

## THE MEDIATING ROLE OF PERFECTIONISM IN THE RELATIONSHIP BETWEEN PARENTING STYLES AND SUICIDAL IDEATION AMONG UNDERGRADUATE STUDENTS IN MALAYSIA

CHENG JIA SHAN KONG KAH MAN

# A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE BACHELOR OF SOCIAL SCIENCE (HONS) PSYCHOLOGY FACULTY OF ARTS AND SOCIAL SCIENCE UNIVERSITI TUNKU ABDUL RAHMAN

The Mediating Role of Perfectionism in the Relationship
between Parenting Styles and Suicidal Ideation
among Undergraduate Students in Malaysia
Cheng Jia Shan, and Kong Kah Man
Universiti Tunku Abdul Rahman

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THE MEDIATING ROLE OF PERFECTIONISM

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KONG KAH MAN

#### THE MEDIATING ROLE OF PERFECTIONISM

#### **Approval Form**

This research paper attached hereto, entitled "The Mediating Role of Perfectionism in the Relationship between Parenting Styles and Suicidal Ideation among Undergraduate Students in Malaysia" prepared and submitted by "Cheng Jia Shan and Kong Kah Man" in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

Supervisor

Ms. Teoh Xi Yao

Date: 3 April 2024

#### i

#### **Abstract**

Parenting styles and perfectionism are connected to individual's well-being. Negative parenting styles and maladaptive perfectionism will lead to high suicidal ideation. However, there were limited studies done on the relationship between parenting styles, perfectionism and suicidal ideation among undergraduate students in Malaysia. Therefore, the current study aimed to apply cross-sectional research design to investigate (1) the relationship between parenting styles and suicidal ideation, (2) the relationship between parenting styles and perfectionism, (3) the relationship between perfectionism and suicidal ideation, (4) the mediating role of perfectionism in the relationship between parenting styles and suicidal ideation among undergraduate students in Malaysia. Data was collected from 315 Malaysian undergraduate students using purposive sampling and online surveys. However, only 228 responses were used for data analysis, with participants had fulfilled specific criteria, which were (1) Malaysia undergraduate students, (2) Malaysian nationality. Scale of Parenting Style (SPS), Perfectionism Cognitions Inventory (PCI), and Beck Scale for Suicidal Ideation (BSSI) were employed to measure the perceived parenting style, frequency of perfectionistic thoughts, presence and severity of suicidal ideations and plans respectively. The result showed that there was a relationship between parenting styles and both suicidal ideation and perfectionism. Moreover, there was a positive relationship between perfectionism and suicidal ideation. Lastly, perfectionism did not serve as a mediator in this relationship. In conclusion, the findings of this study had provided valuable insights into the relationship between parenting styles, perfectionism and suicidal ideation which offer insights for future research and healthcare professionals to develop constructive intervention programs.

Keywords: Parenting styles, perfectionism, suicidal ideation, undergraduate students, Malaysia

#### **Declaration**

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

Name : CHENG JIA SHAN

Student ID : 21AAB02181

Signed : Millian

Date : 8 April 2024

Name : KONG KAH MAN

Student ID : 20AAB01818

Signed :

Date : 8 April 2024

#### **Table of Contents**

		Page
Abstract		i
Declarat	ion	ii
List of 7	ables	vi
List of F	igures	vii
List of A	Abbreviations	viii
Chapte	rs	
I	Introduction	1
	Background of Study	1
	Problem Statement	3
	Significant of Study	(
	Research Objectives	7
	Research Questions	8
	Research Hypotheses	8
	Conceptual Definition	10
	Operational Definition	11
II	Literature Review	13
	Parenting Styles and Suicidal Ideation	13
	Parenting Styles and Perfectionism	23
	Perfectionism and Suicidal Ideation	31
	Parenting Styles, Perfectionism, Suicidal Ideation	34
	Theoretical Framework	42
	Conceptual Framework	45
III	Methodology	46

THE MEDIA	TING ROLE	OF PERFE	CTIONISM

Conclusion

HE ME	DIATING ROLE OF PERFECTIONISM	iv
	Research Design	46
	Sampling Method	47
	Research Location	47
	Research Ethics	47
	Sample Size	47
	Participants	48
	Instruments	49
	Data Collection Procedures	Error! Bookmark not defined.
	Pilot Study	52
	Data Analysis	52
IV	Results	59
	Data cleaning	59
	Normality Assumption	59
	Outliers	60
	Descriptive Statistics	61
	Multiple Linear Regression Assumptions	62
	Pearson Product-Moment Correlation (PPN	MC) 63
	Multiple Linear Regression Analysis	65
	Mediational Analysis	66
	Summary of Findings	71
V	Discussion	73
	Implications	86
	Limitations of Study	89
	Recommendations of Study	90

91

THE $V$	/FDIA	TING	ROLE	OF PERI	FECTION	MZIL	ſ

References		93
Appendices		137
Appendix A	Ethical Clearance Letter	137
Appendix B	Questionnaire	139
Appendix C	Sample Size Calculation	148
Appendix D	SPSS Output: Reliability	150
Appendix E	SPSS Output: Normality Assumptions	152
Appendix F	SPSS Output: Outliers	157
Appendix G	SPSS Output: Descriptive Statistics	164
Appendix H	SPSS Output: Multiple Linear Regression	167
Appendix I	SPSS Output: Pearson Product-Moment Correlation (PPMC)	169
Appendix J	SPSS Output: Multiple Linear Regression Analysis	172
Appendix K	SPSS Output: Mediation Analysis	176

#### **List of Tables**

Table		Page
3.1	Reliability of Scales	51
3.2	Statistical Test Used to Measure Hypotheses	57
4.1	Summary of Results	71

### **List of Figures**

Figure		Page
2.1	Theoretical Framework Model	44
2.2	Conceptual Framework of Present Study	45
4.1	Mediating Effect of Perfectionism on Authoritative Parenting Style –	
	Suicidal Ideation Association	67
4.2	Mediating Effect of Perfectionism on Authoritarian Parenting Style –	
	Suicidal Ideation Association	68
4.3	Mediating Effect of Perfectionism on Permissive-Indulgent Parenting Style	e –
	Suicidal Ideation Association	69
4.4	Mediating Effect of Perfectionism on Permissive-Neglectful Parenting Style	e –
	Suicidal Ideation Association	70

#### **List of Abbreviations**

#### Abbreviations

BSSI Beck Scale for Suicidal Ideation

IPTS Interpersonal Theory of Suicide

NHMS National Health & Morbidity Survey

PB Perceived Burdensomeness

PCI Perfectionism Cognitions Inventory

PPMC Pearson Product-Moment Correlation

PSDM Perfectionism Social Disconnection Model

SERC Scientific and Ethical Review Committee

SPS Scale of Parenting Style

SPSS Statistical Package for Social Science

TB Thwarted Belongingness

UTAR Universiti Tunku Abdul Rahman

VIF Variance Inflation Factor

WHO World Health Organization

#### Chapter I

#### Introduction

#### **Background of Study**

The World Health Organization (WHO, 2021) reported that suicide is a significant global public health issue, with over 703,000 deaths annually. In Malaysia, suicide rates had increased significantly, with a 67% surge in reported cases from January to March 2021 (Free Malaysia Today, 2021). The National Health & Morbidity Survey (NHMS, 2022) showed a remarkable increase in the prevalence of suicidal ideation and attempted suicide rates among Malaysian undergraduate students who aged between 20 to 24 years old. This ongoing gathering and documentation of suicide statistics shed light on our attention in enhancing our understanding of the factors that influence suicide rates and thus aiding in the development of preventive strategies (Snowdon & Choi, 2020).

