Non-attachment and Compassion

| Variable | Compassion |
|----------------|------------|
| Non-attachment | .462** |

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

Lastly, the Table 4.7C showed the Pearson correlation and p -value of non-attachment and prosocial behaviour was $r(160) = .462$, and $p < .001$, which is considered a positive correlation and is statistically significant between non-attachment and prosocial behaviour.

Chapter 5

Discussion

5.1 Background Knowledge

The hypotheses of the study are of the following:

H1: There is a positive correlation between non-attachment and prosocial behaviour.

H2: There is a positive correlation between compassion and prosocial behaviour.

H3: There is a positive correlation between compassion and non-attachment.

The present study is aimed at investigating the relationships among non-attachment, compassion and prosocial behaviour. Non-attachment and compassion are the two independent variables while prosocial behaviour is the dependent variable. The rationale for the study originates from the limited research directly connecting the three variables of non-attachment, compassion and prosocial behaviour. By investigating the relationship between these constructs, this research tries to address literature gaps and to provide insight into how non-attachment and compassion may translate into interpersonal outcomes that benefit others like prosocial behaviours.

H1: There is a positive correlation between non-attachment and prosocial behaviour.

Based on the current research findings, it showed a significant positive correlation between non-attachment and prosocial behaviour among undergraduate students in Malaysia. This result is suggesting that undergraduate students with high non-attachment are more likely to exhibit prosocial behaviour, which was aligned with past study (Sahdra et al., 2015). Hence, hypothesis 1 is supported. It is important to highlight that the research conducted by Sahdra et al. (2015) is the only study that directly investigates the correlation between non-attachment and prosocial behaviour as discussed before in the literature review. This reflects

the situation where there is a lack of direct studies that have been carried out in exploring the correlation between these two variables, which highlights the importance of the current research and the research demonstrated by Sahdra et al. (2015).

As mentioned earlier, the core concept of non-attachment in Buddhism is to encourage individuals to be more flexible and adopt a balanced approach to experiencing life by letting go of expectations and outcomes rather than holding onto them (Tremblay & Van Gordon, 2023). Meanwhile, the non-attachment also involves opening to a universally interconnected self-schema, practicing acceptance and detaching from the stimuli and response (Tremblay et al., 2024). These two studies provided important information that individuals who practice non-attachment encourage them to be more flexible in experiencing their life and let go of rigid self-concepts, resulting in the reduction of self-related concepts and self-centeredness, which is also known as ‘non-attachment to self’ (Whitehead et al., 2018; Whitehead et al., 2021). This is supported by Sahdra et al. (2015), who suggest that non-attachment people have high mental capacity and cognitive flexibility to help them step away from excessive self-focus and be ready to help others.

As a result of the reduction in self-centeredness by non-attachment, it allows undergraduate students to apply the self-transcendence by stepping out of the egotistic view and taking a larger viewpoint, which includes caring for others’ needs and concern about the world (Ge & Yang, 2023; Marple et al., 2024; Sanyer et al., 2023). This implies that the application of high non-attachment leads an individual to have a low level of self-centeredness and fosters the transition to self-transcendence, where they become more sensitive to other needs and prepare themselves to lend a helping hand. Hence, the students with high non-attachment tend to engage in the prosocial behaviour.

Another potential explanation for a positive correlation between non-attachment and prosocial behaviour is the role of empathy. As mentioned earlier, a non-attachment individual will experience a reduction of self-related concepts or self-centeredness that leads students to be more sensitive to others' needs. Being sensitive to others' needs, recognizing and understanding others' emotions are the key features of empathy, which can increase an individual's motivation to take care of them and play an important role in promoting prosocial behaviour (Decety & Holvoet, 2021; Riess, 2017). This is supported by the previous studies that mentioned a non-attached individual is associated with high empathy, which encourages them to engage in prosocial behaviour (Sahdra et al., 2010; Sahdra et al., 2015). Therefore, students with high non-attachment tend to engage in prosocial behaviour.

H2: There is a positive correlation between compassion and prosocial behaviour.

The research findings indicate a positive and significant correlation between compassion and prosocial behaviour within undergraduate students in Malaysia. The results are similar to the early studies carried out by Eisenberg et al. (2010), Gilbert (2017) and Leiberg et al. (2011), and the findings also similar to the recent studies carried out by Chen et al. (2022), Karnaze et al. (2022), Shoshani (2024), Song (2022), Yue and Yang (2021), proving that a higher level of compassion demonstrated a greater tendency to engage in prosocial behaviours. Therefore, the findings substantiated hypothesis two.

This tendency of prosocial behaviour occurs during various disasters and difficulties, especially during Covid-19 pandemic (Chen et al., 2022; Yue & Yang, 2021) and SARS-CoV-2 outbreak (Karnaze et al., 2022). People with high compassion were more likely to exhibit empathy and concern to other people who were experiencing difficulties during the pandemic era. This empathy and concern pushed them to perform prosocial behaviour such as

donation and engage in volunteering behaviour during pandemic to help people in difficulties. As mentioned before, disaster compassion is the cause of this prosocial behaviour (Wider et al., 2022), and the statement and research above strongly demonstrated that compassion is related to prosocial behaviour.

Furthermore, this situation is not related to age. The previous studies and some similar studies stated that there is no significant correlation between ages and prosocial behaviour (Pollerhoff et al., 2022; Velusamy et al., 2024). Compassion and prosocial behaviour also happened in children. The research showed that children will demonstrate empathic concern and perform prosocial behaviour to other people in distress, including helping, confirming or sharing (Shoshani, 2024; Song, 2022; Williams et al., 2014). Regardless of age, people with a high compassion level are more likely to be involved in prosocial behaviour.

Additionally, another potential explanation for a positive correlation between compassion and prosocial behaviour is compassion training and education. Individuals who participated in compassion training or education before may have a high tendency to perform prosocial behaviour in the future, because the program has developed individuals' empathy, care, compassion. According to Morizio et al. (2022), creating compassion programs focuses on the behavioural modelling of empathy and prosocial behaviour. It proactively prioritizes children's well-being and promotes and integrates prosocial behaviours (Maratos & Harvey, 2024). The compassion education and training were also found to be effective for college students (Tendhar & Bueno De Mesquita, 2020), providing evidence that there is a relationship between compassion and prosocial behaviour among undergraduate students in this study.

In conclusion, this study has supported the positive correlation between compassion and prosocial behaviour among undergraduate students in Malaysia. The compassion education and training program has great influence on individuals to exhibit prosocial behaviour. Compassion education and training help individuals to build a safer, healthier, happier and more inclusive educational setting, while encouraging individuals to perform prosocial behaviour and supporting positive mental well-being (Tendhar & Bueno De Mesquita, 2020). In disaster situations, individuals with high compassion levels are more likely to exhibit prosocial behaviour, which not only helps to strengthen the mutual assistance mechanism in society, but also promotes social harmony and cohesion as a whole.

