



A STUDY OF THE MEDIATING ROLE OF SELF-ESTEEM BETWEEN PARENT-CHILD
RELATIONSHIP AND PSYCHOLOGICAL DISTRESS AMONG UNDERGRADUATE
STUDENTS IN MALAYSIA

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A study of the mediating role of self-esteem between parent-child relationship and psychological
distress among undergraduate students in Malaysia

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This research project is submitted in partial fulfilment of the requirement for the Bachelor
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THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

DECLARATION FORM

We declare that the material contained in this paper is the 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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THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

APPROVAL FORM

This research paper attached hereto, entitled “The mediating role of self-esteem between parent-child relationship and psychological distress among undergraduate students in Malaysia,” prepared and submitted by “Kimberley Wan Jian and Mak Wei Teng” in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Abstract

The parent-child relationship is a prevalent topic, and it greatly influences a child's mental development. The quality of the parent-child relationship is linked to psychological distress and self-esteem. Therefore, the present study aims to investigate the mediating effect of self-esteem between parent-child relationships and psychological distress among undergraduate students in Malaysia. This study used a quantitative research design to collect and analyze data. A total of 158 participants were recruited through purposive sampling on social media platforms such as Facebook, LinkedIn, WhatsApp, Xiaohongshu, and Microsoft Teams. The data were collected online using the Qualtrics questionnaire survey form. All 158 participants completed the survey and fulfilled the inclusion criteria of (i) Malaysian nationality, (ii) young adults aged between 18 and 24 years, and (iii) currently enrolled in undergraduate studies in Malaysia. The Inventory of Parents and Peer Attachment, Rosenberg Self-Esteem Scale, and Kessler Psychological Distress Scale were employed to assess relevant variables. Ethical considerations were addressed before distributing the online questionnaire, ensuring participants' voluntary and confidential participation. The results indicated significant associations between parent-child relationships and both psychological distress and self-esteem. A notable correlation between psychological distress and self-esteem was identified. The study emphasized the mediating role of self-esteem in the parent-child relationship and psychological distress. These findings align with previous research and provide valuable insights for future studies. The study's implications offer a reference point for subsequent research. Overall, this research helps us understand the intricate relationship between parents and children, self-esteem, and psychological well-being among Malaysian undergraduates.

Keywords: Parent-child relationship, Psychological distress, Self-esteem, Undergraduates

Table of Contents

	Page
Abstract	i
Declaration	ii
List of Table	vii
List of Figure	ix
List of Abbreviations	x
Chapter	
I Introduction	1
Background of Study	1
Problem Statement	4
Significance of Study	4
Research Questions	5
Research Objectives	5
Hypothesis	6
Conceptual Definition	7
Operational Definition	8
II Literature Review	10
Psychological Distress	10
Parent-Child Relationship	12
Psychological Distress and Parent-child Relationship	14
	7

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Self-Esteem	16
Parent-Child Relationship and Self-Esteem	18
Self-Esteem as a Mediator between Parent-Child Relationship and Psychological Distress	20
Conceptual Framework	21
Theoretical Framework	22
III Methodology	25
Research Design	25
Sampling Procedures	25
Procedure	27
Instruments	29
Inventory of Parent and Peer Attachment (IPPA)	29
Rosenberg Self-Esteem Scale (RSES)	30
Kessler Psychological Distress Scale (K10)	30
Pilot Study	31
Data Analysis	33
IV Results	35
Descriptive Statistic	35
Data Diagnostic and Missing Data	36
Assumption of Normality	37

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Skewness and Kurtosis	37
Test of Normality (Kolmogorov-Smirnov Test)	38
Histogram	38
Q-Q Plot	39
Conclusion for Assumption of Normality	39
Data analysis for each hypothesis or research objective	39
Parent-Child Relationship and Psychological Distress	39
Parent-Child Relationship and Self-Esteem	40
Psychological Distress and Self-Esteem	41
Mediating Analysis	42
V Discussion and Conclusion	45
Discussion	45
H1: There is a significant relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia.	45
H2: There is a significant relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia.	47
H3: There is a significant relationship between psychological distress and self-esteem among undergraduate students in Malaysia.	48
H4: There is a mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students in Malaysia.	49

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Implication	51
Limitation	52
Recommendations	53
Conclusion	54
References	55
Appendices	70
Appendix A: Calculation of Sample Size using G*Power	70
Appendix B: Questionnaires	71
Appendix C: SPSS: Outliers – Boxplot for Each Variable	75
Appendix D: SPSS Output: Normality Assumptions	78
Histogram for Each Distribution	78
Appendix E: SPSS Output: Normality Assumptions	81
Normal Q-Q Plots for Each Distribution	81
Appendix F: SPSS Output: Descriptive Statistics	84
Appendix G: SPSS Output: Mediation Analysis	85
Appendix H: Informed Consent	88
Appendix I: Ethnical Clearance Letter	91
Appendix J: Oral presentation Rubrics	92

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

List of Tables

Table		Page
3.5	Reliability Coefficient for All the Measures Used in the Pilot Study	32
3.6	The statistical test used for each hypothesis	34
4.1	Demographic Information of Participants (n=158)	35
4.1.2	Frequency Distribution of Variables (n=158)	36
4.3.1	Values for Skewness and Kurtosis for the three variables (IPPA, RSES, and K10)	37
4.3.2	Kolmogorov-Smirnov and Shapiro-Wilk (K-S Test)	38
4.4.1	Pearson Correlation of Parent-Child Relationship and Psychological Distress	40
4.4.2	Pearson Correlation of Parent-Child Relationship and Self-Esteem	41
4.4.3	Psychological Distress and Self-Esteem	42
4.5	Summary of Results	44

List of Figures

Figure		Page
2.7	Conceptual Framework	21
2.8	Theoretical Framework	22
4.3.3	Histogram for Variable of Parent-Child Relationship	78
	Histogram for Variable of Self-Esteem	79
	Histogram for Variable of Psychological Distress	80
4.3.4	Q-Q plot for Variable of Parent-Child Relationship	81
	Q-Q plot for Variable of Self-Esteem	82
	Q-Q plot for Variable of Psychological Distress	83
4.4.4	The mediating effect of Self-Esteem between the Parent-Child Relationship and Psychological Distress among undergraduate students in Malaysia	43

List of Abbreviations

Abbreviations

APA	American Psychological Association
DSM-5	Diagnostic and Statistical Manual of Mental Disorders
IPPA	Inventory of Parent and Peer Attachment
K10	Kessler Psychological Distress Scale
PPMC	Pearson-Product Moment Correlation
PTPTN	Future and Ability to Repay Student Loans
RSES	Rosenberg Self-Esteem Scale
SAD	Stress, Anxiety, and Depression
SPM	Sijil Pelajaran Malaysia
SPSS	Statistical Package for the Social Sciences
SDT	Self-Determination Theory

Chapter I

Introduction

1.1 Background of Study

Psychological distress is more prevalent among college students than in the general population. First-year students had the highest levels of psychological distress, with subsequent undergraduate students experiencing lower levels. The level of distress rises during the first year of tertiary study and remains high by the end of the year (Stallman, 2010). Most people experience psychological distress, a type of mental discomfort linked to unfavourable emotions like anxiety, stress, or depression. It is also linked to several physical symptoms, including headaches, sleep disturbances, and difficulty concentrating. Various factors, such as life events, personal challenges, or underlying mental health issues, can lead to psychological distress (American Psychological Association-Dictionary of Psychology). Researchers have shifted attention in recent years to examining how parent-child relationships affect the psychological well-being of university students. The transition to university life entails many challenges and adjustments, including adapting to new academic demands, establishing social networks, and managing increased levels of autonomy (Worsley et al., 2021). The strength of parent-child relationships is crucial at this time because it greatly impacts how well students can handle these transitions and the stress they cause. In addition, poor mental health among university students in Malaysia is becoming a major issue. Family problems were one of the leading causes (Kotera et al., 2020).

The parent-child relationship can be characterised as a unique and powerful bond formed during the interaction between parents and their children, and it is of extreme importance for the mental development of adolescents (Shao & Kang, 2022). Early theoretical frameworks have emphasised the importance of the parent-child relationship in influencing emotional and social

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

development. For instance, Bowlby (1969) put forth the attachment theory, which focuses on the value of secure and nurturing parent-child relationships for fostering positive emotional and social development. According to Ainsworth and her associates (1978), three categorizations of attachment relationships were secure attachment, insecure-avoidant attachment, and insecure-resistant/ambivalent attachment. Securely attached infants experience high physical safety, emotional security, and intimacy with their parents. These children had a self-assurance that made them feel safe even when not around their parents. Furthermore, a secure attachment also aids their emotional and social development (Peluso et al., 2004). According to attachment theory, a secure and nurturing parent-child relationship lays the foundation for psychological well-being, whereas an insecure relationship may lead to psychological distress (Benoit, 2004).

Self-esteem is a critical component of self-perception and a crucial indicator of mental health, representing the emotional or evaluative aspect of one's self-concept (Bajaj et al., 2016). According to Li et al. (2022), a child's self-esteem can be significantly impacted by the quality of parent-child relationships. Children who have positive interactions, support from their parents, and encouragement from family members tend to have higher levels of self-esteem. A child's self-esteem is aided when they believe they can rely on their parents for support and encouragement. On the other hand, failure-focused responses can harm the child's self-esteem and the relationship between parents and children. In addition, a longitudinal study by Boudreault-Bouchard et al. (2013) has shown that children who have positive relationships with their parents tend to have high levels of self-esteem. On the contrary, a hostile or unhealthy parent-child relationship characterised by conflict, rejection, or neglect can be a risk factor for eroding a child's self-esteem (Tian et al., 2018).

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Besides the parent-child relationship, low self-esteem was another factor likely to lead to psychological distress among university students (Becerra et al., 2020). According to many researchers, high self-esteem can improve a person's ability to deal with social issues, perform academically, and maintain better mental health. Mann (2004) also emphasises the connection between mental health and self-esteem. He stated that self-esteem is a crucial component of mental health and acts as a buffer against harmful factors that can have an adverse effect on well-being. Positive self-esteem is considered protective, whereas low self-esteem increases the risk of mental disorders. High self-esteem positively predicted college students' physical and mental health and social anxiety levels. Becerra et al. (2020) have shown that self-esteem significantly predicts a person's physical, social, and mental health.

Based on the literature that is currently available, and demonstrates how the parent-child relationship affects self-esteem and how self-esteem is correlated with psychological distress. In this study, the relationship between the parent-child relationship and psychological distress was hypothesised to be mediated by self-esteem. Few studies have examined how self-esteem mediates between psychological distress and parent-child relationships. The current research aims to advance knowledge of the variables affecting Malaysian undergraduate students' psychological well-being by concentrating on the mediating role of self-esteem. The findings from this study may have implications for developing targeted interventions and support programs to enhance students' well-being and promote positive parent-child relationships within the Malaysian cultural context.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

1.2 Problem Statement

The parent-child relationship is the first social bond a child experiences after birth, which plays a crucial role throughout their life. This relationship is the foundation for forming the child's personality, life choices, and overall behaviour (Breiner et al., 2016). The mental health and well-being of undergraduate students in Malaysia are important factors that can affect their academic performance and overall quality of life. Dam et al. (2023b) showed that the parent-child relationship, self-esteem, and psychological distress are all factors that can influence mental health and well-being.

However, there is a lack of research on the mediating role of self-esteem between parent-child relationships and psychological distress among undergraduate students in Malaysia. Therefore, this study aims to explore the mediating role of self-esteem in the relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia. The findings of this study can provide insights into the factors that influence the mental health and well-being of undergraduate students in Malaysia and can inform the development of interventions to improve their mental health and well-being.

1.3 Significance of Study

The study on the mediating role of self-esteem between parent-child relationship and psychological distress among undergraduate students in Malaysia is significant for several reasons as It can provide insights into the factors that influence the mental health and well-being of undergraduate students in Malaysia, it can inform the development of interventions to improve the mental health and well-being of undergraduate students in Malaysia and contribute to the existing literature on the relationship between parent-child relationship, self-esteem, and psychological distress. Moreover, it can help identify the specific mechanisms through which the parent-child

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

relationship affects the psychological distress of undergraduate students in Malaysia and highlight the importance of strengthening the parent-child relationship and promoting self-esteem to improve the mental health and well-being of undergraduate students in Malaysia. Overall, the findings of this study can have important implications for the mental health and well-being of undergraduate students in Malaysia and can inform the development of interventions to improve their mental health and well-being.

1.4 Research Questions

1. Is there a relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia?
2. Is there a relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia?
3. Is there a relationship between self-esteem and psychological distress among undergraduate students in Malaysia?
4. Is there a mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students in Malaysia?

1.5 Research Objectives

1. To determine the significance of the relationship between parent-child relationship and psychological distress among undergraduate students in Malaysia.
2. To determine the relationship between parent-child relationship and self-esteem among undergraduate students in Malaysia.
3. To determine the relationship between self-esteem and psychological distress among undergraduate students in Malaysia.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

4. To determine the mediating effect of the parent-child relationship, and self-esteem towards psychological distress among undergraduate students in Malaysia.

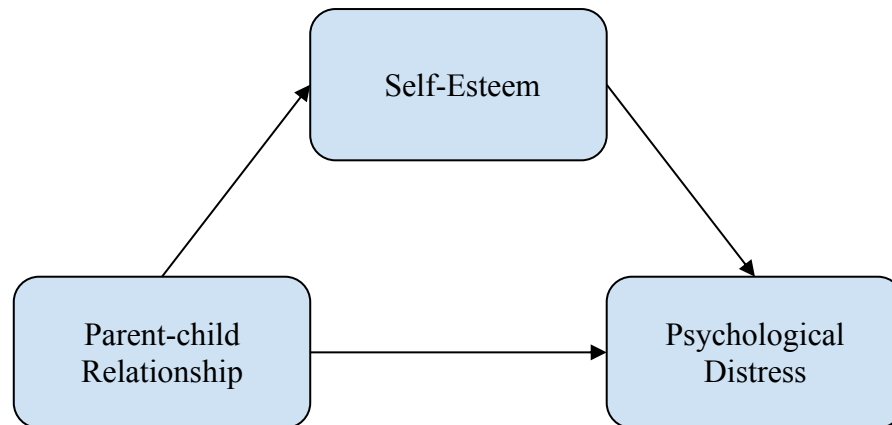
1.6 Hypothesis

H1: There is a significant relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia.

H2: There is a significant relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia.

H3: There is a significant relationship between self-esteem and psychological distress among undergraduate students in Malaysia.