The concept of "suicidality" incorporates a comprehensive range of phenomena, which can be categorised into three components: suicidal ideation, suicidal attempts, and completed suicide (Ibrahim et al., 2019). In the current study, the focus would be solely on exploring the relationship between suicidal ideation and other factors. Suicidal ideation warrants serious attention, as it has the potential to result in detrimental consequences, including suicidal attempts and completed suicide (Coentre & Góis, 2018). The occurrence of completed suicide is contingent upon the coexistence of suicidal ideation and the acquired capability to engage in suicidal behaviour (Cero & Sifers, 2013). Suicidal ideation refers to thoughts about ending one's own life, which can be manifest as either active, involving a plan, or passive, with only a desire to die without a plan (Turecki et al., 2019). Numerous established risk factors, including stressful life events, social and academic shortcomings, and mental illness, have been identified as contributors to suicide (Bahar et al., 2015). As a primary source of socialisation, parenting styles assume a crucial role in transmitting the

affective components that impact the psychosocial development of individuals, allowing an understanding of the process inherent to suicidal ideation (Nunes & Mota, 2023). Studies have shown that improper or maladjusted parenting had the potential to contribute to a range of psychological issues and influences on social connectedness, in turn contributing to suicidal ideation (Karunaharan et al., 2021).

The present study examined the role of parenting styles as a factor in determining the relationship with suicidal ideation. Parenting is the general child-rearing practice in day-today life, where it has both long- and short-term impacts on the development of children in terms of physical, emotional, and mental well-being (Arafat et al., 2022). The concept of parenting styles refers to a constellation of attitudes, goals, and patterns of child-rearing that shape the emotional climate within the parent-child relationship and persist consistently across different life contexts (Darling & Steinberg, 1993). Baumrind's (1971) typology initially categorised three distinct parenting styles, namely authoritative, authoritarian, and permissive. Maccoby and Martin (1983) refined Baumrind's theory by extending an additional type of parenting – neglectful parenting style – to the existing three types of parenting styles. Meanwhile, they used Baumrind's permissive parenting style in two types: permissive-indulgent and permissive-neglectful parenting. The concept proposed by Maccoby and Martin (1983) would be utilised in this study. Improper or maladjusted parenting can play a role in the development of various psychological issues and impact social connections, ultimately contributing to an increased risk of suicidal ideation (Karunaharan et al., 2021). In addition, individuals who were raised in families characterised by socioeconomic challenges, marital dissolution, and poor parent-child relationships are vulnerable to experiencing suicidal ideation (Strandheim et al., 2014).

This study aimed to examine the role of perfectionism as a mediator in the relationship between parenting styles and suicidal ideation. Perfectionism has been defined as

the tendency to establish exceedingly elevated standards and engage in excessively critical self-evaluations (Frost et al., 1990). The development of perfectionism can be attributed to the influence of parenting styles, whereas the consequences of perfectionism can result in either positive or negative aspects (Flett et al., 2022; Frost et al., 1991). According to a recent study conducted in the Chinese context (Ying et al., 2021), it was found that various forms of negative parenting styles were found to have an indirect association with suicidal ideation through the mediating role of maladaptive perfectionism. Therefore, the objective of this study was to examine the relationship between parenting styles and suicidal ideation, with the mediating role of perfectionism. This study employed the Social Expectations Model, Perfectionism Social Disconnection Model (PSDM), and Interpersonal Theory of Suicide (IPTS) as guiding frameworks to examine and analyse the dynamics within this relationship.

#### **Problem Statement**

Suicide had become a worldwide urgency and public health issue (Abu Bakar et al., 2023). According to the WHO (2021), it was estimated that globally, there were over 700,000 people who died from suicide in the year 2019, with a suicide rate of 9.0 per 100,000 population for a year. Additionally, it was predicted that there might be anywhere from 10 to 20 suicide attempts for every completed suicide (Lew et al., 2022), and each suicide resulted in 135 individuals exposed to suicide (Cerel et al., 2019). The WHO (2021) stated that for individuals aged between 15 and 29, suicide was the fourth dominant cause of death, with a higher portion of 77% of deaths by suicide in low- and middle-income countries. Despite the fact that Malaysia was listed as one of the countries that have the lowest rate of completed suicide (Armitage et al., 2015), the prevalence of suicidal behaviour among adolescents was still a concern (Ibrahim et al., 2019). In Malaysia, compared to the data of the NHMS in 2012, 2017 and 2022, the trend of suicidal ideation among adolescents had increased from 7.9% in 2012 to 10.0% in 2017 and 13.1% in 2022 (Institute for Public Health, 2022).

Individuals who aged between 20 to 24 years old were found to have the highest suicidal ideation (Ibrahim et al., 2019). This alarming situation had been highlighted by the New Straits Times, which stated that out of 68 people who called Befrienders Kuala Lumpur, 20 of them had suicidal ideation (Pillay, 2017).

According to Klonsky et al. (2016), overwhelmed life pain and hopelessness could diminish an individual's sense of connectedness, which led to a strong sense of suicidal ideation and, subsequently, contributing to suicide attempts and completed suicide (Coentre & Góis, 2022). Individuals with strong suicidal ideation would view suicide as a workable way to be confronted with stressful life events (Spirito & Esposito-Smythers, 2006).

Consequently, greater repetition of suicidal ideation would bring unfavourable outcomes to an individual's life, increasing the prevalence of mental health problems, such as dysfunction, mood, and anxiety disorders (Howarth et al., 2020). This could be proven by an epidemiological study, which found that in comparison with individuals with non-suicidal thoughts, individuals with suicidal thoughts had higher rates of getting mental disorders (Klonsky et al., 2016). The mortality rate among suicide attempters who suffered from mental illness might be high as they could be more impulsive and took more risks to complete suicide (Corruble et al., 1999; Soloff et al., 2000).

Numerous researchers attempted to discover and disclose the relationships between parenting styles, perfectionism, and suicidal ideation. Research that examined the relationship between parenting styles and suicidal ideation had been carried out in Hong Kong (Lo et al., 2017), Germany (Greening et al., 2014), and China (Gui et al., 2022). On the contrary, studies that were related to the variables of parenting styles and perfectionism had been implemented in Portuguese (Carmo et al., 2021), America (Kamuwara et al., 2002), Iranian (Besharat et al., 2011), and United States (Walton et al., 2018). Past studies also investigated the association between perfectionism and suicidal ideation in different countries, such as the

United States (Robinson et al., 2021) and Korea (You et al., 2022). The past studies disclosed that most of the research about suicide and self-harm had been carried out in the United States or Western countries, yet the amount of studies did not reflect the global distribution of suicide, with Asia accounting for as much as 60% of suicide cases (Armitage et al., 2015). It seemed that there was a lack of studies that had determined the relationship between parenting styles and suicidal ideation, with perfectionism as a mediating role in Malaysia.

Previous studies had revealed different types of parenting styles were positively or negatively associated with adolescent's internalizing symptoms, such as anxiety and depression (Besteiro & Quintanilla, 2017), which influenced the degree of suicidal ideation (Arafat et al., 2022; King et al., 2018; Lo et al., 2017; Nunes & Mota, 2017). However, there was still a gap in the literature as past studies did not reveal the impact of different parenting styles on suicidal ideation among undergraduate students (Gui et al., 2022), given that their participants were limited to individuals who were in primary or secondary school, or primarily focused on Malaysia children and adolescents (Chan et al., 2016; Wu & Yaacob, 2016), where overlooking the significant influence of parenting styles on university students or emerging adults. Furthermore, there was a research gap in which research regarding suicide in Malaysia had been fragmented because these studies consistently focused on suicidal ideation of Indian ethnic groups (Maniam et al., 2014). Additionally, existing research on the relationship between parenting styles and perfectionism had predominantly focused on academically gifted students (Basirion et al., 2013; Basirion et al., 2014), rendering the generalizability of the results to a specific subgroup rather than the broader population.