H3: There is a positive correlation between compassion and non-attachment.

The present research findings showed a significant and positive correlation between compassion and non-attachment within undergraduate students in Malaysia. The findings indicate that individuals with high non-attachment were associated with higher levels of compassion, where the motivation to alleviate other's suffering would be more prevalent in individuals who engage with their internal and external experiences with an openness that is both flexible and balanced but without over-attachment (Sahdra et al., 2016; Goetz et al., 2010). Therefore, hypothesis 3 is supported.

The positive correlation can be explained through the core mechanisms of non-attachment and compassion, in which, non-attachment, the ability to experience all forms of emotions, thoughts and sensations without over-identification and aversion as stated by Sahdra et al. (2016) & Siah et al. (2020) is associated with reduced ego-centric tendencies such as self-judgement and over-identification as shown in a study by Li et al. (2024). This reduction in ego-centric tendencies consequently promotes emotional openness that is central

to non-attachment, cultivating a state of mental clarity and awareness of the suffering of the self and others without being overwhelmed or reacting adversely to it as shown in a study by Xie (2023). This kind of emotional awareness exhibited in non-attachment that is capable of viewing and recognising the suffering of others without aversion or being overwhelmed is conducive for the core components of compassion to emerge, which based on Goetz et al. (2010), is the recognition of another's suffering, which emotional awareness helps to facilitate, that can lead to the urge of wanting to help alleviate it. Thus, the mechanisms that define non-attachment directly help to foster the capacity needed for compassion.

Although prior research lacks direct study of the relationship between non-attachment and compassion, the positive correlation could be explained by the mechanisms it shares with the proposed indirect pathway through self-compassion. According to Li et al. (2024), non-attachment being associated with reducing self-judgement and over-identification, directly helps to promote compassion to self because non-attachment helps reduce ego-centric tendencies that are preventing the capacity for self-compassion. This reduction in ego-centric tendencies shows a fundamental change in mental processing that facilitates compassionate responses, like kindness and understanding shared between self-compassion and compassion for others (Neff, 2023). Therefore, the direct correlation found in our study complements the mediated model proposed in the literature review, where non-attachment may foster conditions that support compassionate responses, either for the self or for others. Moreover, the findings are consistent with past findings that highlight similar associations, reinforcing the relationship's reliability and coherent pattern across different studies.

Implication

Theoretical Implication

During the discussion in the literature review, Eastern philosophy has long promoted the concept of non-attachment, while this construct has recently begun to be studied in the psychology field (Devine et al., 2022). The present researchers noticed a lack of studies done on the relationship between non-attachment, compassion and prosocial behaviour, while the existing papers place more emphasis on Western concepts such as attachment theory. This highlights that the present study contributes to addressing the gap. Based on the findings, there is a significant and positive relationship for the variables in this study, which are: non-attachment and prosocial behaviour, compassion and prosocial behaviour, and compassion and non-attachment. These findings not only provide valuable insights into enhancing and advancing understanding of the different perspectives of a concept used but also provide a theoretical bridge for studying the impact of Eastern constructs on prosocial tendencies.

The present study also contributes to providing support for the integration of Buddhist concept of virtue-meditation-wisdom (Three Trainings) as a holistic framework for exploring the relationship between non-attachment, compassion and prosocial behaviour, along with understanding prosocial development (Yun, 2007a, 2007b, 2007c). The findings in present study also help to illustrate the interdependent nature of this Buddhist concept, wherein each training reinforces each other to cultivate ethical action.

The findings in present study align with the sequence proposed by the theoretical framework. The positive correlation between non-attachment and compassion can be understood as the interaction between Meditation and Wisdom, where non-attachment that is characterized by emotional regulation, mental stability and freedom from cravings and

aversion is the outcome of meditative practice (Sadhra, 2016; Yun, 2007b). The mental clarity cultivated in Meditation then provides the foundation for Wisdom to realise the interconnectedness and universality of suffering, giving rise to the genuine desire to alleviate other's suffering of compassion (Goetz et al., 2010; Yun, 2007c).

For both the correlation between prosocial behaviour and compassion, and between prosocial behaviour and non-attachment, it helps illustrate the role of Virtue in providing practical application for tangible and ethical action (Yun, 2007a). As compassion finds its ultimate expression and completion through action and conduct, Virtue provides the moral framework that helps transform compassionate intention into perceivable action that benefits others (Yun, 2007a). Present study findings found that compassion is more present in individuals engaging in prosocial behaviour, indicating that the motivational aspect in compassion is effectively being channelled into ethical and virtuous conduct. Furthermore, non-attachment supports this process by reducing egocentricity and attachment to personal bias, ensuring that the prosocial acts are genuinely altruistic rather than being self-serving.

The present study empirically supports the Three Trainings concept, suggesting that prosociality is the result of a developed capacity for mental discipline (Meditation), self-transcendence perspective (Wisdom), and ethical conduct (Virtue). The present study also contributes in providing empirical study evidence examining how non-attachment may lead to prosociality as there currently is a lack of study on the topic. Taken together, the present researcher has extended the concept by incorporating other psychological concepts to explain the relationship between non-attachment, compassion and prosocial behaviour. For example, in explaining the relationship between non-attachment and prosocial behaviour, the present researcher had more emphasis on the reduction of self-centeredness resulting from non-

attachment which facilitates empathy and self-transcendence that link to high prosocial behaviour respectively. While the self-compassion concept has been used in explaining the correlation between compassion and non-attachment. Hence, the positive correlation between the 3 variables of non-attachment, compassion and prosocial behaviour may imply that a mediating effect is present. Although the present research did not test for mediation, the pattern of association gathered from the study findings contributes to providing theoretical support for a mediation model that future research can address.

Practical Implications

The findings of this research bring several practical implications that may benefit education institutions, mental health practitioners and policy makers in Malaysia. The study suggested that the relationship between non-attachment, compassion and prosocial behaviour is important for individuals and institutions, especially in shaping student's development and counselling programs.

First, the results of positive and significantly correlation between non-attachment and prosocial behaviour can prove that individuals who integrate non-attachment training and mindfulness-based practices with less attached to rigid self-concepts, personal expectations and materials things such as luxury and cash, can reduces self-centeredness and facilitates openness toward others' needs. Therefore, the policy makers and education institutions could implement non-attachment training, mindfulness-based practices and meditation training as a part of student's development programs. For instance, ministries of education may apply non-attachment training programs into student's schedules, education institutions can organize relevant activities and training programs such as loving-kindness meditation (LKM) to allow students to learn a new soft-skill to improve their well-being and life satisfaction. In addition,

counselling services may also incorporate non-attachment practices to help individuals manage stress and anxiety, and also develop perspective on academic, work, and social challenges. Research showed that brief loving-kindness meditation (LKM) was able to increase an individual's willingness to engage in prosocial behaviour (Hutcherson et al., 2008; Valor et al., 2024). These initiatives not only enhance individual's mental health (Sys et al., 2024) but also increase their willingness to engage in prosocial behaviour such as volunteering and donation (Imbriale et al., 2025).