H4: There is a mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students in Malaysia.



The present study attempts to examine the mediating function of self-esteem in the relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia. The present study examines the relationship between the independent variable (IV), the parent-child relationship, and the dependent variable (DV), which is psychological distress. Additionally, this study explores the role of self-esteem as a mediating

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

variable in this relationship. The conceptual framework illustrates the interplay between these variables and their potential influence on psychological distress.

1.7 Conceptual Definition

1.7.1 Parents-Child Relationship

The parent-child relationship describes the close bonds between parents and their children. The relationship is crucial in a child's life because it prepares the way for their social, emotional, and cognitive growth. According to the American Psychological Association (APA), a positive parent-child relationship is essential for a child's development. Parents are crucial to their children's socialisation throughout childhood by teaching them about different cultures, languages, societal norms, and more.

1.7.2 Psychological Distress

The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines psychological distress as a mental state marked by emotional suffering associated with depression and anxiety, which can manifest as a normal reaction to life events or a symptom of a severe clinical condition Chen et al. (2022).

1.7.3 Self-Esteem

Morris Rosenberg (1965), the creator of the self-esteem scale, defined "self-esteem" as the overall positive evaluation of one's value and worth. Self-esteem can be defined more simply as how a person views themselves in light of a positive self-concept and an evaluation of their strengths and personality traits. Self-esteem plays a role in mental well-being because it correlates with happiness, motivation, and optimism in high levels in people with high self-esteem.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

1.7.4 Undergraduate Student

According to the Cambridge and Oxford Learner's Dictionaries, undergraduates are college or university (public and private) students pursuing their first degree. This includes a bachelor's degree and diploma studies. Typically, undergraduate students fall within the age range of 18 and above (StudyMalaysia.com, 2015, 2022).

1.8 Operational Definition

1.8.1 Parents-Child Relationship

In the current study, parent-child relationships can be measured by the Inventory of Parent and Peer Attachment (IPPA). The IPPA was developed by Armsden and Greenberg in 1987 to assess the level of attachment individuals have towards their parents and peers. The IPPA evaluates the perceived level of trust, communication, and alienation in parent and peer relationships among adolescents and young adults. However, this study focuses exclusively on parent relationships and excludes the scale for peer attachment. Moreover, the IPPA includes reverse-scored items, specifically within the alienation subscales (e.g., "I get upset easily at home," "I feel angry with my parents"). Researchers reversed the scored items in this study to transform them into positive indicators. Consequently, higher scores now signify a positive and secure parent-child relationship.

1.8.2 Psychological Distress

The current study measures psychological distress using the Kessler Psychological Distress Scale (K10), the most recent scale to assess psychological distress in population surveys (Kessler et al., 2002). This scale evaluates how often individuals experience anxiety-depressive symptoms such as nervousness, sadness, restlessness, hopelessness, and worthlessness (Drapeau et al., 2012). The higher score indicates severe psychological distress, whereas the lower score indicates the person is likely to be psychologically well.

1.8.3 Self-Esteem

In the current study, self-esteem is measured by the Rosenberg Self-Esteem Scale (RSES), the most widely used tool (Rosenberg, 1965). The higher individuals perceive themselves positively, the greater their self-esteem, and vice versa. However, the higher scores indicate higher self-esteem, and vice versa.

1.8.4 Undergraduate Students

In the current study, undergraduates are those enrolled in a college or university (public or private) to pursue a bachelor's degree or diploma. In Malaysia, those university students are aged between 18 to 24 years old (StudyMalaysia.com, 2015, 2022)

Chapter II

Literature Review

This section will discuss the literature reviews on self-esteem, parent-child relationship, psychological distress, and their correlation. We will also discuss self-esteem as the mediator between the independent and dependent variables. The conceptual and theoretical frameworks will also be discussed to illustrate the relationship between independent and dependent variables.

2.1 Psychological Distress

According to the National Newspaper, the Malaysian Ministry of Health is concerned students' mental health (Bernama, 2016). The prevalence of stress, anxiety, and depression (SAD) has been discussed by a significant number of researchers in the literature (Deasy et al., 2014; Mofatteh, 2020; Paudel et al., 2020; Zheng et al., 2014). Azman bin Othman and Abdul Rashid (2018) found a statistic revealing that mental health problems among Malaysian students increased from one in ten students in 2011 to one in five in 2016. At the same time, they also identified anxiety and depression as major causes of mental health issues among students. Stallman et al. (2017) reported that psychological distress is a significant issue among university students in society, with various signs of mental conditions. The effects of stress, such as depression and anxiety, have the inability to cope with it, which have been characterised as the features of psychological distress (Deasy et al., 2014; Stallman et al., 2017). Dr Mohd Suhaimi Mohamed, an expert in mental health at the University of Malaya, mentioned that if mental health problems are not addressed immediately, they may lead students to withdraw from social aspects, experience delusions, or even exhibit suicidal behavior (Azman bin Othman & Abdul Rashid, 2018; Teh et al., 2015).

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

In a study by Mas Anom et al. (2017), academic-related matters were the primary cause of students' stress. The survey ranked anxiety at 41.6% and depression at 36.4%. For university students, academic success is important. However, without an optimistic mindset, students may feel stressed out trying to achieve their academic objectives (Beiter et al., 2015; Pariat et al., 2014). For instance, assignments, exams, and the number of subjects taken are stressors for students. This indicates a relationship between academic pressure and mental health conditions. Previous research has established that SAD is prevalent among freshman and final-year students (Ratanasiripong et al., 2018). Final-year students, however, might express uncertainty about their future and ability to repay student loans (PTPTN). Additionally, compared to non-medical peers, students in health-related fields, such as those studying medicine and nursing, have a higher prevalence of SAD (Sharp & Theiler, 2018). These students have a heavier workload due to their theoretical coursework and patient-related work (Fares et al., 2016; Mofatteh, 2020; Sharp & Theiler, 2018). Students majoring in psychology and philosophy are also more likely to develop depression than others. Some research has suggested that there may not be a significant difference in the prevalence of depression between medical and non-medical students, or those non-medical students may even be more susceptible to SAD (Mofatteh, 2020; Paudel et al., 2020).

Besides that, Maser et al. (2019) indicate that female students have a higher SAD prevalence than males. Interestingly, despite experiencing higher SAD levels, female students had a lower dropout rate than males (Ishii et al., 2018). Additionally, self-esteem is associated with SAD among university students, with lower self-esteem linked to a higher risk of SAD (Zheng et al., 2014; Ratanasiripong et al., 2018). Thus, having a strong social network can improve students' social and emotional well-being and lower the risk of developing SAD (Mofatteh, 2020). Mofatteh (2020) stated that family relationship quality also plays a crucial role in developing SAD. A well-

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

established and supportive family relationship can act as a protective factor against SAD. Conversely, negative relationships with parents can contribute to developing SAD among university students.

University students experiencing mental illness can be classified into two categories which are high psychological distress and low psychological well-being (Sharp & Theiler, 2018). Bhullar et al. (2013) found that higher psychological well-being correlated with lower levels of depression, while lower psychological well-being was associated with higher depression. Psychological well-being refers to how individuals manage their lives by encompassing both positive and negative emotions (Udhayakumar et al., 2018; Stamp et al., 2015). According to the theory of psychological well-being, an individual's mental health is influenced by their functioning in various life aspects (Udhayakumar et al., 2018). Beiter et al. (2015) studied personality, and environmental factors were examined in relation to students' psychological well-being and distress, and it was discovered that emotional resilience and capacity for recovery were significant predictors. In a survey of 222 university students, Jahanara (2017) investigated the correlation between hope, optimism, and mental health. The results showed that negative hope and optimism were linked to psychological distress, whereas positive expectations and optimism were related to psychological well-being (Shahira et al., 2018).

2.2 Parent-Child Relationship

The parent-child relationship is a unique bond defined as a foundational connection shaping interactions between parents and children. This relationship is crucial for developing children's physical and mental well-being (Shao & Kang, 2022). Orlov (1996) has identified two types of parent-child relationships within the family dynamic: a) The person-centered family; and b) The socio-centered family. Person-centered families are characterized by their focus on the

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

child's inner world, respect for their children's needs, and acceptance of their individuality. In contrast, socio-centered families are characterized by a tendency to neglect the child's needs and maintain an ambivalent relationship (Popov & Ilesanmi, 2015). The key distinction between these two types of relationships lies in the fact that person-centered families treat their children as individuals with unique personalities. In contrast, socio-centered families prioritize the social roles of their children within the family or even in the broader social context.

The main dimension influencing the quality of parent-child relationships is parental care. Parental care is a continuum of affectionate, warm, and responsive interactions between parents and their children (Stafford et al., 2015). Parental characteristics, including responsiveness, support, warmth, and passion, encourage children to express their views and thoughts consciously (Uzun et al., 2021). This parental care approach is essential for fostering the development of an autonomous sense of self in children (Ferrari et al., 2015). Not only that, but a self-determination theory (SDT) claimed by Ryan and Deci (2017) also suggests that human behaviors arise from interactions with their parents and peers to satisfy their psychological needs, including relatedness, competence, and autonomy. To illustrate, when children interact with their parents, they can receive emotional support and feel respected and loved. These interactions with parents contribute to developing a sense of relatedness and competence. With the perceived sense of relatedness and competence (Shao & Kang, 2022), children are more likely to have a conscious mind, enabling them to think independently. They are also more likely to express their views and thoughts, developing their sense of autonomy (Ferrari et al., 2015; Ryan & Deci, 2017).

However, both mother-child and father-child relationships play distinctive roles in the child's life. Ferrari et al. (2015) demonstrated that the mother-child relationship is primarily associated with the child's socio-emotional development, as mothers serve as caregiving figures.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

The researchers also claimed that daughters tend to have better communication with their parents compared to sons. Simultaneously, children often perceive mothers as more easily approachable than fathers (Ferrari et al., 2015). Not only that, but Uzun et al. (2021) also asserted that mothers who spend more time with their children will have a higher likelihood of building stronger mother-child relationships.

Some researchers reported that parent-child conflict tends to occur during the transition period of adolescence compared to other stages (Ferrari et al., 2015; Laursen et al., 2017; Gao & Cummings, 2019). To illustrate this statement, adolescents tend to spend more time with their peers and receive significant support from them because they have a larger peer group. As adolescents rely more on their peers, they are less likely to seek support from their parents. Consequently, adolescents are more prone to challenging their parents' opinions and engaging in arguments, leading to more severe conflicts in parent-child relationships. In short, the closeness and support in the parent-child relationships will decline over time, while the negative emotions that come along the distance will lead to more conflicts in the parent-child relationship (Gao & Cummings, 2019).

2.3 Psychological Distress and Parent-child Relationship

A positive parent-child relationship creates a secure attachment that supports a child's emotional and cognitive development. Conversely, negative parent-child relationships can lead to psychological distress. Interpersonal cycles are influenced by attachment, which moderates the effects of relational stressors on psychological distress, cognitive biases, and defensive behaviour (Ciocca et al., 2020; Kobak and Bosmans, 2019). Insecure attachment styles are significant contributors to psychological distress. Anxiety and depressive symptoms are more likely to appear among individuals with insecure attachments (Dagan et al., 2018; Manning et al., 2017; Marganska

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

et al., 2013) and develop negative beliefs about themselves, triggering negative cognitive patterns associated with psychological distress. Compared to secure children, children with insecure attachments frequently display higher levels of internalising (depression and anxiety) and externalising (hyperactivity and aggression) behaviour problems (Dubois-Comtois et al., 2013). Generally, individuals with insecure attachments are more prone to psychological distress, whereas secure individuals are likely to experience lower distress (Mónaco et al., 2019).

Additionally, various parenting styles can influence children's psychological well-being differently. Authoritative parenting, characterised by warmth and responsiveness, is associated with positive outcomes. On the contrary, authoritarian, permissive, or neglectful parenting styles would increase children's psychological distress. Meanwhile, parents also significantly influence their children's behaviours and attitudes through modelling. The children will be more likely to observe and imitate their parents; when parents exhibit negative behaviours like aggression or anxiety, their children may adopt the same behaviours, resulting in psychological distress. In addition, children with insecure attachments may experience more disorganisation and negative self-perceptions, leading to higher anxiety levels than secure children (Dubois-Comtois et al., 2013).

Furthermore, emotional support from parents can buffer against SAD. When children feel supported by their parents, they are better equipped to cope with those challenges and life stressors. Conversely, a lack of parental support can increase the likelihood of psychological distress. Parents experiencing relationship strain are more susceptible to depression and loneliness (Reczek & Zhang, 2016), while parents who report being emotionally distant from their children tend to have lower happiness levels. Thus, open and supportive communication allows children to express their

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

feelings and concerns freely, fostering emotional validation and security. In contrast, poor communication can contribute to psychological distress and feelings of isolation in children.

2.4 Self-Esteem

Rosenberg (1965) stated that self-esteem is generally defined as how positively they feel about themselves and how much they value themselves. People who have a high sense of self-worth are typically assertive, content, and respect themselves. Contrarily, people with low self-esteem frequently exhibit anxiety symptoms, lack confidence, are self-critical, and have a contradictory view of themselves (Palermi et al., 2017). There is a growing body of literature on the traits of those with low self-esteem. Those with low self-esteem often avoid participating in tasks due to uncertainty about their abilities (Uzoamaka & Rosemary Onyinyechi Ezioko, 2020). They frequently exhibit passive and reserved behaviour in social situations, lack confidence, and anticipate failure, discouraging them from taking chances. For fear of being rejected, they are reluctant to voice their opinions. A study by Uzoamaka and Rosemary Onyinyechi Ezioko (2020) found that people with low self-esteem look to others for approval. This behaviour frequently includes taking advantage of and acting disrespectfully toward others. These people avoid risks because they lack self-confidence and often doubt their value and acceptance. In addition, people with low self-esteem frequently engage in dishonest behaviour, bullying, giving up easily, avoiding challenges, and other counterproductive coping mechanisms (Uzoamaka & Rosemary Onyinyechi Ezioko, 2020).

Prior research has identified a significant factor influencing self-esteem; it suggests that the development of self-esteem commences early in childhood, particularly in parent-child relationships (Hepper, 2016; McAdams et al., 2016). This suggests parents are crucial in developing and fostering their children's self-esteem. A child's self-esteem will be influenced by

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

how their parents raise them (GhorbaniAmir & AhmadiGatab, 2011). Compared to children whose parents are critical or unresponsive, those whose parents exhibit warmth, approval, and responsiveness tend to have higher levels of self-esteem (Hepper, 2016; Mulyadi et al., 2016). However, the framework of "attachment theory," put forth by Bowlby (1969), is used to understand the effect of parenting experiences on children's self-esteem. According to Bowlby's research, consistent, affectionate, and responsive caregiving encourages a secure attachment and promotes self-esteem, instilling a belief that "I am deserving of love from others." On the other hand, constant rejection or coldness results in avoidant attachment and self-esteem that could occasionally be low but heavily relies on self-reliance, conveying that "I can manage things independently."