Therefore, the objective of this study was to broaden the range of participants by encompassing university students, thus providing a more comprehensive comprehension of the influence of parenting styles on suicidal ideation within this demographic. Furthermore,

the current research ought to fill in the existing research gap to further study and examined the relationship between parenting styles and suicidal ideation, with perfectionism as a mediating role among undergraduate students in Malaysia.

#### **Significant of Study**

#### Theoretical Significance

This study aimed to bridge the literature gap about the relationships between parenting styles, perfectionism, and suicidal ideation among university students in the Malaysia context. The scarcity of research conducted in this domain hampered our understanding of the psychological mechanism that prompted university students to contemplate self-harm when confronted with perceived failure. Therefore, this study facilitated the research of potential associations between parenting styles and suicidal ideation, examining both direct and indirect relationships.

In addition, this study played a pivotal role in addressing the existing research gap concerning the relationship between parenting styles and suicidal ideation among university students in the context of Malaysia. This study served as a reference point for future research aiming to explore the complexities of suicidal ideation throughout a range of various populations. By establishing a theoretical framework for understanding the relationships between parenting styles, perfectionism, and suicidal ideation, this study paved the way for further research into additional variables and risk factors that might be associated with suicidal ideation. This broadened scope of study in this field presented an opportunity to discover nuanced insights, allowing contributions to existing bodies of literature.

#### Practical Significance

Exploring these factors not only enriched our theoretical understanding of human behaviour but also provided vital insights for mental health professionals, educators, and policymakers. By bridging this gap, researchers were allowed to make valuable contributions

towards the development of targeted intervention and support systems that were specifically tailored to the unique socio-cultural context of Malaysia, potentially mitigating the alarming rise of suicidal ideation among university students.

Researching the mediating role of perfectionism in the relationship between parenting styles and suicidal ideation held immense practical significance for society. By acquiring a deeper understanding of how parenting styles and perfectionism influenced the mental well-being of individuals, especially among university students, these findings could have contributed to the development of parenting programs that equipped parents with effective strategies for parenting that struck a balance between the presence of both warmth and demandingness towards their children. Consequently, the probability of suffering suicidal ideation could be diminished through the presence of positive parenting styles and the cultivation of adaptive perfectionism.

Last but not least, this study served as a reference for professionals in various fields, including practical practitioners, counsellors, and educators, operating in diverse contexts. Exploring these factors not only enriched our theoretical understanding of human behaviour, but also yielded vital insights for the aforementioned departments, enabling them to identify, develop targeted interventions, and establish effective support systems for the vulnerable population, thereby effectively mitigating the risk of developing suicidal ideation among university students.

#### **Research Objectives**

- 1. To examine the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia.
- 2. To determine the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and perfectionism among

- undergraduate students in Malaysia.
- 3. To determine the relationship between perfectionism and suicidal ideation among undergraduate students in Malaysia.
- 4. To examine the mediating role of perfectionism between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia.

#### **Research Questions**

- 1. Is there a relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia?
- 2. Is there a relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and perfectionism among undergraduate students in Malaysia?
- 3. Is there a relationship between perfectionism and suicidal ideation among undergraduate students in Malaysia?
- 4. Does perfectionism mediate the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia?

#### **Research Hypotheses**

- **H1:** There is a relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia.
- H<sub>1a</sub>: There is a relationship between authoritative parenting style and suicidal ideation among undergraduate students in Malaysia.
- H<sub>1b</sub>: There is a relationship between authoritarian parenting style and suicidal ideation among

- undergraduate students in Malaysia.
- H<sub>1c</sub>: There is a relationship between permissive-indulgent parenting style and suicidal ideation among undergraduate students in Malaysia.
- H<sub>1d</sub>: There is a relationship between permissive-neglectful parenting style and suicidal ideation among undergraduate students in Malaysia.
- **H2:** There is a relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and perfectionism among undergraduate students in Malaysia.
- H<sub>2a</sub>: There is a relationship between authoritative parenting style and perfectionism among undergraduate students in Malaysia.
- H<sub>2b</sub>: There is a relationship between authoritarian parenting style and perfectionism among undergraduate students in Malaysia.
- H<sub>2c</sub>: There is a relationship between permissive-indulgent parenting style and perfectionism among undergraduate students in Malaysia.
- H<sub>2d</sub>: There is a relationship between permissive-neglectful parenting style and perfectionism among undergraduate students in Malaysia.
- **H3:** There is a relationship between perfectionism and suicidal ideation among undergraduate students in Malaysia.
- **H4:** Perfectionism mediates the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia.
- H<sub>4a</sub>: Perfectionism mediates the relationship between authoritative parenting style and suicidal ideation among undergraduate students in Malaysia.
- H<sub>4b</sub>: Perfectionism mediates the relationship between authoritarian parenting style and suicidal ideation among undergraduate students in Malaysia.

H<sub>4c</sub>: Perfectionism mediates the relationship between permissive-indulgent parenting style and suicidal ideation among undergraduate students in Malaysia.

H<sub>4d</sub>: Perfectionism mediates the relationship between permissive-neglectful parenting style and suicidal ideation among undergraduate students in Malaysia.

#### **Conceptual Definition**

#### Parenting Styles

According to Sahithya et al. (2019), parenting styles are defined as a collection of parental attitudes and behaviours that parents consistently employ across different situations to regulate their children's behaviour.

#### Authoritative Parenting Style

According to Martínez et al. (2019) and Smetana (2017), authoritative parenting style is characterized as both high parental demandingness and responsiveness, where authoritative parents are highly responsive to children's needs while also imposing reasonable limits and expecting mature behaviour from them.

#### Authoritarian Parenting Style

According to Garcia et al. (2020) and Sahithya et al. (2019), authoritarian parenting style is characterized as high in demandingness but low in responsiveness towards children, which parents aim at shaping, controlling, and assessing their child's behaviours and attitudes in accordance with a set standard of conduct, typically an absolute standard that is theologically motivated and established by a higher authority (Lavrič & Naterer, 2020).

#### Permissive-indulgent Parenting Style

According to Hibbard and Walton (2014), permissive-indulgent parents are characterized as having low demandingness but high responsiveness towards children, and they are attentive to their children and fulfil their needs, but they fail to set proper disciplinary, exercise behavioural control, and put-up demands for mature behaviours (Bi et

al., 2018).

#### Permissive-neglectful Parenting Style

According to Pinquart and Gerke (2019), permissive-neglectful parenting style, is also characterized as uninvolved parenting, refers to parents who demonstrate low demandingness and low responsiveness, and these parents are unaffectionate and do not place any demands on their children (Francis et al., 2021).

#### Perfectionism

According to Stoeber (2016), perfectionism refers to a personality trait that is associated with the desire to pursue flawlessness and the setting of exceptionally high-performance standards and is often accompanied by an overly critical assessment of oneself and beliefs others expect perfection from them.

#### Suicidal Ideation

According to Klonsky et al. (2016), suicidal ideation is defined as the act of thinking about, contemplating, or making plans for committing suicide.

#### **Operational Definition**

#### **Parenting Styles**

In this study, parenting styles are measured using the Scale of Parenting Style (SPS), which was developed by Gafor and Kurukkan (2014). This questionnaire is used to evaluate children's perceptions of four types of perceived parenting styles, namely authoritative, authoritarian, permissive-indulgent, and permissive neglectful, based on two dimensions, which are responsiveness and control. It is measured using a 5-point Likert scale that ranges from 1 (very wrong) to 5 (very right). A higher total score indicates the type of perceived parenting style.