Secondly, present research findings highlighted that positive correlation between compassion and prosocial behaviour is important for policy makers and education institutions to implement compassion education and training into student's programs and syllabus. To achieve a harmonious and mutually supportive society in Malaysia, employing compassion education and training across all stages of education, beginning from preschool and primary school until secondary school and universities is necessary to ensure students have developed empathy and sympathy with others. Individuals with high compassion levels are more willing to exhibit helpful behaviour, exhibit lower levels of aggression, hold more positive intergroup views during disputes, and demonstrate greater willingness to reconcile after conflicts (Klimecki, 2019). This is particularly important in today's increasingly severe ethnic, religious and political conflicts in Malaysia. Individuals who receive mindfulness instructions and compassion in brief compassion education can reduce parochial empathy and increase prosocial behaviour (Zheng et al., 2023). Additionally, compassionate individuals are more likely to demonstrate altruistic and prosocial behaviours, including donate resources, engage in volunteering activities and providing emotional support during disaster, especially in Covid-19 pandemic (Chen et al., 2022; Yue & Yang, 2021), SARS-CoV-2 (Karnaze et al., 2022) and other natural disasters. Hence, incorporating compassion-cantered imitative into

young people development strategies may enhance social resilience and mutual support mechanisms in Malaysia. To achieve this target, education institutions and counselling services can conduct compassion related programs such as Mindful Self-Compassion (Bailey et al., 2021), Compassion-Focused Therapy (Petrocchi et al., 2022), Compassion Cultivation Training (Jazaieri et al., 2012), Compassion Meditation (Zheng et al., 2023), Loving-Kindness Meditation (Valor et al., 2024), Cognitively Based Compassion Training (Ash et al., 2021) and The ReSource Training Protocol (Bornemann & Singer, 2013), to individuals enhance psychological well-being and prosocial behaviour (Kirby, 2016).

Third, the results of positive correlation between non-attachment and compassion in this study provides further support for the development of interventions that target both constructs simultaneously. Individuals who practice non-attachment such as mindfulness-based practices and meditation training are more likely to emerge compassionate, and compassionate individuals are more willing to care and show empathy to others. Education and counselling institutions may combine mindfulness, self-reflection and compassion training to bring about a compounded effect, nurturing individuals who are emotionally balanced, empathetic and socially responsible. These skills are not only beneficial at an individual level, but also important for individuals to take the roles of leadership in school, workplace and society (Benevene et al., 2022; Sinclair et al., 2021). Such training may contribute to the development of the leaders who prioritize collective well-being over self-interest, ultimately fostering stronger social cooperation and harmony in Malaysia's multicultural context.

In conclusion, the findings showed that non-attachment and compassion are the key psychological strength to encourage prosocial behaviour and collective well-being. Practical

implication of this study can be embedded into educational institutions programs, counselling services and national youth development policies. By fostering and improving these qualities in individuals, policy makers, educational institutions and counselling services can develop a generation of resilient, compassionate and socially responsible leaders who will contribute positively to society.

Limitations

The limitations in present research was about unequal distribution of the demographics. There are 97.5 % of the participants involved in this study who are Chinese. This showed that the target sample of the present study was highly homogeneous, which has limited the generalization of the findings to other populations, as these findings may be biased towards Chinese culture and could not represent other ethnicities. Hence, this reminds the present study to be more cautious in generalizing the present study's results.

Another limitation of the present research pertains to the length of the questionnaire being too long. The total items involved in the present study questionnaire is about 40 items and it takes approximately 15-20 minutes to complete. When answering the questions, some participants perceived the questionnaire was too long and felt fatigued. This resulted in a reduction of motivation among the participants to complete the questionnaire, leading them to provide an incomplete questionnaire or drop out in the middle, even though they had no intention to do so.

The current research limitations including the dependences on the self-reported questionnaires. The findings might be influenced by social desirability since the questionnaire were based on participant's self-reported. Specifically, participants may want to show their

compassion or empathetic tendency to project a positive image on themselves, rather than reflecting their attitudes or behaviours in real life. This could lead to inflated levels of reported non-attachment, compassion and prosocial behaviour that affect present study findings.

Recommendations

First, in order to overcome the issue of sample homogeneity, future research should recruit more diverse and representative participants. This is because the present study included a highly disproportionate number of Chinese participants, which limits the generalization of the findings to multi-ethnic population in Malaysia. The future studies should recruit students from diverse races including Malay, Indian and indigenous groups, various types of universities such as public and private; and different educational levels like foundation, undergraduate and postgraduate. Therefore, future studies can examine whether the relationships between non-attachment, compassion, and prosocial behaviour are consistent across cultural and social contexts. The diversity in research not only increases the validity of the findings and also provides cross-cultural comparisons to allow researchers to identify the cultural factors that may enhance and reduce these relationships.

Second, the present study faced measurement-related issues, particularly with the length and clarity of the questionnaire. This is because the research questionnaires contained 40 items and took 15–20 minutes to fill out, which might have caused participant fatigue and diminished attention. Future studies should use shorter, validated scales or modify existing instruments through pilot testing in order to assure the validity and reliability of the items to enhance the quality of data, such as The 7-Item Nonattachment Scale (Elphinstone et al., 2020; Sahdra et al., 2015), Compassion scale did not have own short form version, however,

a similar measure is Self-Compassion Scale--Short Form (SCS-SF) (Raes et al., 2011).

Furthermore, to validate participants' responses, future research could also include reverse items, such as using Helping Attitudes Scale (HAS) (Nickell, 1998) to replace Prosocialness Scale for Adults (PSA), because HAS have several reverse items but PSA did not have any reverse item. Also, attention check questions (Muszyński, 2023), including Long Instructed Manipulation Check and Short Instructed Manipulation Check are effective to minimize and exclude invalid data such as straight lining and choosing merely the correct answers.

Third, the reliance on self-report questionnaires in the present study may have introduced social desirability. Participants might provide their answers that are typically accepted by the society instead provide the answers based on their thoughts and behaviour. This risk can be reduced where future studies are encouraged to incorporate multiple methods of data collection. For instance, behavioural observations of prosocial behaviours (Huber et al., 2019; Li et al., 2022), peer or teacher ratings of compassionate behaviour (Kienbaum, 2001), and the use of implicit measures may provide a more accurate and objective picture. Furthermore, future research could conduct experimental designs, such as compassion training interventions (Leiberg et al., 2011; Malik et al., 2025). This can help validate whether increases in non-attachment led to observable changes in prosocial behaviour, compared to self-reported perceptions.