As a result, a program known as "Assertiveness training" was used in the study to boost participants' self-esteem. According to Wesley and Mattaini (2008), this training program aims to enhance people's assertive beliefs and behaviours, ultimately increasing their self-confidence. According to Corey (2009), the foundation of assertiveness training is based on the fundamentals of social learning theory and primarily uses social training methods. According to the study, assertiveness training is frequently carried out in groups. It uses techniques like role-playing, modelling, and rehearsal to help students practise new behaviours before practising them in real life. These studies provide strong evidence that low self-esteem may significantly influence negative behaviour. These negative traits might be attributed to a lack of encouragement or supportive feedback from parents and peers. However, the adverse effects of low self-esteem have not yet received much attention in the research literature. Previous research has established a correlation between low self-esteem and the manifestation of flawed assumptions and self-

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

defeating behaviours such as bullying, smoking, or drinking (Uzoamaka & Rosemary Onyinyechi Ezioko, 2020).

Following Abdel-Khalek, and Ahmed (2016), self-esteem is crucial to mental well-being. People with high self-esteem frequently feel happier, more optimistic, and more motivated than those with low self-esteem. On the other hand, depressive and anxious feelings are commonly experienced by people who have low self-esteem. Furthermore, compared to people with low self-esteem, those with high self-esteem are likelier to take on difficult tasks and persevere through failures. Previous studies have explored the negative consequences associated with low self-esteem. Stavropoulos et al. (2015) and Sharma and Agarwala (2015) have justified the correlation between low self-esteem and severe behavioral issues, including suicidal tendencies and maladjustment. Low self-esteem has been linked to several psychological problems, including social anxiety, depression, and a general decline in well-being.

2.5 Parent-Child Relationship and Self-Esteem

Parent-child relationship and self-esteem are crucial factors that impact adolescents' complete well-being and development. Numerous studies have examined the correlations between these variables and their effects on different facets of adolescents' lives, such as their level of engagement in learning, overall satisfaction with life, and mental well-being. According to Dam et al. (2023), self-esteem and parent-child relationships are two significant variables that have been investigated concerning adolescents' mental health and life satisfaction. The extent to which parent-child relationships exhibit high quality can substantially influence children's self-esteem and emotional, cognitive, and behavioural development. A secure attachment between a parent and child offers the child a sense of security and enhances their self-assurance in navigating the world.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Adolescents with high levels of self-esteem have better mental health outcomes, such as fewer psychiatric symptoms like anxiety and depression (Dam et al., 2023). In their study, Wang et al. (2021) investigated the potential correlation between the duration of parent-child interactions in different activities and the self-esteem levels of children. The findings indicate that parent-child interactions, characterised by positive reinforcement and praise, can benefit children's self-esteem. For example, the study revealed that children who were recipients of active listening from their parents exhibited elevated levels of self-esteem in comparison to children whose parents did not engage in active listening.

Additionally, a study by Shao and Kang (2022) explored how the parent-child relationship affects adolescent learning engagement. The study's findings indicate a mediated impact of the parent-child relationship on levels of participation in the learning process. The effect is moderated by motivation for learning and self-perceived academic competence. This suggests that cultivating a favourable parent-child relationship can enhance adolescents' motivation and self-efficacy, increasing engagement in educational endeavours. In a study by McAdams et al. (2016), genetic information was employed to investigate the correlation between the parent-child connection and adolescent self-esteem. The results of this study indicate that teenagers who maintained intimate, affectionate, and pleasant ties with their parents exhibited higher levels of self-esteem.

The importance of parent-child interactions and self-esteem in teenagers' mental well-being, life satisfaction, and academic accomplishment is significant and should not be underestimated. Positive parent-child relationships, stable attachment, and heightened self-esteem all have the potential to contribute to positive outcomes among teenagers.

2.6 Self-Esteem as a Mediator between Parent-Child Relationship and Psychological Distress

The parent-child relationship plays an essential part in influencing adolescents' psychological well-being. Extensive research has been conducted on this subject, and it has been widely acknowledged as a significant factor influencing various outcomes, such as self-esteem and psychological distress. Multiple scientific investigations have been conducted to explore the correlation between the parent-child relationship and psychological distress experienced by adolescents. One study by Dam et al. (2023) revealed a significant association between the parent-child relationship and adolescents' life satisfaction and mental well-being. Shen et al. (2021) conducted a study to investigate the associations among childhood attachment, adult attachment, self-esteem, and psychological distress. The findings of this research shed light on the intricate dynamics and interactions among these variables. In a research study, the association between the parent-adolescent relationship quality and adolescent psychological functioning in a group of African American adolescents were partially mediated by adolescent self-esteem (Barber et al., 2003; Lee et al., 2021).

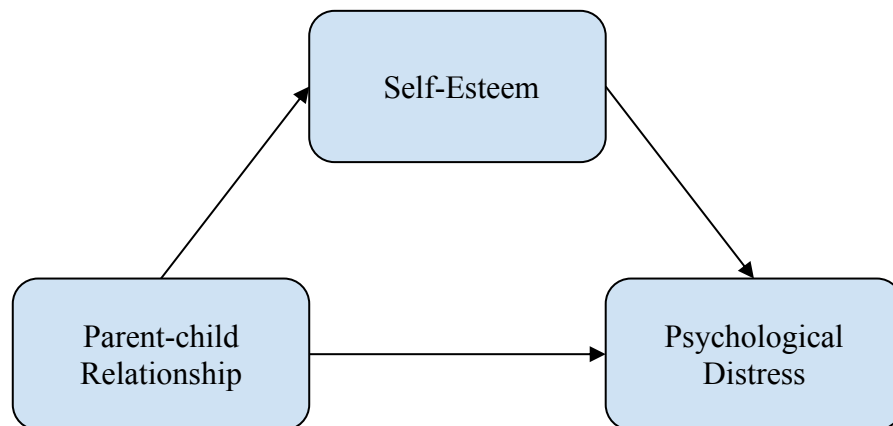
Similarly, a study conducted by Peng et al. (2021) found that the association between parenting style and adolescent mental health was mediated by self-esteem. Therefore, further investigation is warranted to explore the association between parent-child conflict and self-esteem and depression among adolescents. In the context of self-esteem, various protective factors and resilience have been recognised as mediators within the parent-child dynamic and their impact on psychological distress. The research conducted by Dam et al. (2023) emphasised the significance of resilience as a mediator in the relationship between parent-child dynamics and adolescents' overall life satisfaction and mental well-being. This implies that various elements, such as self-esteem and resilience, interact to impact psychological outcomes. The correlation between the

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

parent-child relationship, self-esteem, and psychological distress may exhibit variability across diverse age groups and developmental phases. In a study conducted by O'Neill et al. (2018), an examination was made of the role of children's self-esteem as a mediator during early adolescence, specifically focusing on its influence on the relationship between parent-child dynamics and psychosomatic issues. The findings revealed that self-esteem partially explained the association between the parent-child relationship and psychosomatic problems. This underscores the significance of considering age-related factors when comprehending the mediation process.

2.7 Conceptual Framework

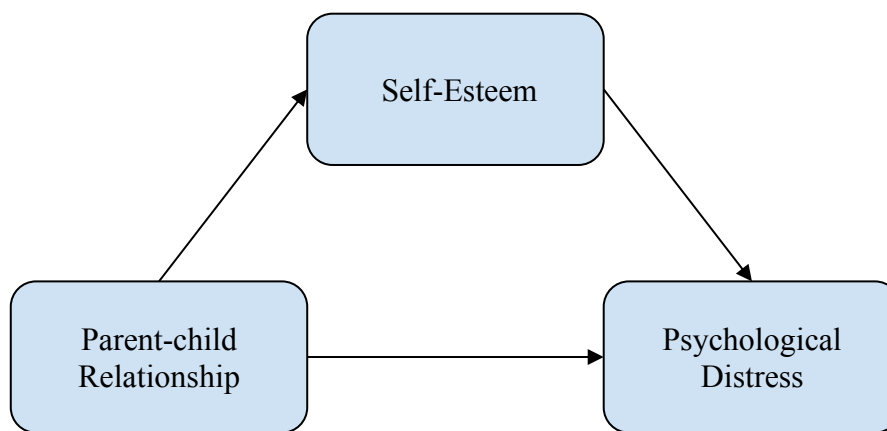
Figure 2.7



The present study attempts to examine the mediating function of self-esteem in the relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia. The present study examines the relationship between the independent variable (IV), the parent-child relationship, and the dependent variable (DV), which is psychological distress. Additionally, this study explores the role of self-esteem as a mediating variable in this relationship. The conceptual framework illustrates the interplay between these variables and their potential influence on psychological distress.

2.8 Theoretical Framework

Figure 2.8



Attachment theory, developed by John Bowlby in the mid-20th century, is a psychological framework that seeks to explore the development of Parent-Child Attachment and its subsequent influence, utilising the attachment theory formulated by John Bowlby and Mary Ainsworth as a conceptual framework. Bowlby (1988) proposed a theoretical framework known as attachment theory, which posits that individuals possess an innate attachment behavioural system. This system, both psychological and biological, serves to motivate individuals to pursue and sustain connections within attachment relationships actively. According to Ainsworth's research, individuals seek attachment figures for two primary purposes: to find a secure haven for distress reduction and pleasure and to establish a stable environment that facilitates exploration, learning, and personal development (Cherniak et al., 2020). The concept of attachment theory also recognises the existence of individual differences, which often arise from various interactions with attachment figures. These interactions are stored within cognitive frameworks of self and others, referred to as internal working models (Cherniak et al., 2020). During the transitional phases of adolescence and adulthood, the initial bonds formed with carers undergo a natural evolution, giving way to

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

many multifaceted interpersonal connections. These connections encompass many relationships, including friendships, romantic partnerships, and professional colleagues (Jones, 2015).

Maslow's hierarchy of needs is a well-known motivational theory in psychology. It consists of a five-tier model representing various human needs, generally illustrated as hierarchical levels within a pyramid structure (Maslow, 1943). As Abraham Maslow proposed, the hierarchy of needs is structured so that the most fundamental needs are situated at the base and progress toward higher-level requirements. These needs, in ascending order, include physiological needs (such as sustenance and clothing), safety needs (such as job stability), love and belonging needs (such as companionship), esteem needs, and self-actualization needs. The satisfaction of lower level wants is a prerequisite for people to address higher-level demands. When individuals encounter psychological distress, it can hinder their capacity to fulfil their desires. Individuals who have depression may encounter difficulties in fulfilling their physiological requirements, such as maintaining regular eating and sleeping patterns, as a result of diminished desire or energy levels.

The Rosenberg Self-Esteem Scale, developed by Rosenberg in 1965, is a commonly employed self-report measure used to assess an individual's self-esteem. The instrument under consideration is a unidimensional tool designed to evaluate the general perspective of individuals' self-esteem. The scale used in this study comprises ten items, equal to five positively worded items and five negatively worded items. Following Rosenberg's (1965b) study, a Likert scale consisting of four points is employed, spanning from "strongly agree" to "strongly disagree." Participants are instructed to assign a score indicating their agreement with each statement. The theoretical underpinnings of the Rosenberg Self-Esteem Scale are firmly grounded in a phenomenological perspective on self-esteem. The scale has been purposefully designed to evaluate an individual's self-worth or self-acceptance. The underlying premise of the scale is that self-esteem is a

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

multifaceted concept that demonstrates a certain degree of consistency across different situations and over time. The primary objective of the scale is to evaluate self-esteem as a unidimensional construct. This implies that all the items in the hierarchy are assumed to measure the same underlying construct.

In the study conducted by Cavalcante et al. (2021), the focus was on investigating the impact of parent-child relationships on parental psychological distress. The present study's findings provide insight into the notable influence these relationships can exert on the overall welfare of parents. This research aims to explore the impact of the parent-child relationship on parental distress. The parent-child relationship is a crucial aspect of a child's development and has been widely studied in psychology. It has garnered considerable recognition as a substantial influence on the overall well-being of parents. Moreover, the research has established that maternal mental distress is associated with an increased probability of impaired mother-child relationships (Cavalcante et al., 2021). The study conducted by Shen et al. (2021) examined the relationships between childhood attachment, adult attachment, self-esteem, and psychological distress by using multiple-mediator model analysis. The results of this study supported the hypothesis that individuals with more secure childhood attachments reported higher levels of self-esteem, lower levels of adult attachment anxiety and avoidance, and less psychological distress during adulthood (Shen et al., 2021). The statement above posits that the reason behind a mother's potential inability to adequately address her child's needs and offer the necessary emotional support stems from her mental distress. Consequently, it is plausible that the child may exhibit an increased propensity for experiencing pain, thereby elevating the probability of encountering challenges within the mother-child relationship.

Chapter III

Methodology

3.1 Research Design

The present study identifies the independent variable as the Parent-Child Relationship, the dependent variable as Psychological Distress, and the mediator as Self-Esteem. It was analysing numerical data to understand and explain phenomena. It is extensively employed in various disciplines, including the natural and social sciences. This research approach systematically gathers and examines numerical data to gain insights into and elucidate various phenomena. It was analysing numerical data. It can ascertain patterns and averages, formulate forecasts, and conduct experiments for testing purposes. The study aims to establish causal linkages and extrapolate findings to broader populations (Bhandari, 2021).

3.2 Sampling Procedures

3.2.1 Sampling Method

Our target population consisted of undergraduate students from Malaysia, aged between 18 and 24. Purposive sampling, a non-probability sampling technique, was employed to select and recruit participants for the study. The purposive sampling method, also known as selective sampling, involves using the researcher's judgement to determine which units should be included in the survey (Nikolopoulou, 2022). The objective of this sampling strategy is to provide a sample that can be logically inferred to be representative of the population. Purposive sampling is a widely employed method for identifying and selecting individuals or groups who possess a comprehensive understanding or share similar experiences related to the topic of interest (Palinkas et al., 2015).

3.2.2 Sample Size

This study computed the sample size using the sample size calculator application G-Power, a beneficial method for estimating sample size (Kang, 2021)—the effect size, $f^2=0.32$. The error probability level is set at 0.05, while the statistical power level is set at 0.95. The target group of this study consisted of undergraduate students from Malaysia, and a sample was selected from the study's target population. Accordingly, the application has indicated that the sample size for this study comprises 120 participants.