#### Perfectionism

In this current study, the Perfectionism Cognitions Inventory (PCI) developed by Flett

et al. (1998) can be known as an instrument used to assess an individual's frequency of automatic perfectionistic thoughts associated with perfectionism cognitions (Flett et al., 2007). This 25-item scale uses a 5-point Likert scale, which ranges from 0 (not at all) to 4 (all of the time), with a higher total score reflecting greater perfectionistic thoughts (Aydın & Yerin Güneri, 2022).

#### Suicidal Ideation

In the present study, the 19-item Beck Scale for Suicide Ideation (BSSI) by Beck et al. (1979) was used to measure the presence and intensity of actual suicidal thoughts and plans (Chioqueta & Stiles, 2006). Each item is scored based on an ordinal scale from 0 to 2, and the total score for the scale is 0 to 38. A higher total score represents a higher level of suicidal ideation (Beurs et al., 2015).

#### **Chapter II**

#### Literature Review

#### **Parenting Styles and Suicidal Ideation**

The function of parenting styles in child development is of greatest significance, either resulting in positive or negative development outcomes, given that parents are the primary agents of socialization for their children (Kuppens & Ceulemans, 2018). Parenting processes constitute the most influential interpersonal relationship for the majority of children, thereby suicidal ideation can be seen as an adverse outcome stemming from dysfunction or ineffective parenting and family system (Lo et al., 2017). Additionally, it is also expected that parenting styles influence individuals' attitudes towards suicide and their susceptibility to engaging in suicidal behaviours (Choi et al., 2020). Family-related factors, such as parenting styles, have been identified as potential external predictors of suicidal ideation (Ati et al., 2020; Singh & Behmani, 2021; Siqueira-Campos et al., 2021; Zhai et al., 2015). Conversely, previous studies have found a significant association between parental affection, family cohesion, parental involvement, and a reduced risk of suicidal ideation (Arafat et al., 2022; Singh & Behmani, 2021). Therefore, the present study aimed to determine the impact of parenting styles on suicidal ideation.

The influence of parenting styles may serve as either protective factors or risk factors for suicidal ideation and behaviours in children and adolescents (Ati et al., 2020). The presence of early supportive parenting, parental care, and parental warmth, have been identified as protective factors against suicidal ideation, leading to a decreased likelihood of experiencing suicidality (Ati et al., 2020; Loas et al., 2019; Siqueira-Campos et al., 2021; Yterdal, 2016). These practices have a significant impact on the vulnerability of children to stress and facilitate the development of secure attachment, as well as contribute to the management of negative emotions in individuals, which in turn have been reported as

parenting practices can be classified as positive parenting, which entails the provision of positive control and warmth, such as monitoring, supervision, consistent discipline, involvement, and support (Perquier et al., 2021).

Furthermore, positive parenting is often considered an authoritative parenting style or an optimal bonding style, where both are characterized by high levels of warmth, care, positive control, and low levels of negative control (Perquier et al., 2021). Studies provide substantial evidence supporting the notion that parental warmth and caring play a protective role in preventing suicidal ideation (Ati et al., 2020; Choi et al., 2020; Lo et al., 2017; Singh & Behmani, 2021; Siqueira-Campos et al., 2021; Yterdal, 2016).

Parental warmth encompasses the sense of positive regard expressed by parents towards their children, the occurrence of pleasant interactions within the parent-child relationship, and the level of parental involvement in the individual's activities. The presence of high parental warmth is beneficial for the development of adaptive internal working models of self, such as perceiving oneself as deserving of love, competence, and worthiness. Moreover, it also contributes to the development of positive internal working models of others, characterised by perceiving others as trustworthy and responsive (Li et al., 2015). The presence of warmth in parenting styles will negatively correlate with suicide ideation; therefore, it seems to serve as a protective factor against engaging in suicidal behaviours (Singh & Behmani, 2021). On top of that, parents who offer parental warmth to their children are able to perceive their parents as affectionate and friendly, thereby fostering the development of supportive and affectionate behaviours in adolescents and strengthening their social competence (Chattopadhyay & Joshi, 2020).

Parental care refers to various aspects of nurturing behaviour exhibited by parents towards their children, encompassing the use of a warm and friendly tone of voice, the

provision of sufficient assistance, the demonstration of adequate affection, frequent smiling directed at the child, a high level of understanding of the child's needs and emotion, the offering of praise, and the ability to provide comfort and emotional support to the child (Loas et al., 2019; Yterdal, 2016). Positive control, also referred to as behavioural control, involves the various strategies employed by parents to effectively monitor or supervise their child's behaviours, thereby ensuring its appropriateness. Children with behaviour control instead of harsh control, can significantly contribute to the positive psychological adjustment of children (Gorostiaga et al., 2019).

Individuals who are raised in families with parental overprotection, parental rejection, negative control, lack of family support, parent-child conflicts, and low levels of parental warmth and affection, result in significantly higher levels of suicidal ideation (Arafat et al., 2022; Guan et al., 2023; Perquier et al., 2021; Singh & Behmani, 2021). Studies have been conducted to examine the influence of both positive and negative parenting styles on an individual's propensity for suicidal ideation and suicide attempts. Most of the studies consistently indicate a significant correlation between negative parenting styles and suicidal ideation (Choi et al., 2020; Lo et al., 2017; Perquier et al., 2021; Reddy et al., 2022). There exist a strong correlation between negative parenting and the aforementioned risk factors for suicidal ideation. Therefore, individuals with negative parenting are more likely to develop cognitive vulnerability, including negative inferential styles, dysfunctional attitudes, low self-esteem, and rumination, in turn increasing the likelihood of suicidal ideation among university students (Lo et al., 2017).

The presence of excessive parental overprotection and inadequate levels of care have been found to have deleterious consequences on suicidal ideation (Arafat et al., 2022).

Parenting practices with extreme overprotection encompass the presence of controlling tendencies (Yterdal, 2016). One such tendency is psychological control, referring to parents'

attempts to manipulate their child's thoughts and feelings by inducing a sense of guilt, humiliation, or resorting to emotional blackmail or overprotectiveness (Gorostiaga et al., 2019). Overprotective parenting can decrease one's autonomy, reduce self-efficacy, undermine subjective well-being, loss of freedom and independence, and increase parent-child conflicts. Consequently, parental overprotection is found to be positively associated with suicidal ideation (Arafat et al., 2022; Perquier et al., 2021; Yterdal, 2016; Zhai et al., 2015). The representative parenting style of possessing parental overprotection is authoritarian parenting.

However, research conducted in Eastern and Asian cultures has suggested that parental overprotection may be perceived as a comparatively less risky factor concerning suicidal ideation, in comparison to parental rejection. The cultural differences between Western cultures and Asian cultures could lead to divergent evaluations of the ideal parental approach. For example, individuals raised in Western cultures may place a high value on personal independence, interpreting parental overprotection as a threat to their self-esteem and autonomy (Peng et al., 2021). Conversely, individuals who have been brought up in Asian cultures may reasonably interpret overprotection as a manifestation of parental care and concerns, representing a demonstration of affection towards their children (Ying et al., 2021). Hence, the determination of whether parental overprotection constitutes a risk factor may be contingent upon the particular cultural context within which the research is conducted.