In conclusion, future research can build upon the foundation established by the present study based on the recommendation provided. Especially in larger methodological diversity, more representative sampling, and the use of longitudinal or experimental approaches would enable a deeper and more robust understanding of how non-attachment and compassion contribute to prosocial behaviour. This would not only advance theoretical

knowledge but also provide practical insights for educators, policymakers, and mental health practitioners seeking to foster compassion and prosocial values among young people in Malaysia.

Conclusion

This research investigated the relationship between non-attachment, compassion and prosocial behaviour among undergraduate students in Malaysia. Using Pearson's Correlation, the findings demonstrated the existence of a significant and positive relationship between the following variables of non-attachment and prosocial behaviour, compassion and prosocial behaviour, and lastly non-attachment and compassion, thereby supporting the study's proposed hypotheses. Findings indicate that high non-attachment levels were linked to with high compassion, while both were positively related to prosocial behaviour.

The present research findings suggest an advanced theoretical understanding by addressing limited research done on the relationship between non-attachment, compassion and prosocial behaviour, particularly within an Eastern psychological framework. The findings provide empirical support for the Buddhist model of the Three Trainings (Virtue, Meditation, Wisdom), demonstrating how these interdependent practices foster prosocial tendencies. The study's findings bridge Eastern contemplative theory with contemporary psychological perspectives and establish a foundation for future research to explore potential mediating effects such as empathy, self-transcendence and self-compassion. Aside from theoretical contributions, the study also suggests practical implications for policymakers, institutions and mental health practitioners in integrating non-attachment and compassion into education, counselling and national youth development initiatives.

However, several limitations that may affect the overall generalizability of the study must be addressed, including reliance on self-reported measures, characteristics of the study sample and overall design of the questionnaire utilised. These constraints highlight future directions for future research, with several recommendations having been suggested by the present study's researchers for future research to investigate and build upon.

Conclusion, empirical support was provided by this study for the interconnected roles of non-attachment, compassion and prosocial behaviour. By connecting Eastern contemplative theory with contemporary psychological research, it not only addresses gaps in literature but also offers practical suggestions for nurturing prosociality in a real-life context.

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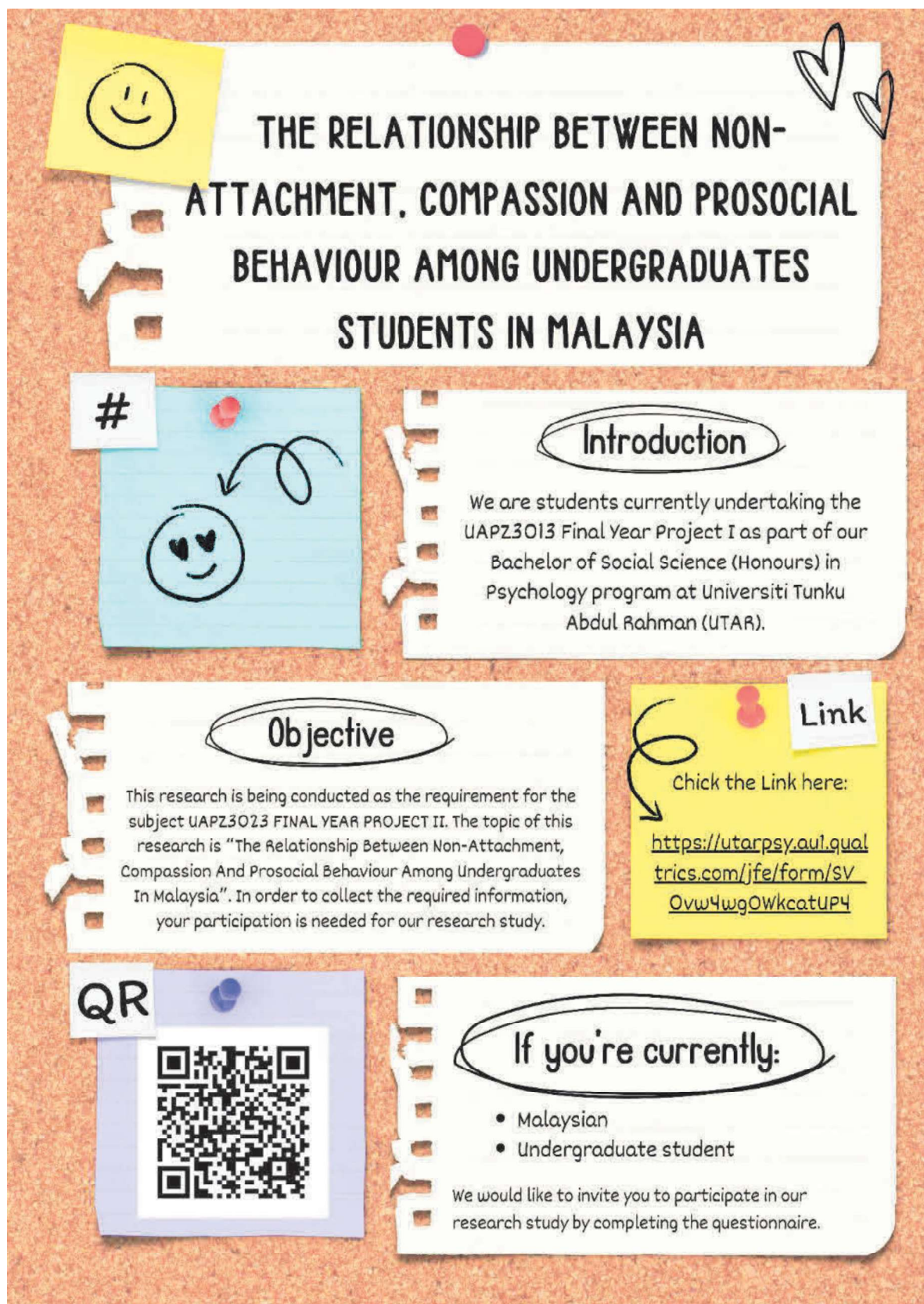
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Appendix H

Poster



THE RELATIONSHIP BETWEEN NON-ATTACHMENT, COMPASSION AND PROSOCIAL BEHAVIOUR AMONG UNDERGRADUATES STUDENTS IN MALAYSIA

#

Introduction

We are students currently undertaking the UAPZ3013 Final Year Project I as part of our Bachelor of Social Science (Honours) in Psychology program at Universiti Tunku Abdul Rahman (UTAR).

Objective

This research is being conducted as the requirement for the subject UAPZ3023 FINAL YEAR PROJECT II. The topic of this research is "The Relationship Between Non-Attachment, Compassion And Prosocial Behaviour Among Undergraduates In Malaysia". In order to collect the required information, your participation is needed for our research study.