3.2.3 Research Location

The present study was carried out online utilising a Qualtrics questionnaire survey. Additionally, the survey was disseminated across several social media platforms, including Microsoft Teams, WhatsApp, Instagram, LinkedIn, and Facebook. This study employed a methodology that facilitated data collection from respondents now engaged in academic pursuits throughout multiple states in Malaysia. This phenomenon can be attributed to the ability to engage with the intended demographic rapidly and effectively, as it necessitates a reduced time investment and incurs fewer expenses.

3.2.4 Research Participants

The rationale for the selection was based on the research objective of the current study, which aims to enhance the understanding of romantic relationship engagement among undergraduate students in Malaysia. Additionally, the selection was made to increase the reliability and validity of the study's data and outcomes. Therefore, participants will be selected based on the following criteria to ascertain their qualifications: (i) To be eligible, individuals must be Malaysian undergraduate students currently enrolled in a Malaysian university. (ii) Additionally, individuals must fall between the age range of 18 to 24.

3.2.5 Ethical Clearance Approval

To conduct the research effectively, addressing ethical considerations before distributing the pilot study questionnaire is crucial. A comprehensive set of questionnaires was submitted to the UTAR Scientific and Ethical Review Committee (SERC) for evaluation. The components of the study package consisted of a cover page, an informed permission form, the Inventory of Parent and Peer Attachment – IPPA, the Rosenberg Self-Esteem Scale–RSES, and the Kessler Psychological Distress Scale–K10. The questionnaires were assessed by the SERC prior to their distribution for the pilot research. The purpose of obtaining ethical approval is to ascertain the extent to which the data collected is representative of different ethnic groups. This is achieved by ensuring participants receive informed consent forms before the survey.

3.3 Procedure

3.3.1 Inclusion and exclusion criteria

In the present study, several inclusion criteria had to be met by the participants. Individuals were considered eligible to participate if they fulfilled the following inclusion criteria: (i) Malaysian nationality, (ii) young adults aged between 18 and 24 years, and (iii) currently enrolled in undergraduate studies in Malaysia. Regarding the exclusion criteria, individuals currently pursuing undergraduate studies in countries other than Malaysia, those aged outside the range of 18 to 24 years old, and those who provided incomplete responses in the survey form were excluded.

3.3.2 Data Collection / Informed Consent

Data collection

Before distributing the survey, the researchers obtained ethical clearance approval from the UTAR Scientific and Research Committee to conduct the research. Once the approval was approved, the researchers distributed the questionnaire via Qualtrics. A hyperlink was generated

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

to facilitate the data collection process. Participants were able to access the online survey via the provided hyperlink. This link was shared through various social media platforms, including Facebook, Instagram, LinkedIn, and WhatsApp, as well as through Microsoft Teams and email. Participants were also encouraged to share the hyperlink with their peers to ensure a broad reach within the undergraduate population.

A self-administered questionnaire was prepared in English, and respondents were encouraged to complete it within 10-15 minutes. The survey consisted of four sections: Informed Consent, Section A (Demographic Information), Section B (Inventory of Parent and Peer Attachment – IPPA) to measure parent-child relationship, Section C (Rosenberg Self-Esteem Scale – RSES) to measure self-esteem, and Section D (Kessler Psychological Distress Scale – K10) to measure psychological distress. Each section comprised close-ended questions, requiring respondents to rate each item using a Likert scale. Respondents' information was kept anonymous and confidential to ensure confidentiality and maximise the response rate. Following data collection, the study's results were recorded, measured, and subjected to analysis. After removing outliers and incomplete data, IBM SPSS Statistical Version 23.0 software (SPSS) was employed to evaluate and identify distinct patterns among data variables.

Informed consent

Informed consent was secured from respondents through Section A of our questionnaire, known as the "Consent Form for Research Participation and Personal Data Protection." This section provides comprehensive details about the current study, encompassing its purpose, the voluntary nature of participation, confidentiality considerations, the contact information of researchers, and the inclusion criteria of participants. To protect participants' rights, every

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

participant was required to complete the consent form before answering the questionnaire. Those who agreed to the terms and conditions and chose to participate in the study were required to click on the "I agree to participate in the survey" option. The researchers' contact information was included in case participants had any inquiries. Participants were informed that their participation was voluntary, and they retained the right to withdraw from the research at any point if they felt uncomfortable. Additionally, it was stated that all gathered information would be treated as anonymous and kept confidential. The data collected from participants will be strictly utilised for academic purposes only.

3.4 Instruments

Inventory of Parent and Peer Attachment (IPPA)

The Inventory of Parent and Peer Attachment (IPPA) assesses individuals' attachment levels to their parents and peers. A secure attachment indicates a positive parent-child relationship, while an insecure one suggests a negative one. The scale, created in 1987 by Armsden and Greenberg, consists of 28 items for assessing both parents and 25 items for peer attachment. However, this study focused exclusively on the parent-child relationship, utilizing only 28 items related to parents. These items are evaluated using a rating scale ranging from 1 (indicating a shallow frequency or absence of truth) to 5 (indicating a very high frequency or consistent truth). The IPPA evaluates perceived trust, communication, and alienation among adolescents and young adults (Andretta et al., 2017). The IPPA includes reverse-scored items; in this study, items related to alienation were reverse-scored (e.g., "I get upset easily at home," "I feel angry with my parents"). Researchers reversed the scored items to transform them into positive indicators. Consequently, higher scores now signify a positive and secure parent-child relationship. Furthermore, the

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

psychometric features of IPPA demonstrate strong reliability, with internal consistency coefficients ranging from $\alpha = .66$ to $.86$, as well as evidence of convergent validity.

Rosenberg Self-Esteem Scale (RSES)

The Rosenberg Self-Esteem Scale (RSES), developed by Morris Rosenberg in 1965, aims to assess an individual's overall positive evaluation of their value and worth. This assessment encompasses both positive (items 1, 3, 4, 7, and 10) and negative factors (items 2, 5, 6, 8, and 9). As a result, the scale comprises ten items, rated on a four-point Likert scale, ranging from 1 (strongly agree) to 4 (strongly disagree). To calculate the total score, five items (items 2, 5, 6, 8, and 9) are considered reversed items within the scale. The sum of scores from all ten items indicates the individual's self-esteem level, with an overall score range of 10 to 40. Higher scores are indicative of a higher level of self-esteem. According to research by Chacón-López and Maeso-Broncano (2023), Cronbach's alpha value of the RSES ranges from $\alpha = .72$ to $\alpha = .87$ in various independent studies. Morris Rosenberg (1965) also revealed that the scale demonstrated satisfactory criterion and convergent validity. Given these high Cronbach's alpha values, the reliability of the RSES is considered to be strong.

Kessler Psychological Distress Scale (K10)

The Kessler Psychological Distress Scale (K10), developed by Kessler et al. (2002), aims to evaluate how often individuals experience symptoms of anxiety and depression, including nervousness, sadness, restlessness, hopelessness, and worthlessness (Drapeau et al., 2012). Consequently, the scale consists of 10 items, each rated on a five-point Likert scale, ranging from 1 (none of the time) to 5 (all of the time). A cumulative score is derived from the 10 items, with higher scores indicating a greater level of psychological distress, while lower scores suggest lower levels of psychological distress. A recent study by Zabidi et al. (2023) mentioned that Cronbach's

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

alpha ($\alpha = 0.88$) indicated a high scale score reliability. This suggests the K10 scale demonstrates good internal consistency in measuring psychological distress.

3.5 Pilot Study

In (2017) study, a pilot study was conducted on a smaller scale to determine if the researcher's main study was feasible. The pilot study helped identify necessary changes and improvements, familiarised researchers with the study procedures and estimated the sample size. Hence, it reviewed processes like randomization and blinding, assessed potential participants, and expanded the researchers' experience with the study of methodologies. The pilot study also aimed to validate the efficiency and feasibility of the research procedures. This involved evaluating the inclusion and exclusion of the participants (In, 2017). For the current study, the inclusion criteria were Malaysian undergraduate students aged 18 to 24. In contrast, the exclusion criteria included those outside this age range or who declined to complete the questionnaire.

In addition, validating the efficiency and feasibility of the research involves testing measurement instruments is the most important aspect. A pilot study aims to familiarise researchers with the study's purpose, method, and procedures (In, 2017). It is essential to review the suitability of the data collection method. In this case, researchers examine an online questionnaire using Qualtrics to avoid errors. The questionnaire links were shared with participants through various platforms like Microsoft Teams, Facebook, WhatsApp, Instagram, LinkedIn, and Xiaohongshu. After collecting responses, the reliability and validity of measurement scales, including the Inventory of Parent and Peer Attachment (IPPA), Rosenberg Self-Esteem Scale (RSES), and Kessler Psychological Distress Scale (K-10), were evaluated. Finally, statistical analysis was conducted to test the hypotheses presented in the study.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

In the present study, 30 undergraduates in Malaysia, aged between 18 and 24 years old, were recruited as participants in the pilot study through purposive sampling techniques. The primary objectives of conducting a pilot study were to ensure that participants in the actual study experienced more consistent research procedures and to eliminate external factors that could compromise the accuracy of data and results. Consequently, data from the pilot study were collected, and the reliability test was analysed using IBM SPSS Statistical Version 23.0 software (SPSS).

Table 3.5

Reliability Coefficient for All the Measures Used in the Pilot Study

Measures	No. of items	Cronbach's alpha
		Pilot study (n=30)
Inventory of Parents and Peer Attachment (IPPA)	28	.873
Rosenberg Self-Esteem Scale (RSES)	10	.827
Kessler Psychological Distress Scale (K10)	10	.864

Table 3.5.1 presents the results of reliability coefficients for all the instruments used in the pilot study. All the instruments were deemed reliable, as indicated by Cronbach's alpha values exceeding $\alpha = 0.8$.

3.6 Data Analysis

All statistical tests will use the IBM SPSS Statistical Version 23.0 software (SPSS). SPSS serves as a valuable tool in research performance. It can perform various statistical analyses, including Pearson Correlation, Linear Regression, ANOVA and other related statistical analyses tests. Moreover, SPSS simplifies the analysis and interpretation of data obtained from these instruments. However, the current study employs different statistical tests. The list of the statistical tests to be used is shown in the table (Table 3.6.1). Pearson correlation will be used in the current study to test hypotheses one, two, and three to measure the relationship of independent variables (parent-child relationship) with the dependent variable (psychological distress) mediated by the mediator (self-esteem). Besides, Process Macro Model 4 will be used to test the mediating effect of self-esteem, which is the mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students (hypothesis four).

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Table 3.6

The statistical test used for each hypothesis

Hypothesis	Statistical Test
H1: There is a significant relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia.	Pearson Correlation
H2: There is a significant relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia.	Pearson Correlation
H3: There is a significant relationship between psychological distress and self-esteem among undergraduate students in Malaysia.	Pearson Correlation
H4: There is a mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students in Malaysia.	Process Macro Model 4

Chapter IV

Results

4.1 Descriptive Statistic

Table 1 presents the demographic information provided by the respondents in the current study. The study's sample comprised 158 individuals aged 18 to 24 ($M = 21.70$, $SD = 1.229$), with a majority of 31.6% ($n=50$) falling within the 21-year-old category. In the present study, the sample consisted of 114 female participants, accounting for 72.2% ($n=114$) of the total respondents. Additionally, there were 44 male participants, representing 27.8% ($n=44$) of the sample. It is worth noting that females slightly outnumbered males in the research. Moreover, the majority of participants, comprising 93% ($n=147$), were identified as Chinese. Malays accounted for 3.2% ($n=5$) of the respondents, while Indians constituted 2.5% ($n=4$), and the remaining 1.3% ($n=2$) belonged to other ethnic backgrounds.

Table 4.1
Demographic Information of Participants (n=158)

		Frequencies (<i>n</i>)	Percentage (%)
Gender	Male	44	27.8
	Female	114	72.2
Age	18	1	0.6
	19	4	2.5
	20	18	11.4
	21	50	31.6
	22	41	25.9
	23	33	20.9
	24	11	7.0
Ethnicity	Malay	5	3.2
	Chinese	147	93
	Indian	4	2.5
	Others	2	1.3

Notes: Descriptive statistics for Demographic Information of Participants ($n=158$).

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Table 4.1.2 displays the frequency distribution of the variables examined in this study, namely Parent-Child Relationship, Self-Esteem, and Psychological Distress, among undergraduate participants. The mean scores for Parent-Child Relationship, Self-Esteem, and Psychological Distress were 95.21 (SD = 19.132), 23.04 (SD = 5.052), and 26.22 (SD = 9.219), respectively. Given that the scales were measured continuously, the decision was made to utilise the mean as the threshold for categorising the scores into two groups: below and above the mean. Participants who obtained scores above the average will be assigned to the high-level category. In contrast, participants who obtained scores below the average will be classified in the low-level category.

Table 4.1.2

Frequency Distribution of Variables (n=158)

	Mean	SD	Min	Max
Parent-Child Relationship	95.21	19.132	43	140
Self-Esteem	23.04	5.052	10	35
Psychological Distress	26.22	9.219	10	50

Note: SD = Standard Deviation; Min = Minimum values; Max = Maximum values. A total of 158 participants were selected from various universities in Malaysia.

4.2 Data Diagnostic and Missing Data

A total of 184 online responses were collected prior to the beginning of the data-cleaning procedure. Participants who did not meet the inclusion criteria were excluded from the study in manually keyed questionnaires preventing their data entry. The presence of missing data was observed subsequent to the completion of the data-cleaning process. 26 participants did not complete the survey questions, resulting in their exclusion from the study. Consequently, the final sample size consisted of 158 responses.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

4.3 Assumption of Normality

The normality assumption was examined to ensure the findings yielded valid inferences about the underlying population. Indicators of normality encompassed measures such as skewness, kurtosis, the Kolmogorov-Smirnov test as a quantitative representation, as well as the histogram and Q-Q plot as visual representations.