Nonetheless, parental rejection is found to be directly and indirectly related to suicidal ideation (Sobrinho et al., 2016). Parental rejection is defined as the presence of hostile criticisms and punishments towards children, coupled with a lack of warmth, support, affection, and concern that individuals optimally receive from their parents and other caregivers (Ying et al., 2021; Zhu et al., 2020). Individuals who are raised in a socio-

emotional environment characterised by adversity and lack of support are prone to developing the erroneous belief that their parents will only accept them if they are perfect and constantly worry about their wrongdoing, in turn developing low levels of self-esteem and depression (Quirk et al., 2014; Ying et al., 2021). As a result, the occurrence of parental rejection shows an indirect correlation with the risk of engaging in suicidal ideation, which could be attributed to the mediating factors of diminished self-esteem and depression (Sobrinho et al., 2016; Zhu et al., 2020). Moreover, when disruptive parental practices and dysfunctional relationships between children and parents occur, it leads to the development of insecure attachment styles and the production of dysfunctional internal representations. These factors are influential in augmenting vulnerability to subsequent stress and the emergence of psychopathological disorders (Quirk et al., 2014; Sobrinho et al., 2016). Consequently, individuals may endeavour to regulate their adverse emotions or engage in self-destructive behaviours, such as attempting suicide (Ying et al., 2021).

Furthermore, empirical research indicates that insufficiency of support constitutes a potential risk factor for suicidal tendencies among youths, encompassing deficiencies in emotional, social, and parenting support (Singh & Behmani, 2021; Yterdal, 2016).

Individuals with low parental support are at a heightened risk of developing feelings of thwarted belongingness and perceived burdensomeness, which frequently arise as a consequence of various significant life stressors. Therefore, when individuals encounter stressful life circumstances, perhaps the feelings of loneliness and burdensome will provoke the development of suicidal ideation (Mackin et al., 2016). Both authoritarian parenting style and neglectful parenting style are associated with a higher risk of suicidal ideation. This association can be attributed to the absence of adequate family support, a characteristic commonly observed in these particular parenting styles (Gorostiaga et al., 2019).

#### Authoritative Parenting Style and Suicidal Ideation

Parents who adhere to authoritative parenting are characterised by the establishment of strict rules that are not overly constrictive (Yterdal, 2016). This approach involves striking a balance between concise and reasonable parental demands while demonstrating emotional responsiveness and acknowledging the child's autonomy (Singh & Behmani, 2021). Individuals who were raised in families with authoritative parenting tend to have enhanced psychosocial abilities, better self-esteem, and better emotional well-being (Uwaoma et al., 2023). In addition, it is important to note that there is a strong emphasis on promoting parent-child communication and considering the child's perspectives within this parenting approach (Yterdal, 2016). This parenting style also involves the implementation of parental surveillance and guidance, which facilitates individuals' engagement in constructive activities (Singh & Behmani, 2021). Consequently, they are more inclined to minimize their participation in antisocial and dangerous activities, as well as are less likely to engage in suicide-related behaviours (Singh & Behmani, 2021).

Furthermore, it has been suggested that providing substantial parental support, as advocated by this parenting style, may mitigate the influence of life stress on the development of suicidal ideation. This potential reduction in risk could be attributed to the protective effects against feelings of thwarted belongingness and perceived burdensomeness (Mackin et al., 2016). Individuals who experience authoritative parental behaviours tend to develop adaptive strategies to effectively deal with daily vicissitudes, as well as to express their thoughts and feelings confidently and authentically in a secure manner. Hence, it serves as a protective factor in relation to the occurrence of suicidal ideation, as it enhances the individual's ability to critically assess, handle, and solve interpersonal conflicts (Nunes et al., 2023). Research has shown that authoritative parenting is the most effective parenting style for fostering children's self-efficacy and independence, reducing the likelihood of

experiencing depression, anxiety, delinquency, and substance abuse (Yterdal, 2016). Authoritative parenting is associated with positive outcomes, making it a potentially protective factor against the development of suicidal ideation among university students (Arafat et al., 2022; Reddy et al., 2022; Singh & Behmani, 2021).

#### Authoritarian Parenting Style and Suicidal Ideation

Authoritarian parenting style has been identified as a significant predictor of suicidal ideation. Previous studies have consistently shown a positive correlation between the perception of authoritarian parenting style and an elevated risk of suicide (Arafat et al., 2022; Ati et al., 2020; Choi et al., 2020; Gorostiaga et al., 2019; Lo et al., 2017; Reddy et al., 2022; Singh & Behmani, 2021; Sun et al., 2017; Uwaoma et al., 2023; Yterdal, 2016). The parenting practices employed by authoritarian parents, characterised by low degrees of responsiveness and high degrees of demandingness, are associated with a range of adverse consequences in children. The provision of parental care based on excessive control and deprivation of affection may potentially contribute to the development of suicidal ideation, which is hypothesised to occur through the establishment of emotionally unsafe relationships within the mother-adolescent dyad (Nunes et al., 2023).

Authoritarian parents exhibit a high level of strictness, a focus on obedience, and a strong emphasis on parental authority (Doinita & Maria, 2015). That is, the parenting practices encompass restricted trust, the enforcement of strict rules, discouragement of open communication, and a high level of perceived parental control (Yterdal, 2016). Parents convey their demands and expectations through rules and commands. However, they often neglect the communication of the underlying reasons behind these regulations (Doinita & Maria, 2015). Therefore, children with authoritarian parenting often receive learning pressure from their parents and have poor relationships with them (Zhai et al., 2015). They tend to exhibit a greater inclination towards fear rather than affection when it comes to their parents

due to the limited display of emotional comfort and affection by their parents (Uwaoma et al., 2023).

Due to the characteristics of low care and overcontrol associated with this parenting style, it has been consistently correlated with an increased likelihood of suicidal tendencies, thus serving as a risk factor for suicidal ideation (Tugnoli et al., 2022). Furthermore, the implementation of arbitrary regulations and constraints adopted by this parenting style is likely to result in a decreased likelihood of adolescents forming positive interpersonal relationships, increasing their susceptibility to experiencing suicidal ideation (Nunes et al., 2023). Individuals who were raised in authoritarian parenting environments show a twofold increase in the likelihood of experiencing suicidal ideation and are at a threefold higher risk of eliciting intentional self-harm (Singh & Behmani, 2021; Uwaoma et al., 2023). Not only do the characteristics of this parenting style directly predict suicidal ideation, but the counterproductive outcomes of this parenting style also indirectly contribute to suicidal ideation (Tugnoli et al., 2022). For instance, the detrimental outcomes associated with this parenting style, such as an increased tendency to anticipate failure, the development of dysfunctional attributions, a decrease in self-regulation abilities, and the experience of feelings of hopelessness, have been identified as additional factors that lead to the risk of suicidal ideation (Yterdal, 2016).

#### Permissive-indulgent Parenting Style and Suicidal Ideation

Previous research has indicated a correlation between permissive-indulgent parenting style and a lower prevalence of suicidal ideation among adolescents (Arafat et al., 2022; Ati et al., 2020; Donath et al., 2014; Gorostiaga et al., 2019; Singh & Behmani, 2021; Uwaoma et al., 2023; Yterdal, 2016). Permissive-indulgent parents exhibit high degrees of responsiveness towards their children while maintaining a relatively low level of demandingness. Parents that adopt this particular parenting style are characterised by their

warmth and acceptance, as well as their non-demanding nature and lack of control. This approach allows their children to develop independence and reflects a parenting attitude of friendship (Yterdal, 2016). The characteristic of high dimensions of responsiveness in permissive-indulgent parenting, wherein parents consistently offer love and support to their children's decisions.

The high level of care provided by this parenting style serves as a protective factor for suicidal ideation (Yterdal, 2016). Although children with permissive-indulgent parenting are more likely to inhibit the development of competence and hinder the successful application of one's competence due to the low levels of maturity demands and control associated with this parenting style (Pinquart & Gerke, 2019). However, the absence of demandingness also results in a lower level of overcontrol and is correlated with less behavioural control, which, in turn, may serve as a protective factor against suicidal ideation (Gorostiaga et al., 2019). The parenting style comprises the characteristics of a protective factor in parental care while avoiding the risk factor of control, thereby more likely to reduce the negative impact of suicidal ideation (Arafat et al., 2022; Donath et al., 2014; Gorostiaga et al., 2019; Singh & Behmani, 2021; Uwaoma et al., 2023; Yterdal, 2016).