Link

Click the Link here:

<https://utarpsy.aui.qualtrics.com/jfe/form/SV0vw4wgOWkcatUP4>

QR

If you're currently:

- Malaysian
- Undergraduate student

We would like to invite you to participate in our research study by completing the questionnaire.

Appendix I

Descriptive Statistics – Demographic

Section B: Demographic Information

1. A

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | | 4 | 2.5 | 2.5 | 2.5 |
| | 19 | 5 | 3.1 | 3.1 | 5.6 |
| | 20 | 12 | 7.4 | 7.4 | 13.0 |
| | 21 | 36 | 22.2 | 22.2 | 35.2 |
| | 22 | 61 | 37.7 | 37.7 | 72.8 |
| | 23 | 27 | 16.7 | 16.7 | 89.5 |
| | 24 | 10 | 6.2 | 6.2 | 95.7 |
| | 25 | 2 | 1.2 | 1.2 | 96.9 |
| | 26 | 1 | .6 | .6 | 97.5 |
| | 28 | 2 | 1.2 | 1.2 | 98.8 |
| | 29 | 2 | 1.2 | 1.2 | 100.0 |
| | Total | 162 | 100.0 | 100.0 | |

2. Gender

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 42 | 25.9 | 25.9 | 25.9 |
| | Female | 120 | 74.1 | 74.1 | 100.0 |
| | Total | 162 | 100.0 | 100.0 | |

3. Racial Group - Selected Choice

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------|-----------|---------|---------------|--------------------|
| Valid | Malay | 3 | 1.9 | 1.9 | 1.9 |
| | Chinese | 158 | 97.5 | 97.5 | 99.4 |
| | Indian | 1 | .6 | .6 | 100.0 |
| | Total | 162 | 100.0 | 100.0 | |

5. University (please fill in full name): - Selected Choice

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------------------|-----------|---------|---------------|--------------------|
| Valid | Universiti Tunku Abdul Rahman | 76 | 46.9 | 46.9 | 46.9 |
| | Other: (Please Specify) | 86 | 53.1 | 53.1 | 100.0 |
| | Total | 162 | 100.0 | 100.0 | |

5. University (please fill in full name): - Other: (Please Specify) - Text

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------|---------|---------------|--------------------|
| Valid | 79 | 48.8 | 48.8 | 48.8 |
| AIMST University | 2 | 1.2 | 1.2 | 50.0 |
| Akademi Seni Budaya dan Warisan Kebangsaan | 1 | .6 | .6 | 50.6 |
| Asia Pacific University | 7 | 4.3 | 4.3 | 54.9 |
| Han Chiang University College of Communication | 1 | .6 | .6 | 55.6 |
| HELP University | 2 | 1.2 | 1.2 | 56.8 |
| Heriot-Watt University | 1 | .6 | .6 | 57.4 |
| INTI International College Subang | 3 | 1.9 | 1.9 | 59.3 |
| Kolej Matrikulasi Negeri Sembilan | 1 | .6 | .6 | 59.9 |
| Kolej Unikop | 1 | .6 | .6 | 60.5 |
| Monash University | 1 | .6 | .6 | 61.1 |
| Multimedia University | 9 | 5.6 | 5.6 | 66.7 |
| New Era University College | 2 | 1.2 | 1.2 | 67.9 |
| Peninsula College | 1 | .6 | .6 | 68.5 |
| SEGi University and Colleges | 7 | 4.3 | 4.3 | 72.8 |
| Southern University College | 1 | .6 | .6 | 73.5 |
| Sunway University | 2 | 1.2 | 1.2 | 74.7 |
| The One Academy | 1 | .6 | .6 | 75.3 |
| Tunku Abdul Rahman University of Management and Technology | 19 | 11.7 | 11.7 | 87.0 |
| UCSI University | 2 | 1.2 | 1.2 | 88.3 |
| Universiti Kebangsaan Malaysia | 3 | 1.9 | 1.9 | 90.1 |
| Universiti Malaysia Sabah | 2 | 1.2 | 1.2 | 91.4 |
| Universiti Malaysia Sarawak | 1 | .6 | .6 | 92.0 |
| Universiti Pertahanan Nasional Malaysia | 1 | .6 | .6 | 92.6 |
| Universiti Sains Malaysia | 1 | .6 | .6 | 93.2 |
| Universiti Teknologi Malaysia | 1 | .6 | .6 | 93.8 |
| Universiti Utara Malaysia | 1 | .6 | .6 | 94.4 |
| University of Cyberjaya | 1 | .6 | .6 | 95.1 |
| University of Nottingham Malaysia | 3 | 1.9 | 1.9 | 96.9 |
| University of Technology Sarawak | 2 | 1.2 | 1.2 | 98.1 |
| University of Wollongong Malaysia | 1 | .6 | .6 | 98.8 |
| University Sains Malaysia | 1 | .6 | .6 | 99.4 |
| Xiamen University Malaysia | 1 | .6 | .6 | 100.0 |
| Total | 162 | 100.0 | 100.0 | |

Appendix J

Descriptive Statistics

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|-----|---------|---------|------|----------------|
| 2. Gender | 162 | 1 | 2 | 1.74 | .440 |
| 3. Racial Group - Selected Choice | 162 | 1 | 3 | 1.99 | .157 |
| 4. Nationality: | 162 | 1 | 1 | 1.00 | .000 |
| 5. University (please fill in full name): - Selected Choice | 162 | 1 | 3 | 2.06 | 1.001 |
| 6. Level of Study | 162 | 2 | 2 | 2.00 | .000 |
| Valid N (listwise) | 162 | | | | |

Frequency Table

NAS_SF_Score

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------|-----------|---------|---------------|--------------------|
| Valid | Low | 4 | 2.5 | 2.5 | 2.5 |
| | Moderate | 79 | 48.8 | 48.8 | 51.2 |
| | High | 79 | 48.8 | 48.8 | 100.0 |
| | Total | 162 | 100.0 | 100.0 | |

CF_Score

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------|-----------|---------|---------------|--------------------|
| Valid | Low | 1 | .6 | .6 | .6 |
| | Moderate | 64 | 39.5 | 39.5 | 40.1 |
| | High | 97 | 59.9 | 59.9 | 100.0 |
| | Total | 162 | 100.0 | 100.0 | |

PSA_Score

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------|-----------|---------|---------------|--------------------|
| Valid | Low | 4 | 2.5 | 2.5 | 2.5 |
| | Moderate | 71 | 43.8 | 43.8 | 46.3 |
| | High | 87 | 53.7 | 53.7 | 100.0 |
| | Total | 162 | 100.0 | 100.0 | |