4.3.1 Skewness and Kurtosis

Table 4.3.1

Values for Skewness and Kurtosis for the three variables (IPPA, RSES, and K10)

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Parent-Child Relationship (IPPA)	158	-.054	.193	-.171	.384
Self-Esteem (RSES)	158	-.139	.193	-.171	.384
Psychological Distress (K10)	158	.126	.193	-.538	.384
Valid N (listwise)	158				

In Table 4.3.1, skewness and kurtosis values are presented for Parent-Child Relationship (IPPA), Self-Esteem (RSES), and Psychological Distress (K-10) variables. According to Gravetter and Wallnau (2014), the acceptable range for both skewness and kurtosis was within ± 2 . It was found that all variables in the study fell within this acceptable range. Hence, the underlying assumptions for the skewness and kurtosis indicators were not found to be violated.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

4.3.2 Test of Normality (Kolmogorov-Smirnov Test)

Table 4.3.2

Kolmogorov-Smirnov and Shapiro-Wilk (K-S Test)

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Parent-Child Relationship (IPPA)	.034	158	.200*	.995	158	.881
Self-Esteem (RSES)	.073	158	.039	.987	158	.130
Psychological Distress (K-10)	.083	158	.009	.979	158	.017

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

a. Lilliefors Significance Correction

Table 4.3.2 presents the results of the normality tests conducted for the variables Parent-Child Relationship (IPPA), Self-Esteem (RSES), and Psychological Distress (K-10). The variables IPPA ($D(158)=.034$, $p=.200$), RSES ($D(158)=.073$, $p=.039$), and K-10 ($D(158)=.083$, $p=.009$) exhibited significant normality. Therefore, the sample distributions exhibited a significant conformity to normality, as they were derived from a normal distribution and did not violate the normality test indicator.

4.3.3 Histogram

Figures 1 to 3, as presented in the Appendix, present the histograms representing the distribution of scores for the Parent-Child Relationship (IPPA), Self-Esteem (RSES), and Psychological Distress (K-10) variables. The histograms displayed a normal distribution characterised by a bell-shaped curve for three variables. Consequently, there is no violation of the histogram indicator.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

4.3.4 Q-Q Plot

Figures 4 to 6, as presented in the Appendix, display the Q-Q plots outcomes pertaining to the constructs of Parent-Child Relationship (IPPA), Self-Esteem (RSES), and Psychological Distress (K-10). The plotted data consists of the observed scores plotted against a diagonal line for each variable. Therefore, the Q-Q plot indicator is not violated either.

4.3.5 Conclusion for Assumption of Normality

The normality test results indicate no violation of the normality assumption, as all five indicators demonstrate conformity to normal distribution. Hence, it can be inferred that the normal distribution has been attained, enabling the derivation of conclusions regarding the general population.

4.4 Data analysis for each hypothesis or research objective

This section will discuss the statistical results pertaining to each research question and hypothesis. A study was conducted using Pearson-Product Moment Correlation (PPMC) to examine the relationship between the Parent-Child Relationship, Self-Esteem, and Psychological Distress. Additionally, Process Macro Model 4 was used to explore the potential mediating role of Self-Esteem in the relationship between Parent-Child Relationship and Psychological Distress.

4.4.1 Parent-Child Relationship and Psychological Distress

RO1: To determine the significance of the relationship between parent-child relationship and psychological distress among undergraduate students in Malaysia.

H1: There is a significant relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia.

Pearson-product-moment correlation (PPMC) was used to investigate a statistically significant negative connection between Parent-Child Relationship and Psychological Distress.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

The Pearson-Product-Moment Correlation analysis revealed a statistically significant moderate negative correlation between the Parent-Child Relationship and Psychological Distress, with a correlation coefficient of $r(158) = -.476^{**}$, $p < .001$. Based on the Guildford Rule of Thumb, the correlation between Parent-Child Relationship and Psychological Distress was found to be weak, as indicated by an r value falling within the range of .2 to .4. The findings also demonstrated that individuals with stronger parent-child relationships tend to experience lower levels of psychological distress.

Table 4.4.1

Pearson Correlation of Parent-Child Relationship and Psychological Distress

	Psychological Distress	
Parent-Child Relationship	Pearson's Correlation	-.476**
	Sig. (2 tailed)	.000
	N	158

*Note: ***. Correlation is significant at the 0.01 level (2-tailed).

4.4.2 Parent-Child Relationship and Self-Esteem

RO2: To determine the relationship between parent-child relationship and self-esteem among undergraduate students in Malaysia.

H2: There is a significant relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia.

Pearson-product-moment correlation (PPMC) was used to investigate a statistically significant association between Parent-Child Relationship and Self-Esteem. The findings from the Pearson-Product-Moment Correlation analysis indicated a statistically significant moderate negative correlation between the Parent-Child Relationship and Self-Esteem, with a correlation

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

coefficient of $r(158) = -.493^{**}$ ($p < .001$). Based on the Guildford Rule of Thumb, the correlation between Parent-Child Relationship and Self-Esteem was weak, as indicated by a r value falling within the range of .2 to .4.

Table 4.4.2

Pearson Correlation of Parent-Child Relationship and Self-Esteem

Self-Esteem		
Parent-Child Relationship	Pearson's Correlation	-.493**
	Sig. (2 tailed)	.000
	N	158

Note: **. Correlation is significant at the 0.01 level (2-tailed).

4.4.3 Psychological Distress and Self-Esteem

RO3: To determine the relationship between self-esteem and psychological distress among undergraduate students in Malaysia.

H3: There is a significant relationship between self-esteem and psychological distress among undergraduate students in Malaysia.

Pearson-product-moment correlation (PPMC) was used to investigate a statistically significant association between Psychological Distress and Self-Esteem. The Pearson-Product-Moment Correlation analysis showed a statistically significant positive relationship between Psychological Distress and Self-Esteem, with a correlation coefficient of $r(158) = .618^{**}$ ($p < .001$). Based on the Guildford Rule of Thumb, a moderate association exists between psychological distress and self-esteem, as indicated by the r value falling within the range of .4 to .7.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Table 4.4.3

Psychological Distress and Self-Esteem

	Self-Esteem	
Psychological Distress	Pearson's Correlation	.618**
	Sig. (2 tailed)	.000
	N	158

Note: **. Correlation is significant at the 0.01 level (2-tailed).

4.4.4 Mediating Analysis

RO4: To determine the mediating effect of the parent-child relationship, and self-esteem towards psychological distress among undergraduate students in Malaysia.

H4: There is a mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students in Malaysia.

Process Macro Model 4 version 4.2, developed by Hayes (2022), was integrated into SPSS software and used. This version was employed to examine the mediating role of self-esteem in the associations between parent-child relationships, as well as psychological distress. The bootstrap method was utilised with 5,000 samples, and the default confidence interval of 95% was used. According to Hayes (2017), a statistically supported mediation effect can be inferred if the indirect effect's confidence interval (CI), as determined by the bootstrap samples, does not include zero.

Self-esteem as a mediator between Parent-Child Relationship and Psychological Distress

As the results are shown in the Appendix, Self-esteem acts as a partial mediator as the parent-child Relationship predicts Self-Esteem significantly negatively, $B = -.130$, $SE = .018$, t

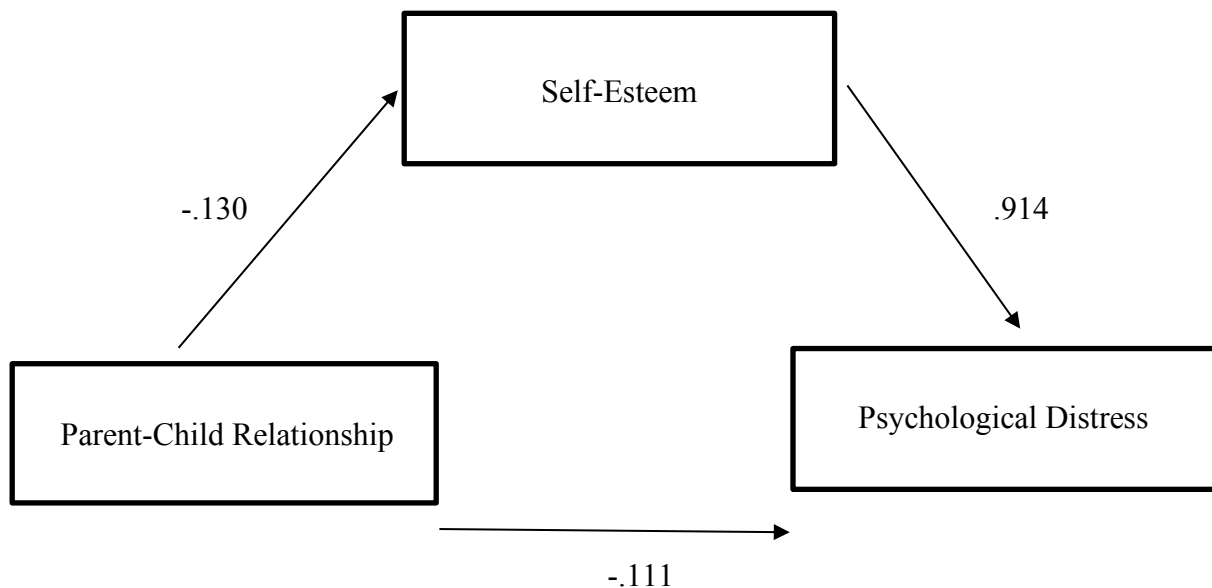
THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

=7.078, $p < .05$, 95% CI [-.167, -.094]; Self-Esteem was a significant and positive predictor of Psychological Distress, $B = .914$, $SE = .129$, $t = 7.100$, $p < .05$, 95% CI [.659, 1.165].

The indirect effect of the Parent-Child Relationship on Psychological Distress through Self-Esteem was significantly negative, $B = -.119$, $SE = .026$, 95% CI [-.175, -.072]. The direct effect of Parent-Child Relationship and Psychological Distress was significantly negative, $B = -.111$, $SE = .034$, $t = -3.254$, $p < .05$, 95% CI [-.178, -.043]. As the direct effect of the parent-child relationship and psychological distress was significantly negative, this result indicates a partial mediation effect of self-esteem.

Figure 4.4.4

The mediating effect of Self-Esteem between the Parent-Child Relationship and Psychological Distress among undergraduate students in Malaysia



THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Table 4.5

Summary of Results

Hypothesis	Decision
H1: There is a significant relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia.	Supported
H2: There is a significant relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia.	Supported
H3: There is a significant relationship between psychological distress and self-esteem among undergraduate students in Malaysia.	Supported
H4: There is a mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students in Malaysia.	Supported

Chapter V

Discussion and Conclusion

This chapter discusses the findings of this study, which are (1) the relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia, (2) the relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia, (3) the relationship between self-esteem and psychological distress among undergraduate students in Malaysia, and (4) the mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students in Malaysia. Besides, the implication of significant results, limitations, and recommendations for future research was shown in the discussion.

5.1 Discussion

H1: There is a significant relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia.

Based on the results of this study, the hypothesis above is approved. The results support the hypothesis suggested in this study, which stated that there is a significant relationship between parent-child relationships and psychological distress among undergraduate students in Malaysia.

This present finding is consistent with Gao & Cummings (2019), as the parent-child relationship and psychological distress have a significant connection. The diminishing of intimacy and support in parent-child relationships can lead to negative emotions, particularly results in more conflicts, leading to psychological distress, including stress, anxiety, and depression (SAD). However, some researchers argue that parent-child conflict tends to occur during the transition period of adolescence (Ferrari et al., 2015; Laursen et al., 2017; Gao & Cummings, 2019). Adolescents often interact and spend more time with their peers than their parents, as they perceive

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

peers as their immediate source of support. Consequently, adolescents are more prone to live independently, weakening their reliance on parent-child relationships (Hong et al., 2021). They may also experience conflicts and arguments with their parents over differing opinions, resulting in significant tensions within parent-child relationships (Gao & Cummings, 2019). In short, the higher the satisfaction in parent-child relationships, the lower the psychological distress, with low levels of SAD (Hong et al., 2021).

However, children receive greater emotional support from their parents, enhancing parent-child relationship bonds and decreasing psychological distress. To illustrate, if children feel supported by their parents and experience a sense of love and care from their parents, they are better equipped to cope with challenges and life stressors. Conversely, a lack of parental support can increase the likelihood of psychological distress. Not only that, but if children perceive less social support from their parents, it can also result in a high level of psychological distress, such as SAD, loneliness and unhappiness. It is crucial to note that higher levels of social and emotional support from parents correlate with lower levels of psychological distress among children and positively impact parent-child relationships (Reczek & Zhang, 2016). Thus, open and supportive communication allows children to express their feelings and thoughts freely, fostering emotional validation. In contrast, poor communication can contribute to psychological distress and feelings of isolation in children.

H2: There is a significant relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia.

Based on the results of this study, the hypothesis above is acceptable. The results support the hypothesis suggested in this study, which stated that there is a significant relationship between parent-child relationships and self-esteem among undergraduate students in Malaysia. It indicates that the more positive the parent-child relationship, the higher the level of self-esteem.

Numerous studies have demonstrated a significant connection between the parent-child relationship and self-esteem (McAdams et al., 2016; Tian et al., 2018; Keizer et al., 2019; Wang et al., 2021; Li et al., 2022). The results of a study by McAdams et al. (2016) indicate that adolescents who maintained intimate, affectionate, and close ties with their parents exhibited higher levels of self-esteem. Higher levels of self-esteem, in turn, encouraged adolescents to participate more actively in the social world and cope with challenges independently. They were also more willing to express their thoughts and ideas freely. According to Trong Dam et al. (2023), the quality of parent-child relationships significantly influences children's self-esteem and emotional, cognitive, and behavioural development. A secure attachment between a parent and child provides the child with a sense of security and enhances their self-assurance in navigating the world. Additionally, Wang et al. (2021) argue that parent-child interactions characterised by positive reinforcement and praise can benefit children's self-esteem. For example, the study revealed that children who received active listening from their parents exhibited elevated levels of self-esteem compared to children whose parents did not engage in active listening.

Moreover, a study by Li et al. (2022) reported that two types of parental responses to children's performance play a crucial role in developing self-esteem: (1) parents' success-oriented and (2) parents' failure-oriented. The parents' success-oriented response favours children's self-esteem, while the failure-oriented response is associated with children's low self-esteem. A

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

success-oriented response involves providing positive feedback towards children's performance, ultimately boosting their self-esteem. According to the self-determination theory (Ryan & Deci, 2017), children receiving such positive responses experience emotional support and love, satisfying their basic need for relatedness and promoting essential psychological function development. Conversely, suppose parents adopt a failure-oriented reaction, such as offering hostile or harsh feedback to evaluate their children's efforts. In that case, the children may develop the belief that they cannot perform well independently and develop a sense of self-worth, which leads to increased self-doubt, symptoms of psychological distress such as SAD, and results in decreased self-esteem.