#### Permissive-neglectful Parenting Style and Suicidal Ideation

Permissive-neglectful parenting is characterized by low in both responsiveness and demandingness. Children exposed to this parenting style are raised in an environment characterised by low expectations and a lack of emotional support (Shahlal et al., 2021). Insufficient parental affection, attention, cognitive and ethical guidance, protection, supervision, and limited parental engagement contribute to conflicts and challenges within the parent-child relationship (Shahlal et al., 2021). In addition, it has been observed that these parents exhibit a lack of proactive involvement in guiding their children's decision-making process and fail to establish a nurturing parent-child relationship that offers protection and

support in instances where the child's attempts at independent decision-making and self-sufficiency prove unsuccessful (Pinquart & Gerke, 2019). Thus, undeniably, there are numerous detrimental outcomes associated with this parenting style. Research has indicated evidence suggesting a potentially harmful impact of this parenting style on the prevalence of suicidal ideation among adolescents through both a direct and indirect relationship between permissive-neglectful parenting and suicidal ideation (Yterdal, 2016).

The presence of parental warmth positively impacts reducing the likelihood of engaging in suicidal ideation, thus acting as a protective factor. Contrarily, parental neglect has been identified as a risk factor for suicidal ideation, increasing the vulnerability to such behaviours (Arafat et al., 2022; Perquier et al., 2021). All of the parental abuse, emotional abuse, and neglect considerably predicted suicidal ideation in individuals (Singh & Behmani, 2021). Furthermore, this parenting style fails to facilitate the cultivation of a strong support system from protecting them to developing suicidal ideation (Sun et al., 2017; Mackin et al., 2016). Instead, it contributes to the development of suicidal ideation, primarily attributable to the inadequate provision of emotional support and the resultant isolation experienced by the children (Singh & Behmani, 2021; Yterdal, 2016). One potential factor contributing to suicidal ideation among adolescents is the presence of weak and insecure interactions with their parents (Chattopadhyay & Joshi, 2020). On the other hand, the characteristic of low demandingness may also serve as a potential risk factor for suicidal ideation. Individuals who grew up in environments characterised by a lack of control may exhibit impulsive behaviours and struggle with impulse control. This can be attributed to the absence of opportunities to acquire and develop self-regulation skills, as their parents were less practising behavioural control over them (Yterdal, 2016), which increases the risk of various detrimental outcomes that may serve as a risk factor for the propensity towards suicidal ideation.

#### **Parenting Styles and Perfectionism**

According to the ecological systems theory that was proposed by Bronfenbrenner (1986), it mentioned that the family, as a microsystem environment who have direct contact with individuals, will have the most direct impact on them. The perceived parenting styles influence the parent-child relationship, which in turn, affects the psychological development of children. For instance, parents who have high demands and exert excessive control over children will reduce the strength of the relational bond and parent-child relationship (Aloia & Warren, 2019), which leads to a higher rate of internalizing problems (Steele & McKinney, 2019). Children who receive high expectations and criticism from their parents when expectations are not met will internalize these expectations which are associated with negative self-evaluation, and lead to the development of perfectionism (Carmo et al., 2021). In addition, the psychological and emotional atmospheres dominant in the family constitute the behavioural and personality features of children (Kilonzo, 2017). Moreover, researchers have also found that parenting styles have frequently been involved in and have determined the propensities of perfection in children (Mahmood, 2023).

In the literature on perfectionism, several models are deliberated upon, all aiming to explain how perfectionism develops. These models highlight childhood and adolescence as key periods for the formation of perfectionism, with parents playing a crucial role throughout the period (Carmo et al., 2021; Damian et al., 2013). One of the models discussed in this literature is based on the social learning model (Flett et al., 2002). Studies have provided supporting evidence indicating a significant correlation between children's and parent's perfectionism, suggesting that parental modelling has a significant influence on the development of perfectionism (Stoeber et al., 2016). This model proposes that children observe, model, and repeat the perfectionistic behaviours displayed by their parents (Flett & Hewitt, 2002; Yıldız et al., 2020). For instance, children who observed an adult reward

themselves after achieving high standards were less inclined to reward themselves unless they also met the standards (Smith et al., 2022). Besides, perfectionism can also be formed due to being frequently exposed to parents' perfectionistic beliefs and behaviour, as well as the children's tendency to idolize and want to simulate seemingly ideal caregivers (Damian, 2013; Smith et al., 2022). Besides the social learning model, another model that discusses perfectionism is based on the social expectation model. The social expectation model suggests that perfectionism develops as a result of conditional parental approval integrated with expectations and criticism from parents (Damian, 2013). This means that parents convey ideas to children that perfection and success are important to delight them and to receive love and affection from them. Conversely, children's failure will not make parents express any love and affection. Furthermore, the development of perfectionism may be due to children internalising the high standards and expectations from their parents when they fail to meet the high expectations and receive criticism from their parents (Damian, 2013; Yang et al., 2021). Other than that, according to the anxious upbringing model, parents who are overly concerned with their children's needs and believe that the children will not be able to solve problem on their own tend to excessively focus on children's mistakes, and thus children are expected to behave perfectly without any mistakes (Flett & Hewitt, 2002).

The literature disclosed supporting evidence that different dimensions of perfectionism can be shaped through the social learning model and social expectation model (Appleton et al., 2010). Moreover, several studies also simultaneously tested these two models and proposed that different models might lead to the development of different dimensions of perfectionism (Neumeister, 2004; Vieth & Trull, 1999). For instance, adaptive perfectionism is formed through the social learning model whereas the development of maladaptive perfectionism is from the social expectation model (Damian, 2013).

Different literatures suggest that family context as well as parenting styles are

important factors in influencing the emergence and development of perfectionism (Basirion et al., 2014; Miller & Neumeister, 2017; Yıldız et al., 2019). Parenting styles can be differentiated into two categories, namely demandingness and responsiveness. The dimensions of demandingness and warmth are crucial in the development of children's perfectionism (Walton et al., 2018). Overly demanding and critical parenting styles are associated with the development of maladaptive perfectionism (Kawamura et al., 2002). Besides, excessive parental demand for neurotic children is also considered a prognostic factor for the development of perfectionism among children (Oros et al., 2017). Numerous studies have agreed that perfectionism tend to emerge more readily in families with very critical parents, and that children who grew up under authoritarian parenting style might possess towards perfectionist orientation (Carmo et al., 2021). There is also evidence showing a positive association between authoritarian parenting style and maladaptive perfectionism (Miller et al., 2012; Zikopoulou et al., 2021).

### Authoritative Parenting Style and Perfectionism

Authoritative parenting style is the combination of both high degree of demandingness and responsiveness, which means that parents who practice authoritative parenting style are focused on both clear standards and support (Piko & Balázs, 2012; Xie et al., 2016). Parents who are authoritative set high, mature, and positive expectations for their children while also consistently rewarding them with love and support (Cameron et al., 2020). This type of parenting style is characterized as controlling and demanding styles, they try to guide children's activities in a reasonable, issue-oriented manner (Lavrič & Naterer, 2020). They establish clear guidelines for their expectations and provide justifications for any disciplinary actions (Sanvictores & Mendez, 2021). On top of that, authoritative parents retain strict control at points of divergence (Kaufmann et al., 2000), but they encourage verbal give and take, communicate with children about the reasons behind the rules and use

power, and shaping to strengthen objectives (Lavrič & Naterer, 2020; Sarwar, 2016).