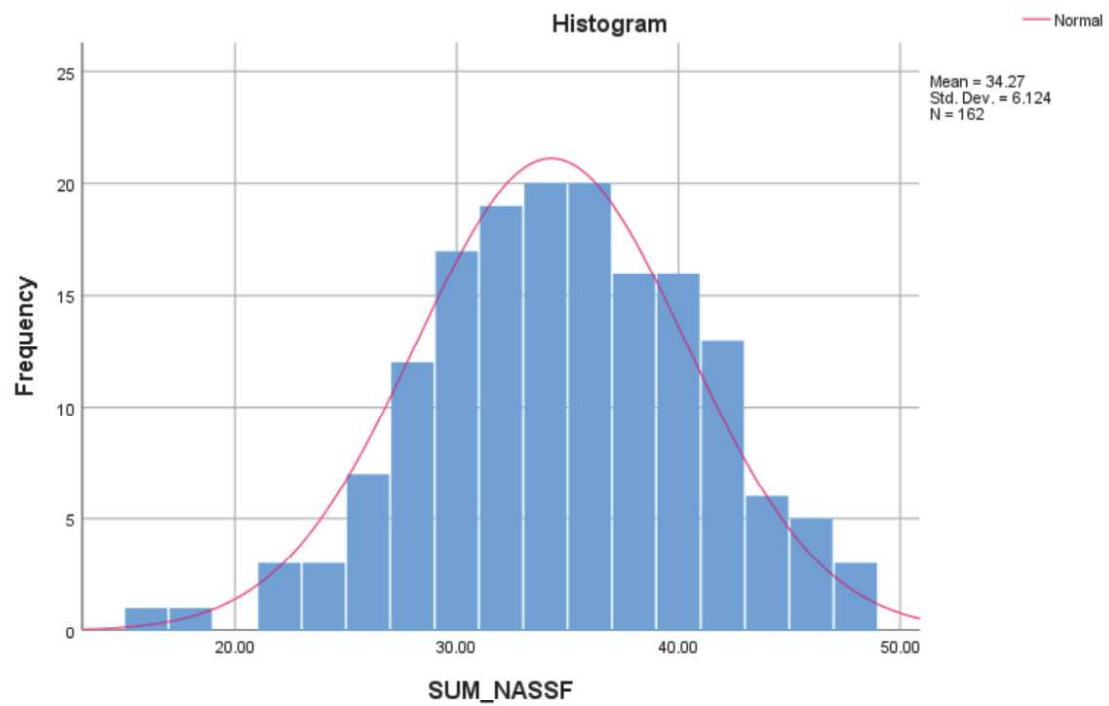
Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|---------|----------------|
| SUM_NASSF | 162 | 16.00 | 48.00 | 34.2654 | 6.12377 |
| MEAN_CF | 162 | 2.31 | 4.88 | 3.7674 | .39321 |
| MEAN_PSA | 162 | 1.88 | 5.00 | 3.6682 | .60401 |
| Valid N (listwise) | 162 | | | | |