H3: There is a significant relationship between psychological distress and self-esteem among undergraduate students in Malaysia.

Based on the results of this study, the hypothesis above is acceptable. The results support the hypothesis suggested in this study, which stated that there is a significant relationship between psychological distress and self-esteem among undergraduate students in Malaysia. It indicates that a higher level of self-esteem will indicate severe psychological distress, such as SAD.

High self-esteem must sustain healthy psychological development. A higher level of self-esteem can help individuals build self-confidence and cope with stressors more effectively. A global trend noted by the World Health Organization's World Mental Health International College Student Project, as reported by Auerbach et al. (2018), indicated that the majority of the student population reported anxiety, followed by depression (Becerra et al., 2020). However, several studies have reported a significant correlation between psychological distress and self-esteem (Liu et al., 2021; Becerra et al., 2020; Galanakis et al., 2016; Bajaj et al., 2016). Thus, a study conducted by Bajaj et al. (2016) claims that individuals with low self-esteem may experience various forms of psychological distress, such as anxiety and depression, and more severe distress may lead to

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

suicidal behaviour or self-harm. Furthermore, Liu et al. (2021) argue that social support can indirectly affect psychological distress by improving self-esteem. If individuals perceive less social support from family and peers, they may be associated with depressive symptoms or isolation. In comparison, they are likely to feel secure and companionable with their family and peers if they perceive sufficient social support.

Additionally, Galanakis et al. (2016) demonstrated that students with high self-esteem experience less distress than those with low self-esteem. The results indicate that highly distressed individuals are more likely to have irrational beliefs or negative feelings about themselves, such as questioning their ability to perform well or feeling like a failure, and these feelings are correlated with their level of self-esteem. This can lead to psychological distress, including SAD, fatigue, difficulty sleeping or concentrating, and the onset of depressive symptoms. In contrast, if an individual possesses a positive personality, this trait may act as a protective factor, potentially mitigating psychological distress and elevating self-esteem.

H4: There is a mediating effect of self-esteem between the parent-child relationship and psychological distress among undergraduate students in Malaysia.

Based on the results of this study, the hypothesis above is acceptable. The results support the hypothesis suggested in this study, as the direct effect of the parent-child relationship and psychological distress through self-esteem was significantly negative; the indirect effect of the parent-child relationship and psychological distress through self-esteem was significantly negative, indicating a partial mediation effect of self-esteem.

Li et al. (2023) argue that self-esteem is crucial in psychological endurance and coping with stress. A significant and positive relationship was found between self-esteem and psychological distress in the present study, indicating that it is important to understand the relationship between parent-child relationships and psychological well-being. For example,

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

research found that parents who were more positive towards their children had higher self-esteem, which in turn was associated with better psychological well-being (Li et al., 2023). For instance, having supportive and actively involved parents in the child's life can foster resilient and stable self-esteem. Similarly, self-esteem mediates the association between loneliness and psychological and subjective well-being among university students (ÇİÇEK, 2021). According to Szcześniak et al. (2021), students with higher self-esteem reported greater life satisfaction and less loneliness.

Additionally, Trong Dam et al. (2023) found a significant partial mediation effect between self-esteem and psychological distress in the parent-child relationship. It was found that conflict with both parents negatively affected mental well-being via self-esteem, with a total effect of 14.7% (Trong Dam et al., 2023). This means that self-esteem is a significant factor in reducing psychological distress in the parent-child relationship. When children have higher self-esteem, they are more likely to be less anxious and stressed, and this can lead to better communication and a stronger bond between parent and child (Henriksen et al., 2017).

5.2 Implication

5.2.1 Theoretical Implications

The theories used in this study were Attachment theory and Maslow's hierarchy of needs. Self-esteem was assessed using the Rosenberg Self-Esteem Scale. The parent-child relationship is an important factor in developing self-esteem and psychological distress, which is a key component of Maslow's esteem needs (Maslow, 1943). Attachment theory suggests that a secure attachment between a child and parent is essential for the child to feel secure and develop healthy self-esteem. The results of this study support this, showing that a secure attachment between parent and child was associated with higher levels of self-esteem (Kurtz, 2008). Similar to the current study, the more positive the parent-child relationship, the higher the level of self-esteem. This indicates that a secure attachment between parent and child is essential for developing healthy self-esteem. Parents should strive to create and maintain a positive relationship with their children to ensure their emotional well-being.

5.2.2 Practical Implications

By providing insight and bringing advantage to other universities, colleges, undergraduates, and parents, the findings can contribute to understanding the mediating effect of self-esteem on parental-child relationships and psychological distress among undergraduate students. This research can also be used to develop interventions that target parents, undergraduates, and universities to address mental health issues. Additionally, it can offer valuable insight into the potential benefits of undergraduate support. Also, it is possible to gain a better understanding of how parent-child relationships can impact esteem needs, which in turn can intervene in psychological distress. Furthermore, fostering a positive parent-child relationship is important for developing healthy self-esteem and reducing psychological distress in children through secure attachment. This can help create a more resilient and emotionally stable child, leading to better

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

academic performance and more successful relationships in the future. As a result, investing in parent-child relationships can benefit children, parents, and society.

5.3 Limitation

Like all previous studies conducted by researchers, the present study has some limitations. The study may have a small sample size, limiting its findings' generalizability to a broader population of undergraduate students in Malaysia. In addition, the data could be difficult to detect if there are subtle differences or trends. Furthermore, the study may not provide a comprehensive picture of the situation in Malaysia. This is because it only focuses on a small group of students between the ages of 18 and 24. It is also possible that the study does not include control variables that could help to account for potential confounding factors, such as socioeconomic status and cultural background. This could make it difficult to isolate the mediating effect of self-esteem in the relationship between parent-child relationships and psychological distress.

Since no guide exists, participants may have difficulty answering and completing the survey. Therefore, the survey may not be completed carefully as a result, which may result in incorrect information. Moreover, the purposeful sampling method was used to collect the samples. As a result of sampling that does not reflect the population, bias may be introduced into the research and could impact the results. For instance, if the same survey is given to different people in different settings, different responses may be received due to different contexts. Last, the study might use a limited measure of parent-child relationships, which may not capture their complexity and nuances. This could lead to an incomplete understanding of the role of parent-child relationships in the mediating effect of self-esteem on psychological distress among undergraduate students in Malaysia. For example, the study might measure parent-child relationships only through a single-item measure, such as parental support or warmth.

5.4 Recommendations

In future studies, a longitudinal research design should be adopted. Using longitudinal studies, researchers can collect multiple data sets over time from the same group of participants (Taris & Kompier, 2014). This method can also assess causal relationships between variables in a study. This also allows for a better understanding of how variables interact over time and how changes over time can affect outcomes. Longitudinal studies can also be beneficial in evaluating the long-term effects of an intervention. For this reason, longitudinal studies in social sciences are preferred over cross-sectional studies (Wang, 2013). By collecting data at two different time points, a longitudinal research design will be able to address the limitations of this current study, thereby offering a better understanding of the relationship between psychological variables (Self-Esteem, Parent-Child Relationship, and Psychological Distress) and their changes.

Secondly, indirect questioning in the survey can overcome social desirability bias. Indirect questioning is defined by Ried et al. (2022) as asking participants to answer a survey from the perspective of others instead of their own. In this way, participants will feel more inclined to answer truthfully because they know they won't be judged. The word "you" in future research should be avoided. For example, rather than asking, "Do you agree with the statement?" it should be phrased as "Would you agree with someone if they agreed with the statement?". Additionally, future research is recommended to conduct similar studies in other countries outside Malaysia to improve the generalizability of the results. For example, a study could be conducted in a Western country with a larger sample size to compare the differences between East and West. This would enable us to gain a more holistic understanding of the effectiveness of our method and its potential impact.

5.5 Conclusion

This study aimed to investigate the relationship between parent-child relationships, psychological distress, and self-esteem among undergraduates in Malaysia. This present study seeks to examine whether self-esteem has a mediating effect on parent-child relationships and psychological distress.

This is a cross-sectional study where participants need to complete the online survey questionnaire through Qualtrics. Any undergraduates in Malaysia aged between 18 and 24 are eligible to participate in the survey questionnaire. The researchers employed a purposive sampling technique to recruit participants, resulting in a total of 184 participants. After data cleaning, only 158 qualified responses were available for the final data analysis. However, in this study, researchers used instruments that consisted of demographic information, the Inventory of Parent and Peer Attachment (IPPA), the Rosenberg Self-Esteem Scale (RSES), and the Kessler Psychological Distress Scale (K10).

At the conclusion of this study, researchers identified a significant correlation between parent-child relationships and psychological distress. Additionally, the study reported a notable association between parent-child relationships and self-esteem. The researchers also measured that there is a significant correlation between psychological distress and self-esteem. Aside from this, the study highlighted the significant mediating role of self-esteem.

In summary, the majority of findings from this study align with past research. This study can potentially serve as a reference for future researchers. This contribution may be attributed to evolutionary factors or other variables. Regardless, the study has played a role in enhancing Malaysia's research database in mediating the role of self-esteem in parent-child relationships and psychological distress.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

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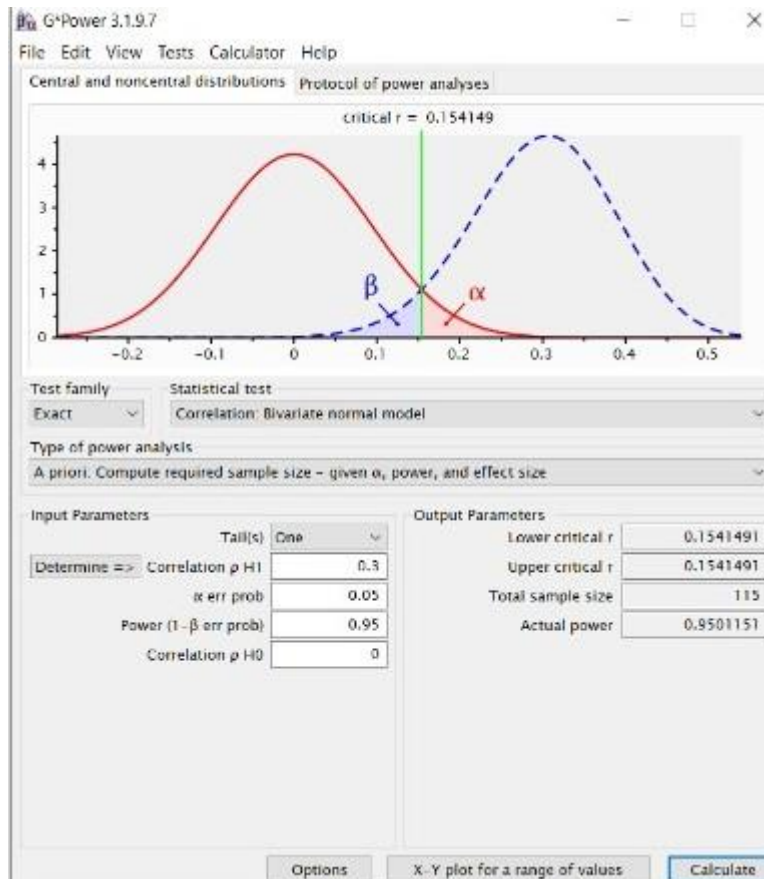
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THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Appendices

Appendix A: Calculation of Sample Size using G*Power



THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Appendix B: Questionnaires

B1: Inventory of Parent and Peer Attachment (IPPA)

Almost Never or Never True	Not Very Often True	Sometimes True	Often True	Almost Always or Always True
1	2	3	4	5

Questions	Rating				
	1	2	3	4	5
1. My parents respect my feelings.					
2. I feel my parents are successful as parents.					
3. I wish I had different parents.					
4. My parents accepts me as I am.					
5. I have to rely on myself when I have a problem to solve.					
6. I like to get my parents' point of view on things I'm concerned about.					
7. I feel it's no use letting my feelings show.					
8. My parents sense when I'm upset about something.					
9. Talking over my problems with my parents makes me feel ashamed or foolish.					
10. My parents expect too much from me.					
11. I get upset easily at home.					
12. I get upset a lot more than my parents know about.					
13. When we discuss things, my parents consider my point of view.					
14. My parents trust my judgment.					
15. My parents have their own problems, so I don't bother them with mine.					
16. My parents help me to understand myself better.					
17. I tell my parents about my problems and troubles.					
18. I feel angry with my parents.					
19. I don't get much attention at home.					
20. My parents encourage me to talk about my difficulties.					
21. My parents understand me.					
22. I don't know whom I can depend on these days.					
23. When I am angry about something, my parents try to be understanding.					
24. I trust my parents.					
25. My parents don't understand what I'm going through these days.					

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

26. I can count on my parents when I need to get something off my chest.					
27. I feel that no one understands me.					
28. If my parents know something is bothering me, they ask me about it.					

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

B2: Rosenberg Self-Esteem Scale – RSES

Strongly agree	Agree	Disagree	Strongly disagree
1	2	3	4

Questions	Rating			
	1	2	3	4
1. On the whole, I am satisfied with myself.				
2. At times I think I am no good at all.				
3. I feel that I have a number of good qualities.				
4. I am able to do things as well as most other people.				
5. I feel I do not have much to be proud of.				
6. I certainly feel useless at times.				
7. I feel that I'm a person of worth.				
8. I wish I could have more respect for myself.				
9. All in all, I am inclined to think that I am a failure.				
10. I take a positive attitude toward myself.				