Several findings have shown that children who perceive an authoritative style of parenting are positively associated with adaptive perfectionism, which includes personal standards, organizations, and self-oriented perfectionism (Basirion et al., 2014; Gong et al., 2015; Hibbard & Walton, 2014; Sapieja et al., 2011; Soysa & Weiss, 2014). Since authoritative parents provide more autonomy, responsiveness, and warmth to children, studies have revealed that children who experienced authoritative parenting style tend to develop positive or adaptive perfectionism (Mahmood et al., 2023; Soysa & Weiss, 2014). As these children are given autonomy and reasoning behind rules, children may internalize high expectations along with warmth, which could affect their self-evaluations and cognitive expectancies (Soysa & Weiss, 2014). Individuals who are positive perfectionists exhibit a readiness to engage with challenges and actively seek to achieve high standards and expectations (Basirion et al., 2014). Such individuals establish lofty goals and personal standards and pursue rewards that are linked to achievement, all the while maintaining the capability to find contentment in their performance (Neumeister, 2004; Silverman, 2007).

In addition, a parenting style that combines the elements of a high degree of parental control with positive support for children's autonomy, including fostering warm relationship, engaging in rational communication and being receptive to children's needs, often tend to bring children in developing traits of high self-resilience, self-control and independence (Lavrič & Naterer, 2020). According to Cameron et al. (2020), students raised with a highly responsive or authoritative parenting style tend to exhibit a high level of emotional intelligence. This is reflected in their practice of more adaptive emotional regulation (Cameron et al., 2020), directly influencing them to have higher resilience (Collado-Soler et al., 2023). A high level of resilience helps increase an individual's healthy striving rather than negative outcomes that are connected with perfectionism (Rasmussen & Troilo, 2016).

Parents who provide greater emotional and social support, as well as autonomy to their children, enabling them to explore various life events. This empowerment helps children better analyse and manage situations with greater efficiency, ultimately aiding them in pursuing their goals. Additionally, this process facilitates the development of cognitive skills that allow children to find positive meanings even in the face of negative or stressful circumstances (Karim et al., 2013).

## Authoritarian Parenting Style and Perfectionism

Authoritarian parenting style is defined as parents who have high demandingness and low responsiveness to children's needs (Doinita & Maria, 2015; Jadon & Tripathi, 2017). This type of parenting style is considered strict, rigid and not warm to their children (Garcia et al., 2020; Jadon & Tripathi, 2017). They are highly directive, exert strict, and rigid rules on their children, provide an orderly environment and closely monitor children's activities (Checa & Abundis-Gutierrez, 2018; Rauf & Ahmed, 2017). They strongly emphasize restricting, shaping, and evaluating children's behaviours and attitudes, and they enforce compliance and respect for authority (Carmo et al., 2021; Miller & Neumeister, 2017). In addition, their children are expected or required to comply with all the imposed rules without any resistance. Parents with authoritarian parenting style typically do not explain the rationale of the rules to their children and instead rely on their authority when their children misbehave (Sulaiman & Hassan, 2019). Researchers argue that parents' levels of demandingness and warmth are highly related to the development of children's perfectionism and may interact with perfectionism. For instance, parents who are high in demandingness and low in warmth, such as conveying messages that children will not be loved if they fail to achieve parents' expectations, could contribute to the development of maladaptive perfectionism (Hibbard & Walton, 2014).

Several studies have found that individuals may more easily adopt and develop

perfectionism orientation during their lives if they live with extremely critical parents who utilize an authoritarian parenting style (Carmo et al., 2021; Damian et al., 2013; Domocus & Damian, 2018; Kawamura et al., 2002; Madjar et al., 2015). Children who perceive an authoritarian parenting style or harsh parenting characterized by parental criticism combined with excessive control, lack of care, and high expectations are predicted to develop maladaptive perfectionism (Damian et al., 2013). According to the social reaction model, children who grow up in a harsh and controlled environment develop perfectionism as a coping strategy. This allows them to regain internal control over an excessively demanding environment and to reduce the mortification that results from the deprivation of autonomy (Gong et al., 2015). Moreover, children exposed to authoritarian parenting style are also likely to develop perfectionism, as they strive for perfection and to avoid parental disapproval (Curran et al., 2017).

In addition, children who perceive parental control are predicted to develop maladaptive perfectionism, characterized by concern over mistakes, doubts about actions and abilities, and socially prescribed perfectionism (Gong et al., 2016; Hibbard & Walton, 2014; Reilly et al., 2016). Children who perceive an authoritarian parenting style often experience constant pressure, leading to manifestations of high tension, anxiety, and vigilance. This heightened state of neuroticism can easily result in maladaptive perfectionism. Furthermore, children raised under authoritarian parenting rarely feel that their efforts are good enough to receive praise or recognition from their overdemanding or excessively controlling parents (Sapieja et al., 2011). Thus, these children may perceive a loss of autonomy in the process of setting standards, leading to a belief that expectations placed upon them are unfairly high and unattainable, in turn contributing to the development of maladaptive perfectionism (Sapieja et al., 2011). Moreover, children internalize parental criticism and foster harsh self-criticism (Kawamura et al., 2002). Perfectionistic children tend to be fixated on evaluations and may

interpret minor reprimands as harsh criticism (Carmo et al., 2021). Therefore, maladaptive perfectionism might occur because of their constant emphasis on their own mistakes and their increased likelihood of recalling situations involving parental critiques of performance (Carmo et al., 2021).

## Permissive-indulgent Parenting Style and Perfectionism

Permissive-indulgent parenting style is characterized by parents who have either low or no demandingness and high responsiveness towards children (Besharat et al., 2011; Hibbard & Walton, 2014; Miller & Neumeister, 2017). Parents who are permissive-indulgent demonstrate a high level of warmth and acceptance attitude towards children (Miller & Neumeister, 2017; Moilanen et al., 2015). Apart from that, this parenting style also reflects parents-child relationships that are more akin to friendship (Patock-Peckham & Corbin, 2019), since the parents have fewer rules for children and provide little control over children, resulting from their nondemanding behaviours (Miller & Neumeister, 2017). Compared with authoritative and authoritarian parenting styles, parents who parent with a permissive-indulgent style have more tolerance and acceptance of their children's impulses, desires and actions. They grant a significant degree of self-regulation and place minimal demands for children's mature behaviours (Checa, P., & Abundis-Gutierrez, 2018; Moilanen et al., 2015), and do not take an active role in shaping children's behaviour (Wright et al., 2019). These parents also aim to be nonpunitive and steer clear of confrontation or excessive control to achieve their goals (Checa, P., & Abundis-Gutierrez, 2018).

Few studies revealed that there is no relationship between permissive-indulgent parenting style and perfectionism (Basirion et al., 2014; Hibbard & Walton, 2014; Patock-Peckham & Corbin, 2019; Yıldız et al., 2020). Indulgent parents are more towards letting children free without exercising much control or rules (Azizi & Besharat, 2011), therefore this parenting style buffers individuals from feeling criticized or being concerned about their

own mistakes (Hibbard & Walton, 2014). Since the parents' demands on children are low, for this reason, children who experience a permissive-indulgent parenting style may not have the desire to strive for higher expectations or standards (Hibbard & Walton, 2014). Besides, these children also never feel stress at all from parents to achieve higher standards.

## Permissive-neglectful Parenting Style and Perfectionism

In contrast with the permissive-indulgent parenting style, the style of permissiveneglectful parenting is characterized as uninvolved parenting, neither demanding nor
responsive, or having little demand but not responsive towards children (Aunola et al., 2000;
Cameron et al., 2020). Parents who are neglectful towards children seldom engage in their
children's activities or child-rearing practices (Bi et al., 2018; Hibbard & Walton, 2014).
Furthermore, neglectful parents neither support nor promote children's self-regulation, and
also frequently fail to oversee, monitor, or supervise their children's behaviours and actions
(Aunola et al., 2000; Klein & Ballantine, 2001). In other words, neglectful parents are parentcentred, overall uninvolved in activities that relate to children and do not set any rules for
children (Bi et al., 2018). A neglectful parenting style is considered a negative parenting
style, and it might directly influence children's developmental problems, such as emotional
disorders, aggression, anxiety, and behavioural issues (Vafaeenejad et al., 2019).