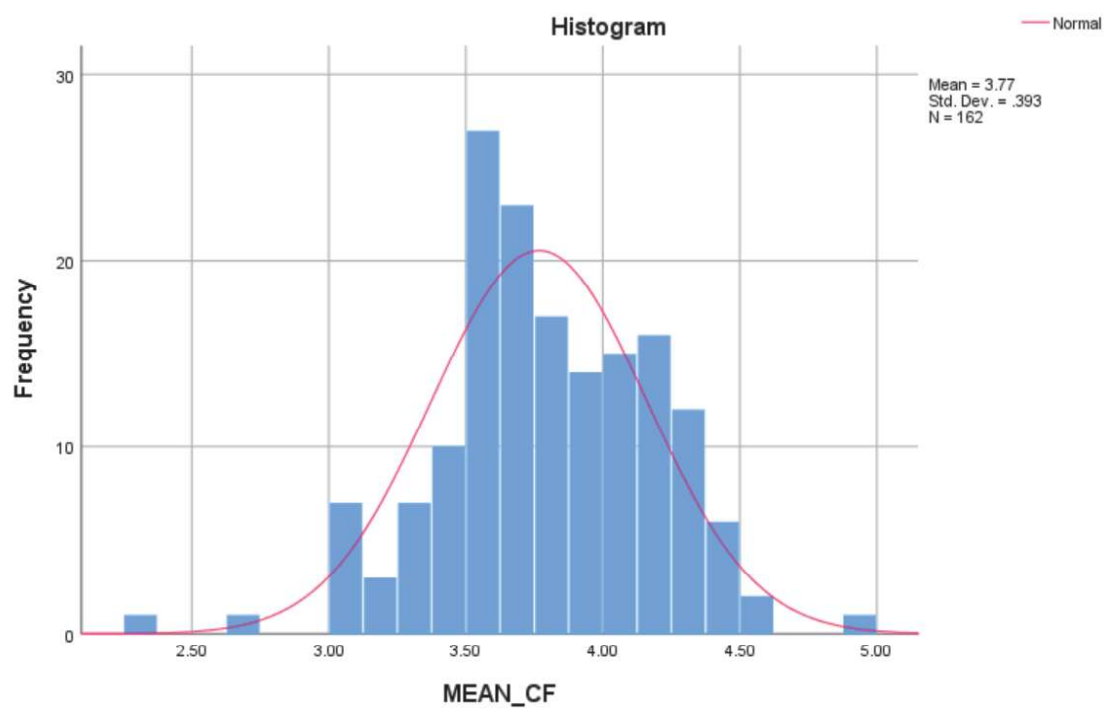
Appendix K

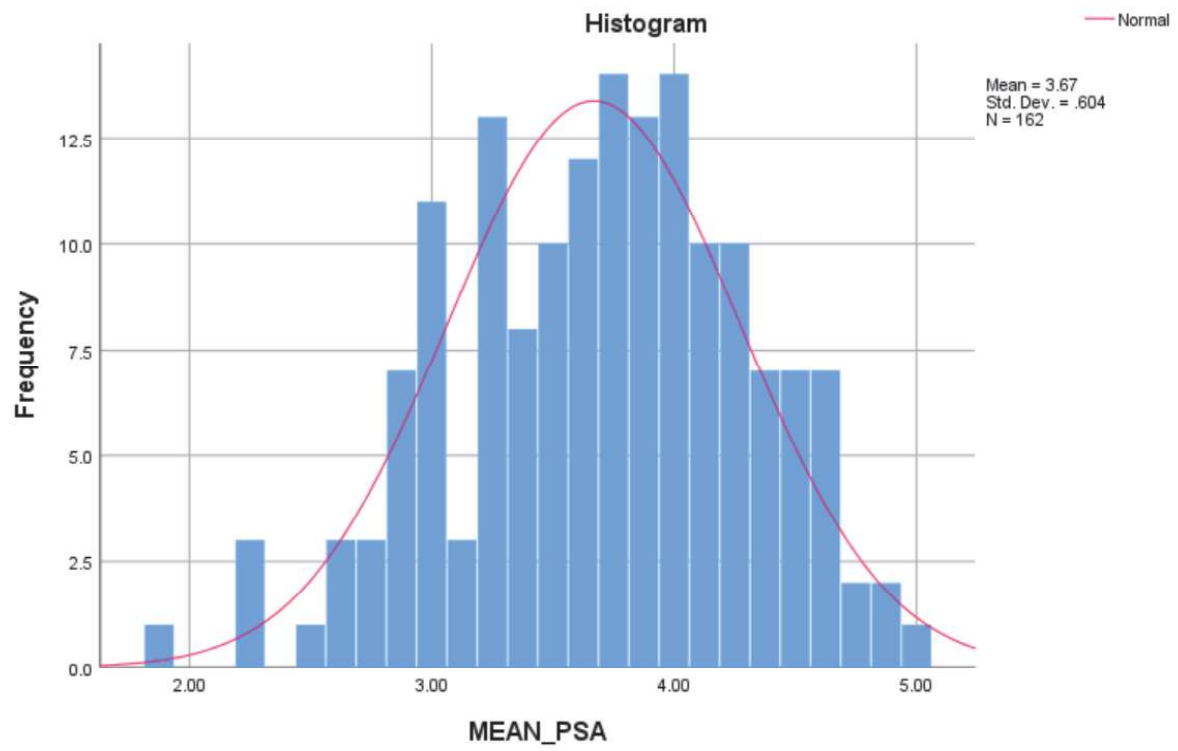
Histogram

SUM_NASSF



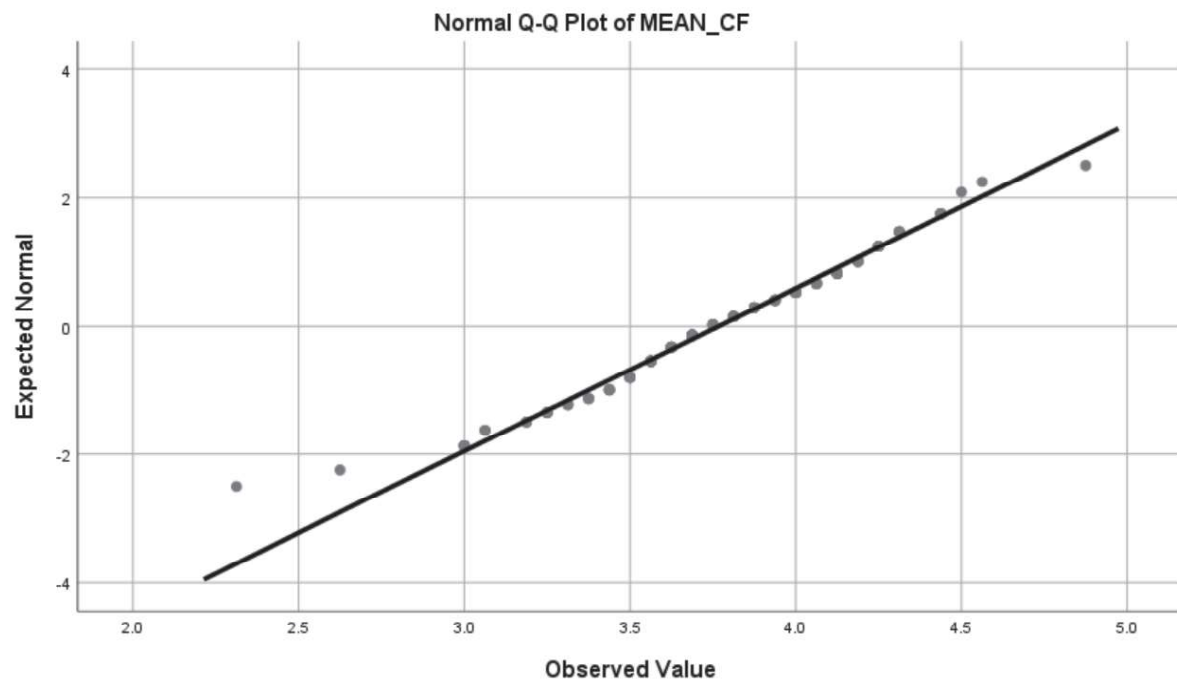
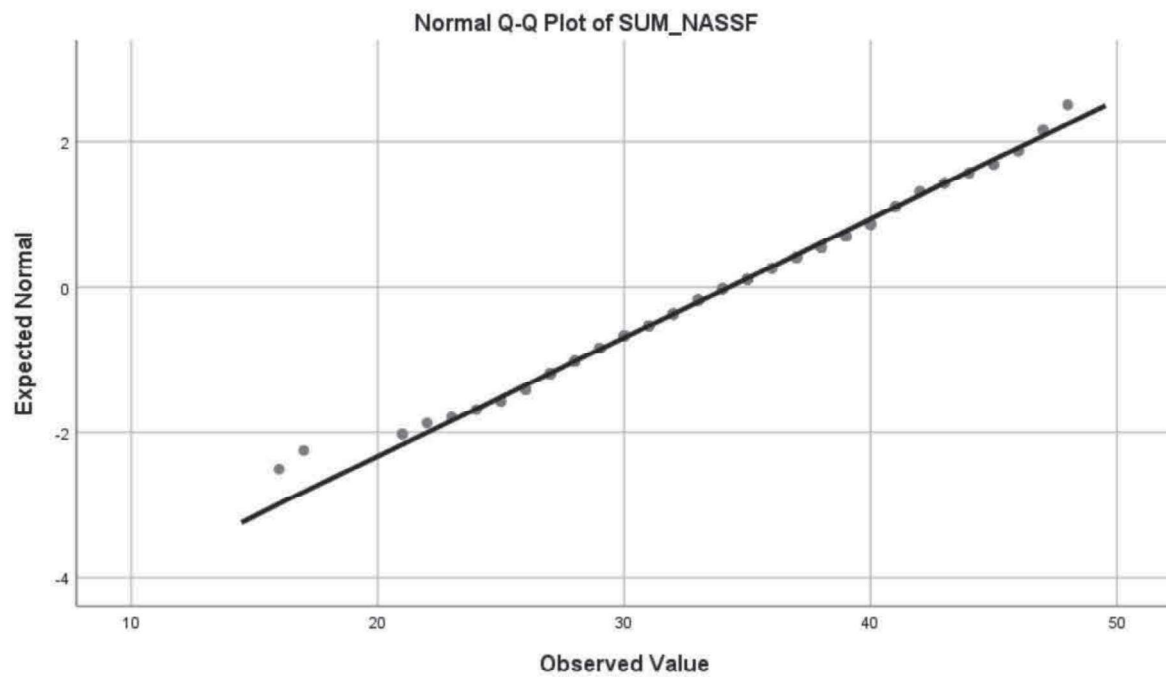
MEAN_CF