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

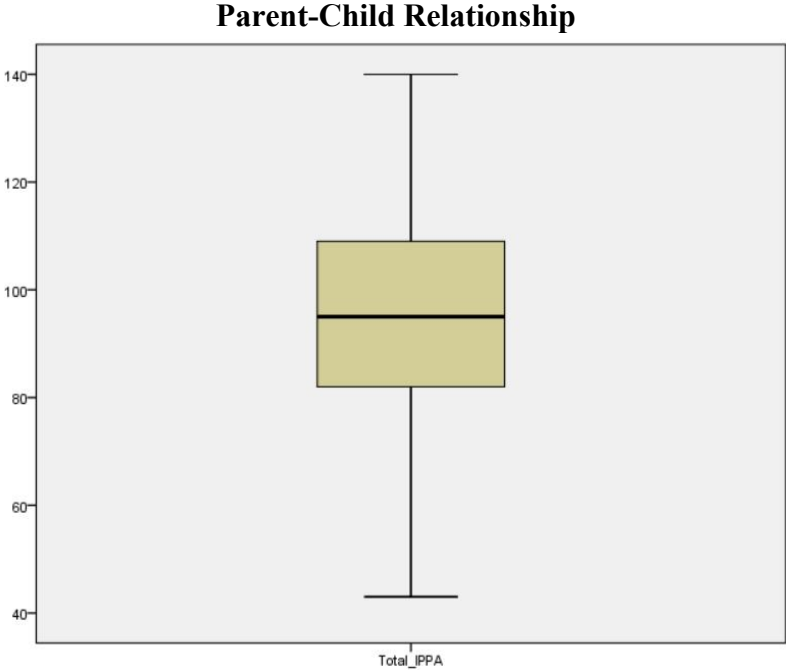
B3: Kessler Psychological Distress Scale – K10

All of the time	Most of the time	Some of the time	A little of the time	None of the time
5	4	3	2	1

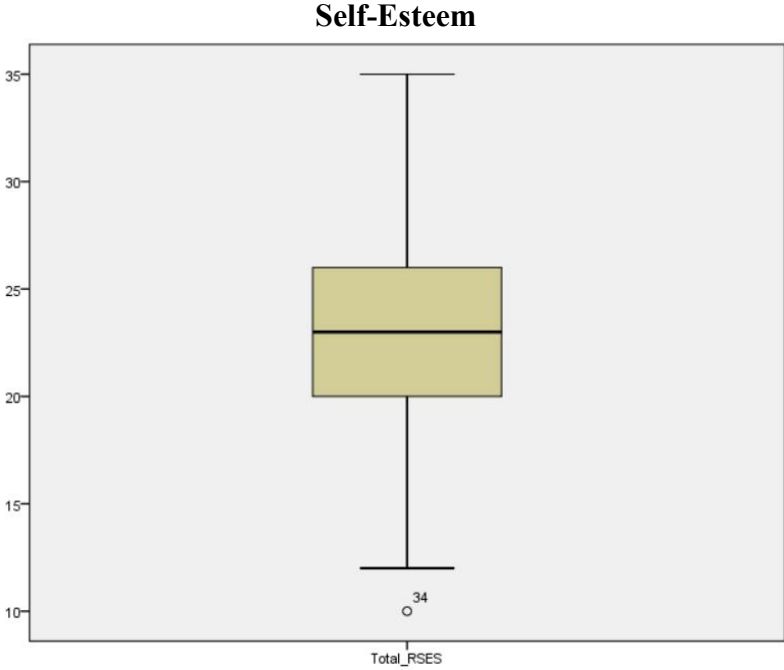
Questions	Rating				
	5	4	3	2	1
1. In the past 4 weeks, about how often did you feel tired out for no good reason?					
2. In the past 4 weeks, about how often did you feel nervous?					
3. In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?					
4. In the past 4 weeks, about how often did you feel hopeless?					
5. In the past 4 weeks, about how often did you feel restless or fidgety?					
6. In the past 4 weeks, about how often did you feel so restless you could not sit still?					
7. In the past 4 weeks, about how often did you feel depressed?					
8. In the past 4 weeks, about how often did you feel that everything was an effort?					
9. In the past 4 weeks, about how often did you feel so sad that nothing could cheer you up?					
10. In the past 4 weeks, about how often did you feel worthless?					

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

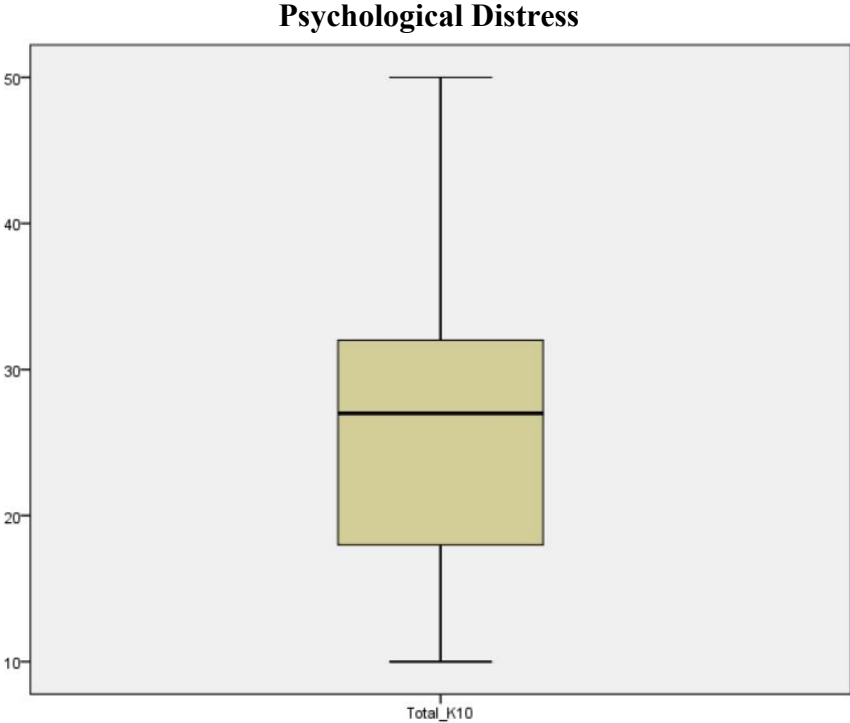
Appendix C: SPSS: Outliers – Boxplot for Each Variable



THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS



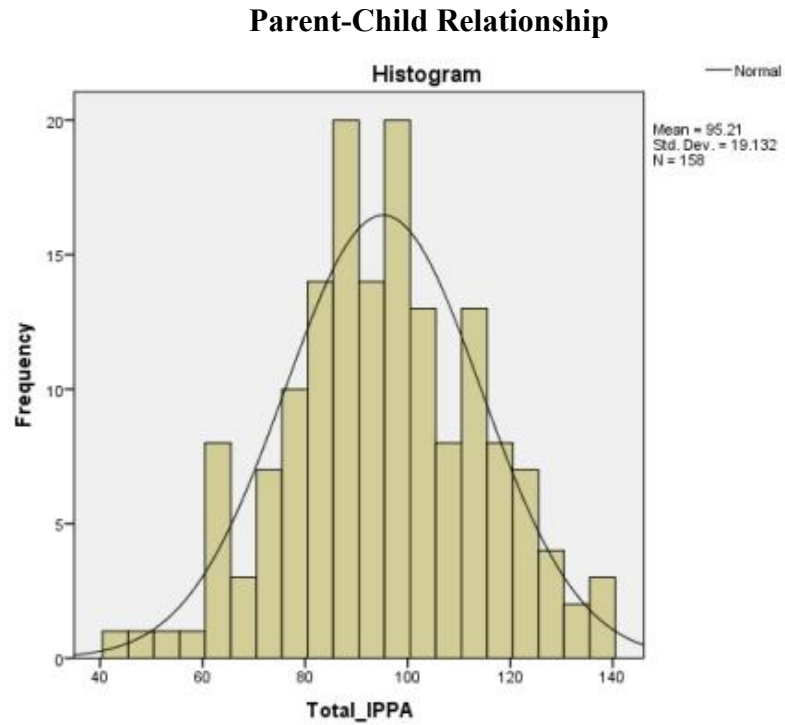
THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS



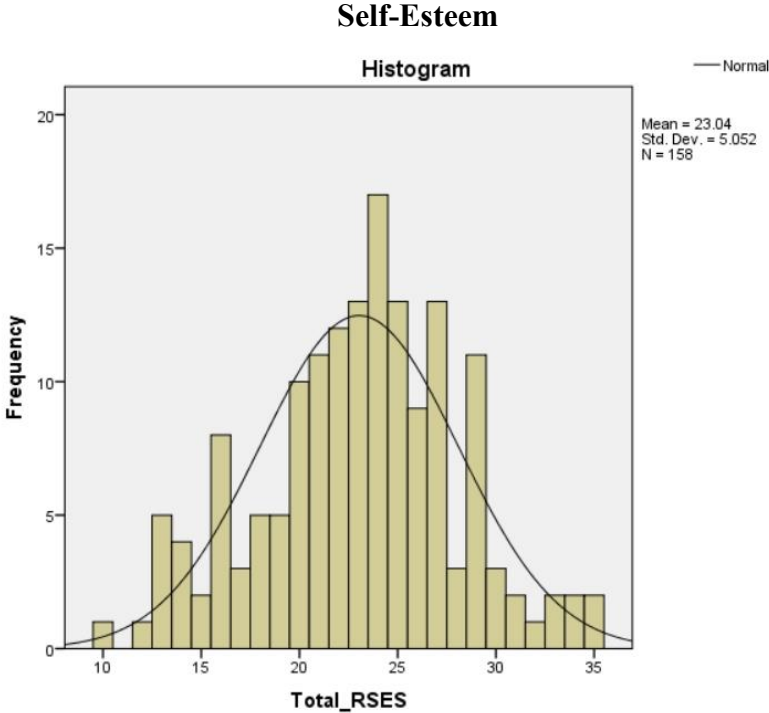
THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Appendix D: SPSS Output: Normality Assumptions

Histogram for Each Distribution

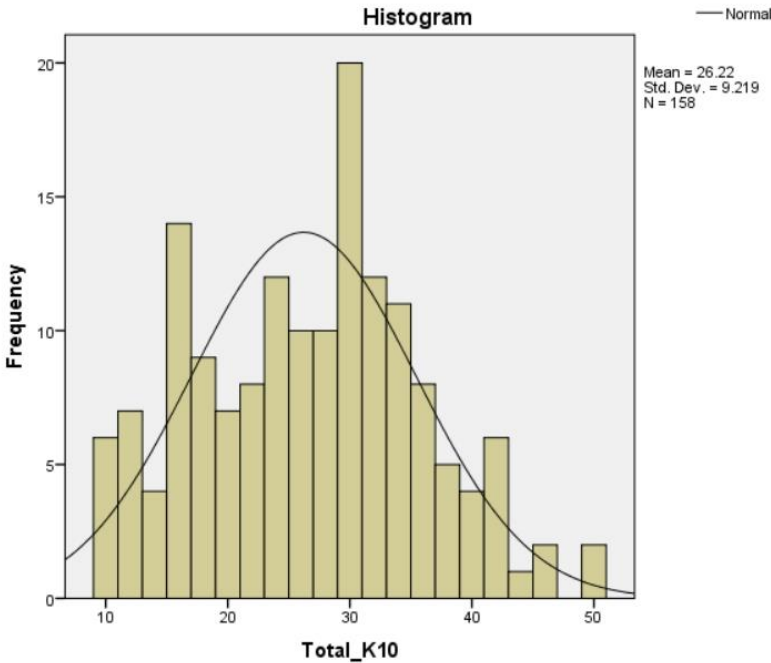


THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS



THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

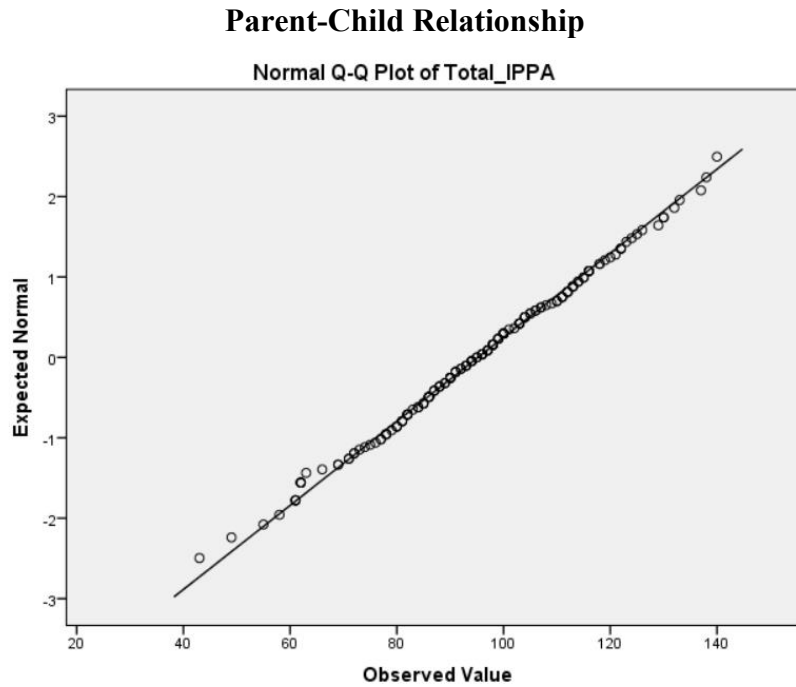
Psychological Distress



THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

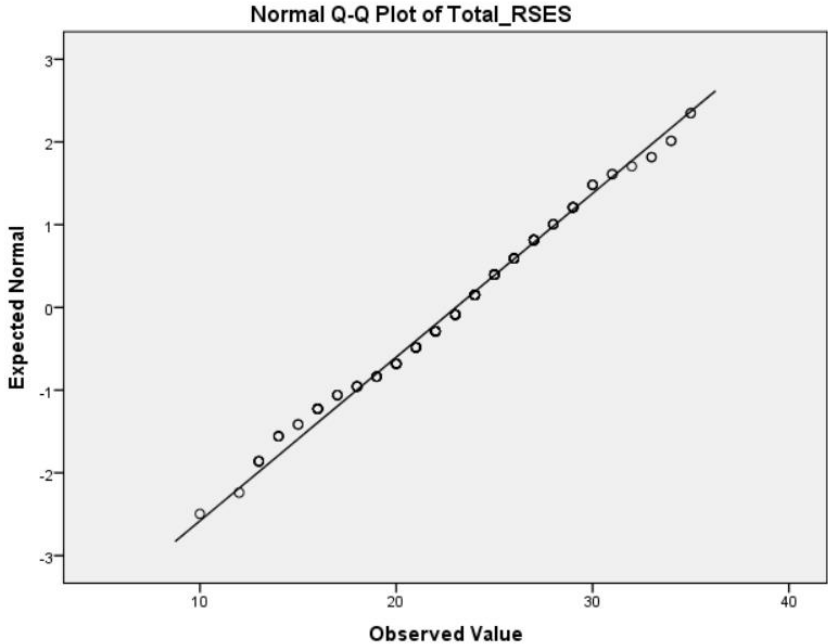
Appendix E: SPSS Output: Normality Assumptions