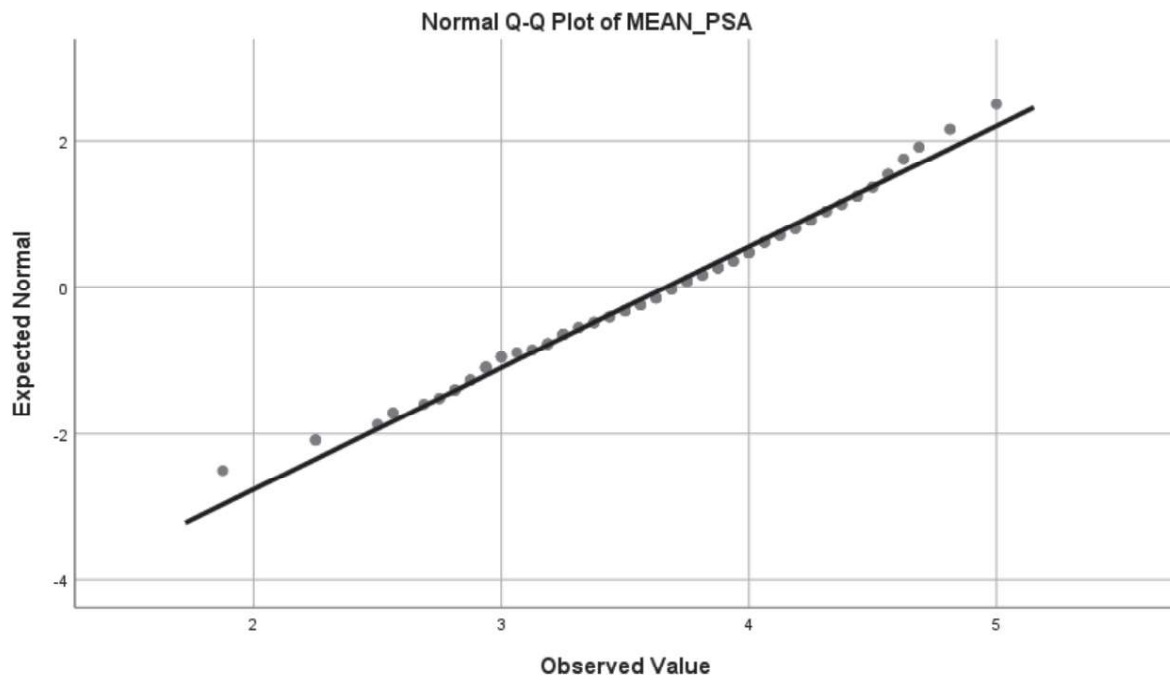


MEAN_PSA

Appendix L

Q-Q Plot





Appendix M

Skewness and Kurtosis of Non-attachment, Compassion and Prosocial Behaviour

Descriptives

| | | | Statistic | Std. Error |
|-----------|----------------------------------|-------------|-----------|------------|
| SUM_NASSF | Mean | | 34.2654 | .48113 |
| | 95% Confidence Interval for Mean | Lower Bound | 33.3153 | |
| | | Upper Bound | 35.2156 | |
| | 5% Trimmed Mean | | 34.3354 | |
| | Median | | 34.0000 | |
| | Variance | | 37.501 | |
| | Std. Deviation | | 6.12377 | |
| | Minimum | | 16.00 | |
| | Maximum | | 48.00 | |
| | Range | | 32.00 | |
| | Interquartile Range | | 9.00 | |
| | Skewness | | -.172 | .191 |
| | Kurtosis | | -.045 | .379 |
| MEAN_CF | Mean | | 3.7674 | .03089 |
| | 95% Confidence Interval for Mean | Lower Bound | 3.7064 | |
| | | Upper Bound | 3.8284 | |
| | 5% Trimmed Mean | | 3.7753 | |
| | Median | | 3.7500 | |
| | Variance | | .155 | |
| | Std. Deviation | | .39321 | |
| | Minimum | | 2.31 | |
| | Maximum | | 4.88 | |
| | Range | | 2.56 | |
| | Interquartile Range | | .50 | |
| | Skewness | | -.296 | .191 |
| | Kurtosis | | .734 | .379 |
| MEAN_PSA | Mean | | 3.6682 | .04746 |
| | 95% Confidence Interval for Mean | Lower Bound | 3.5745 | |
| | | Upper Bound | 3.7619 | |
| | 5% Trimmed Mean | | 3.6824 | |
| | Median | | 3.6875 | |
| | Variance | | .365 | |
| | Std. Deviation | | .60401 | |
| | Minimum | | 1.88 | |
| | Maximum | | 5.00 | |
| | Range | | 3.13 | |
| | Interquartile Range | | .88 | |
| | Skewness | | -.308 | .191 |
| | Kurtosis | | -.273 | .379 |

Kolmogorov-Smirnov Test

| Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | | |
|---------------------------------|-----------|-----|-------------------|-----------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| SUM_NASSF | .051 | 162 | .200 [*] | .992 | 162 | .451 |

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

| Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | | |
|---------------------------------|-----------|-----|--------------|-----------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| SUM_CF | .069 | 162 | .056 | .983 | 162 | .050 |

a. Lilliefors Significance Correction

| Kolmogorov-Smirnov ^a | | | | Shapiro-Wilk | | |
|---------------------------------|-----------|-----|-------------------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| MEAN_PSA | .060 | 162 | .200 [*] | .988 | 162 | .183 |

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Appendix O
Cronbach's Alpha

Non-attachment

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .833 | 8 |

Compassion

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .731 | 16 |

Prosocial Behaviour

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .906 | 16 |

Appendix P

Pearson Correlation Coefficient (PCC)

→ Correlations

Correlations

| | | SUM_NASSF | MEAN_CF | MEAN_PSA |
|-----------|---------------------|-----------|---------|----------|
| SUM_NASSF | Pearson Correlation | 1 | .157* | .462** |
| | Sig. (1-tailed) | | .023 | .000 |
| | N | 162 | 162 | 162 |
| MEAN_CF | Pearson Correlation | .157* | 1 | .443** |
| | Sig. (1-tailed) | .023 | | .000 |
| | N | 162 | 162 | 162 |
| MEAN_PSA | Pearson Correlation | .462** | .443** | 1 |
| | Sig. (1-tailed) | .000 | .000 | |
| | N | 162 | 162 | 162 |

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

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

Appendix Q

Turnitin Originality Report







Page 2 of 43 - Integrity Overview

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Matches with neither in-text citation nor quotation marks
- **24 Missing Quotations** 3%
Matches that are still very similar to source material
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Matches with in-text citation present, but no quotation marks

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- 6% ■ Internet sources
- 4% ■ Publications
- 10% ■ Submitted works (Student Papers)

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