Normal Q-Q Plots for Each Distribution



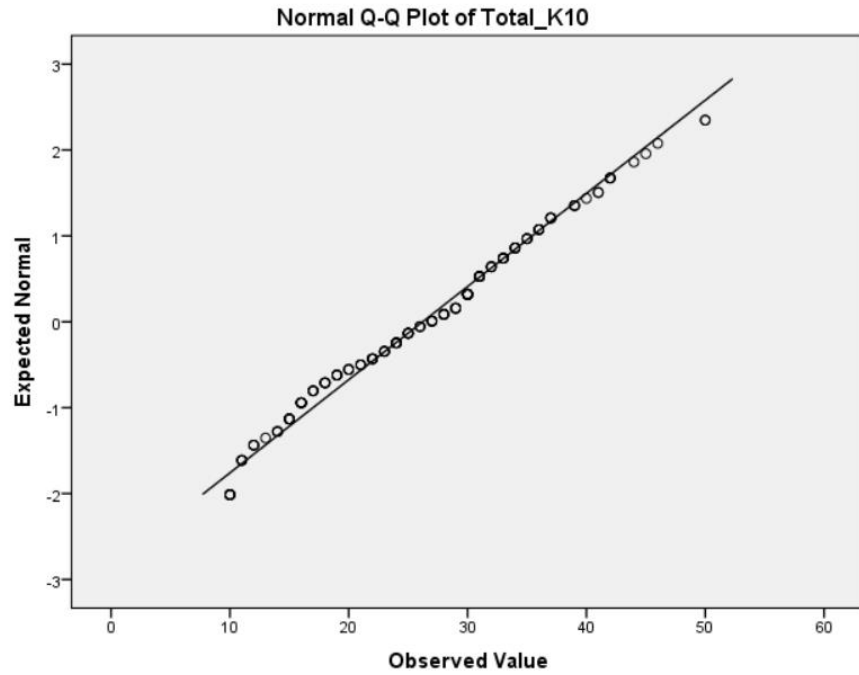
THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Self-Esteem



THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Psychological Distress



Skewness and Kurtosis Tests for Each Distribution

Tests of Normality

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total_IPPA	.034	158	.200*	.995	158	.881
Total_RSES	.073	158	.039	.987	158	.130
Total_K10	.083	158	.009	.979	158	.017

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

a. Lilliefors Significance Correction

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Appendix F: SPSS Output: Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Part B Demographic					
1. Are you a Malaysian and currently studying in Malaysia?	158	1	1	1.00	.000
2. Your age:	158	18	24	21.70	1.229
3. Your gender:	158	1	2	1.72	.450
4. Ethnicity: - Selected Choice	158	1	4	2.02	.329
5. Marital Status:	158	1	2	1.01	.112
6. Study Level:	158	1	4	2.96	.405
Valid N (listwise)	158				

DESCRIPTIVES VARIABLES=Total_IPPA Total_RSES Total_K10
/STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.

Descriptive Statistics of main variables							
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Total_IPPA	158	43	140	95.21	19.132	-.054	.193
Total_RSES	158	10	35	23.04	5.052	-.139	.193
Total_K10	158	10	50	26.22	9.219	.126	.193
Valid N (listwise)	158						

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Appendix G: SPSS Output: Mediation Analysis

Self-Esteem as a mediator between Parent-Child Relationship and Psychological Distress

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4
Y : Total_K1
X : Total_IP
M : Total_RS

Sample
Size: 158

OUTCOME VARIABLE:
Total_RS

Model Summary

R	R-sq	MSE	F	df1	df2	p
.493	.243	19.446	50.094	1.000	156.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	35.434	1.786	19.838	.000	31.905	38.962
Total_IP	-.130	.018	-7.078	.000	-.167	-.094

Standardized coefficients

	coeff
Total_IP	-.493

OUTCOME VARIABLE:
Total_K1

Model Summary

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

R	R-sq	MSE	F	df1	df2	p
.645	.417	50.229	55.339	2.000	155.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	15.696	5.388	2.913	.004	5.053	26.339
Total_IP	-.111	.034	-3.254	.001	-.178	-.043
Total_RS	.914	.129	7.100	.000	.659	1.168

Standardized coefficients

	coeff
Total_IP	-.229
Total_RS	.501

Test(s) of X by M interaction:

F	df1	df2	p
.582	1.000	154.000	.447

***** TOTAL EFFECT MODEL *****

OUTCOME VARIABLE:

Total_K1

Model Summary

R	R-sq	MSE	F	df1	df2	p
.476	.227	66.137	45.773	1.000	156.000	.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	48.067	3.294	14.592	.000	41.560	54.573
Total_IP	-.230	.034	-6.766	.000	-.297	-.163

Standardized coefficients

	coeff
Total_IP	-.476

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *****

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI	c_cs
-.230	.034	-6.766	.000	-.297	-.163	-.476

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI	c'_cs
--------	----	---	---	------	------	-------

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

-.111 .034 -3.254 .001 -.178 -.043 -.229

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI	
Total_RS	-.119	.026	-.175	-.072

Completely standardized indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI	
Total_RS	-.247	.050	-.352	-.155

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

WARNING: Variables names longer than eight characters can produce incorrect output when some variables in the data file have the same first eight characters. Shorter variable names are recommended. By using this output, you are accepting all risk and consequences of interpreting or reporting results that may be incorrect.

----- END MATRIX -----

REGRESSION

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Total_K10
/METHOD=ENTER Total_IPPA
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS DURBIN
/CASEWISE PLOT(ZRESID) OUTLIERS(2)
/SAVE MAHAL COOK LEVER.



Part A Consent Form

PERSONAL DATA PROTECTION NOTICE

Please be informed that in accordance with the Personal Data Protection Act 2010 ('PDPA'), which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ('UTAR') is hereby bound to take notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

1. Personal data refers to any information that may directly or indirectly identify a person, including sensitive personal data and expression of opinion.

Among others, it includes:

- (a) Name
- (b) Identity card
- (c) Place of Birth
- (d) Address
- (e) Education History
- (f) Race
- (g) Religion
- (h) Personal Information and Associated Research Data

2. The purposes for which your personal data may be used are inclusive but not limited to:

- (a) For assessment of any application to UTAR
 - (b) For processing any benefits and services
 - (c) For communication purposes
-

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

- (d) For advertorial and news
- (e) For general administration and record purposes
- (f) For enhancing the values of education
- (g) For educational and related purposes consequential to UTAR
- (h) For replying any response to complaint and enquiries
- (i) For the purpose of our corporate governance
- (j) For the purposes of conducting research or collaboration

3. Your personal data may be transferred and/or disclosed to a third party and/or UTAR collaborative partners, including but not limited to the respective and appointed outsourcing agents, for the purpose of fulfilling our obligations to you with respect to the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

4. Any personal information retained by UTAR shall be destroyed and/or deleted per our retention policy applicable to us if such information is no longer required.

5. UTAR is committed to ensuring the confidentiality, protection, security and accuracy of your personal information made available to us. Our ongoing strict policy has been to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Consent:

6. By submitting or providing your personal data to UTAR, you have consented and agreed for your personal data to be used in accordance with the terms and conditions in the Notice and our relevant policy.

7. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfil our obligations to contact you or assist you regarding the purposes and/or any other purposes related to the purpose.

8. You may access and update your personal data by writing to us at:

- (a) Kimberley Wan Jia Xian (kimberley.wan@1utar.my)
- (b) Mak Wei Teng (weiteng@1utar.my)

You are invited to participate in this study as long as you fulfil the following criteria:

- (a) Malaysian**
- (b) between 18 to 24 years**
- (c) currently enrolled in undergraduate studies**

Acknowledgment of Notice


I have been notified and that I hereby understood, consented and agreed per UTAR above notice.

I disagree, my personal data will not be processed.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Appendix I: Ethical Clearance Letter

✕ Group Ethical Appr L...  

**UNIVERSITI TUNKU ABDUL RAHMAN** DU012(A)
Wholly owned by UTAR Education Foundation Co. No. 578227-M

Re: U/SERC/252/2023

28 September 2023

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

Dear Dr Pung,

Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research project from Bachelor of Social Science (Honours) Psychology programme enrolled in course UAPZ3013/UAPZ3023. We are pleased to inform you that the application has been approved under Expedited Review.


The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	The Relationship Between Interpersonal Conflict and Organizational Citizenship Behaviour on Turnover Intention Among Workers in Malaysia	1. Chu Kai Xin 2. Wye Sheng Khang	Dr Ooh Seow Ling	28 September 2023 - 27 September 2024
2.	A Study of the Mediating Role of Self-esteem Between Parent-Child Relationship and Psychological Distress Among Undergraduate Students in Malaysia	1. Kimberley Wan Jia Xian 2. Mak Wei Teng	Ms Teoh Xi Yao	
3.	Social Media Usage, Attitude Toward Singlehood, Narcissism and Happiness Among Young Adults in Malaysia	1. Lee Kah Weng 2. Lau Chun Khang 3. Chong Yew Yap	Ms Sarvarubini a/p Naince	
4.	Cyberbullying and Body Image Satisfaction Among University Students in Malaysia: Self-esteem as a Moderator	1. Nataliya 2. Wong Hui Qing	Mr Tan Soon Ann	

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.
- (4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (05) 468 8888 Fax: (05) 466 1313
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (03) 9386 0200 Fax: (03) 9109 8868
Website: www.utar.edu.my



Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,



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

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

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP,
PSYCHOLOGICAL DISTRESS

Appendix J: Oral presentation Rubrics

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS
DEPARTMENT OF PSYCHOLOGY AND COUNSELING
FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABDUL RAHMAN

INDIVIDUAL ORAL PRESENTATION EVALUATION FORM

UAPZ 3023 Final Year Project II

No.	Name of Student	ID	*Total (44%)	**Final score (20%)
S1	Mak Wei Teng	19AAB02411	38	17.3
S2	Kimberley Wan Jia Xian	19AAB06318	39	17.7

**Final Score: () / 44 marks ÷ 4 x 20 = () / 20 marks
is to be converted into 20% as according to the syllabus

Date: __1st December 2023_____

Time: _1pm_____

SCORE TRAITS	SCORE		EXCELLENT 4	GOOD 3	AVERAGE 2	LACKING 1
	VERBAL SKILLS					
Enthusiasm	S1	S2	Demonstrates a strong, positive feeling about topic during entire presentation.	Occasionally shows positive feelings about topic.	Shows little positive feelings toward topic presented.	Shows absolutely no interest in topic presented.
	3	3				
Delivery	S1	S2	Uses a clear voice and speaks at a good pace so audience can hear presentation. Does not read off slides.	Presenter's voice is clear. The pace is a little slow or fast at times. Audience can hear presentation.	Presenter's voice is low. The pace is much too rapid/slow. Audience has difficulty hearing presentation.	Presenter mumbles or talks very fast, and speaks too quietly for audience to hear and understand.
	4	4				
Competency in Q&A session	S1	S2	Student demonstrates competent knowledge of the subject by explaining with details and elaborations.	Student is able to provide sufficient information to enable audience to understand main ideas. Some details and elaborations.	Student is able to provide basic information with some attempts to elaborate but information is vague and disjointed. Student is able to answer questions related to the facts,	Student does not have grasp of information and unable convey the information for the audience to understand.
	2	3				

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

			Able to answer correctly to questions related to the facts, theories, and process presented.	Able to answer logically to questions related to the facts, theories and process presented.	theories, and process presented with few points.	Student is not able to answer to questions related to the facts, theories, and process presented.
Language	4	4	Excellent and competent use of subject-related vocabulary and correct pronunciation.	Presentation shows competent use of subject-related vocabulary and correct pronunciation.	Some parts of lapse into colloquialism with inappropriate vocabulary and pronunciation	Mostly inappropriate vocabulary and pronunciation
SCORE TRAITS	SCORE		EXCELLENT 4	GOOD 3	AVERAGE 2	LACKING 1
NON-VERBAL SKILLS						
Eye contact	S1 3	S2 3	Student maintains eye contact with audience, seldom returning to notes.	Student maintains eye contact most of the time but frequently returns to notes.	Student occasionally uses eye contact, but still reads most of report.	Student reads all of report with no eye contact.
Body language & Facial Expression	4	4	Movements seem fluid. Displays relaxed, self-confident nature about self, with no-mistakes. Appropriate facial expression, never notice a deadpan or conflicting expression	Made movements or gestures that enhance articulation. Makes minor mistakes, displays little or no tension. Occasionally demonstrate either a deadpan or conflicting expression during presentation.	Very little movement or descriptive gestures. Displays mild tension; has trouble recovering from mistakes. Occasionally demonstrate both a deadpan and conflicting expression during presentation.	No movement or descriptive gestures. Tension and nervousness is obvious; has trouble recovering from mistakes. Has either a deadpan expression or shows a conflicting expression during presentation.
Timing (*for whole group)	4		Presented within 15 minutes of allotted time as a group.	Presented within 17 minutes of allotted time as a group.	Presented within 20 minutes of allotted time as a group.	Presented too long (>20 minutes) or too short (<5 minutes) as a group.
PRESENTATION OF POSTER						
Organisation	4		Title/author(s) of paper clearly displayed. Concise presentation of introduction, review of literature, methodology, findings and conclusions.	Shows title/author(s). Adequately presents introduction, review of literature, methodology, findings and conclusions.	Shows title/author(s). Presents main ideas of introduction, review of literature, methodology, findings and conclusions.	Title/author(s) missing. Insufficient coverage of main points of introduction, review of literature, methodology, findings and conclusions.
Visual Presentation	3		Visually appealing. Colors and organisation enhances reading. Appropriate and varied font size enhances readability. Content arrangement appealing. Graphics well-positioned and enhances quick comprehension.	Overall visually appealing. Organisation of content enhances readability. Appropriate font size enhances readability. Content arrangement easily understood. Graphics enhances text.	Visual appeal is adequate. Colours and layout somewhat cluttered. Font size affects readability. Content arrangement confusing Graphics help to highlight some content.	Visuals lack appeal. Colours and layout cluttered. Hinders readability. Font sizes inconsistent/distracting. Content arrangement confusing. Graphics do not enhance text.

THE MEDIATING ROLE, SELF-ESTEEM, PARENT-CHILD RELATIONSHIP, PSYCHOLOGICAL DISTRESS

Referencing	4	Citation of all data obtained from other sources. APA citation style is accurate.	Cites most data obtained from other sources. APA citation style is accurate.	Cites some data obtained from other sources. Citation style is inconsistent.	Does not cite sources.
Mechanics	3	Linguistically correct (no grammatical and spelling errors). Adheres to the format specified.	Minimal spelling and grammar mistakes. Poster does not hinder comprehension.	Noticeable spelling and grammar mistakes. Partial comprehension.	Excessive spelling and grammar mistakes. Difficult to comprehend.
*TOTAL	38	39			

Comments:

Evaluated by:



(NAME OF EVALUATOR: **TEOH XI YAO**)

Department of Psychology and Counseling
 Faculty of Arts and Social Science
 UTAR Perak Campus