In the literature on permissive-neglectful parenting style, past researchers have stated that an individual's perfectionism is linked to a neglectful parenting style (Chen et al., 2019; Damian et al., 2013; Feng et al., 2021). Studies have found that neglectful parenting is associated with and contributing to fostering maladaptive perfectionism, such as doubt about one's abilities. In addition, the lack of warmth, which is a characteristics of the neglectful parenting style, is considered a main factor influencing the development of perfectionism (Richter et al., 2000). Inadequate proper structure and support from neglectful parents also contribute to the development of children's perfectionism (Zikopoulou et al., 2021). Due to

neglect, children may feel criticized and doubts their abilities, especially among males (Hibbard & Walton, 2014). Children with parents who express little demands and affection adopt a perfectionistic orientation or set high standards as a means to bring structure into their lives, which may be lacking due to neglectful parenting (Hibbard & Walton, 2014). Consequently, children may develop a perfectionist tendency as a way to cope and gain control over their lives (Flett et al., 2002).

## Perfectionism and Suicidal Ideation

There is growing evidence that shows the connection between perfectionism and suicidal ideation among adults and adolescents (O'Connor & Forgan, 2007; Rasmussen et al., 2012; You et al., 2022). There is a high possibility for perfectionist individuals to commit suicide as they are often striving for flawless and highly self-critical (Flamenbaum & Holden, 2007). Individuals who are high in perfectionism tend to have overly critical evaluations towards themselves. Therefore, perfectionists rarely perceive themselves as completely achieving their standards, which frequently leads to dissatisfaction with their accomplishments, with themselves, and with their lives (Stoeber & Janssen, 2011). High levels of perfectionism are associated with psychiatric disorders such as depression (Smith et al., 2016), and such become a vulnerability factor for suicide attempts (Flett et al., 2014).

Joiner's Interpersonal Theory of Suicide (IPTS) proposed that individuals will not complete suicide unless they have the desire to die by suicide and the capability to do so (Van Orden et al., 2008). For individuals to commit suicide, the theory states that three important conditions must be met, which are a sense of perceived burdensomeness, a perception of thwarted belongingness, and the development of the ability to self-harm (Rasmussen et al., 2012). Individuals will develop perfectionism due to the unrealistic high expectations from significant others or themselves, leading them to strive for the standards. However, when perfectionist individuals fail to live up to the expectations, they will experience feelings of

unacceptance or unloved by their significant others, which may reinforce their poor selfperception and the belief that their life is not worthy (Sommerfeld & Malek, 2019). Hence,
they might develop maladaptive perfectionism when they perceive a discrepancy between
actual performance and expectations, which can lead to psychological problems, such as a
decrease in self-esteem, greater depression, and hopelessness (Rice et al., 2006), ultimately
increasing suicidal ideation. Moreover, individuals who are more to Confucius' collectivism
often strive to achieve self and parental expectations in order to honour family and ancestors
and save face (Wang et al., 2013). They are more likely to experience higher levels of stress
to achieve those expectations for the sake of the reputation of the family. The perceived
discrepancy between their performance and expected performance leads them to perceive
themselves as a burden to their family, as they feel they have failed to honour their family's
expectations, thus increasing their suicidal ideation.

Past studies have identified that perfectionism is positively correlated with suicidal ideation (Robinson et al., 2021; Smith et al., 2018; Zeifman et al., 2020). According to Burns (1980) and Hollender (1965), they stated that one of the potential outcomes for perfectionist individuals is attempting suicide. Comparison to non-perfectionist individuals, perfectionistic individuals tend to experience heightened negative emotion before, during, and after task evaluation. They often judge their work as low quality and believe that their work should have been better (Hamilton & Schweitzer, 2000). Specifically, individuals with both high perfectionism and self-criticism are vulnerable to experiencing greater stress and depression (Rice et al., 2012), which is associated with suicidal ideation or suicidal behaviours (Donaldson et al., 2000). When perfectionists fall short of expectations, they perceive themselves as ineffective or as failures (Rasmussen et al., 2012). They experience high levels of negative self-awareness or feelings that arise from the comparison of ideal and actual performance (Flamenbaum & Holden, 2007; Tang et al., 2013). Suicide may be seen as the

ultimate way to escape from negative feelings (Flamenbaum & Holden, 2007). This is supported by the escape theory of suicide proposed by Baumeister (1990).

Numerous past studies examined the relationship between types of perfectionism and suicidal ideation. Based on studies conducted by Robinson et al. (2021) and Smith et al. (2018), they revealed that self-oriented perfectionism is positively correlated with an individual's suicidal ideation. This situation can be explained as people who are high in selforiented perfectionism having cognitive distortions with perfectionistic themes, such as black-and-white dichotomous thinking (Smith et al., 2018). This thinking style leads individuals to evaluate themselves with only two choices, either total success or total failure (Kiaei & Kachooei, 2022). In other words, they will only accept themselves as perfect when they achieve the standard and criticize themselves when they fail to meet expectations (Hewitt & Flett, 2002). This can result in low self-esteem, which is linked to the risk of depression and can trigger a causal chain cumulating in suicide (Smith et al., 2018). Furthermore, several studies have stated that there is a negative relationship (Blankstein et al., 2007), or no significant relationship between other-oriented perfectionism and suicidal ideation (Chen et al., 2017; Smith et al., 2018). Even though other-oriented perfectionists seem to cause significant distress in others (Nealis et al., 2005), research findings indicate that other-oriented perfectionists themselves do not experience a higher risk of suicidal ideation (Smith et al., 2018). Nonetheless, although individuals high in other-oriented perfectionism might not suffer from depression, they could contribute to the development of socially prescribed perfectionism and, consequently, depressive symptoms in others (Sherry et al., 2016). In other words, the depressive outcomes associated with socially prescribed perfectionism can be seen as a legitimate response to the perfectionists' demands imposed upon individuals (Smith et al., 2019). Moreover, clinically, socially prescribed perfectionism is more detrimental to an individual's mental health, as it is categorized under maladaptive

perfectionism (Klibert et al., 2005). This is proven by the Perfectionism Social Disconnection Model (PSDM) that individuals with a high degree of perfectionism are more likely to have maladaptive outcomes such as depression (Hewitt et al., 2006), by engendering social disconnections (Smith et al., 2018). Studies have discovered that socially prescribed perfectionism is positively and significantly related to suicidal ideation (Huggins et al., 2008; Robinson et al., 2021; Smith et al., 2018; Wang et al, 2013). Since people high in perfectionistic concerns often seek acceptance and recognition by placing excessive emphasis on achieving agentic accomplishments (Sherry et al., 2016), when socially prescribed perfectionists fail to achieve expectations, they develop thoughts and beliefs of falling short of people's expectations (Smith et al., 2018). These unfavourable thoughts and beliefs subsequently give rise to pessimistic expectations about social hopelessness, which indicates one's ability to fit in and feel comfortable with other, contributing to the development of depressive symptoms (Sherry et al., 2016), which increase the chances of getting suicidal ideation (Flett et al., 2003; Huggins et al, 2008; Robinson et al., 2021).

# Parenting Styles, Perfectionism, Suicidal Ideation

Research is scarce concerning the relationships between parenting styles, perfectionism, and suicidal ideation, especially in understanding the potential role of perfectionism as a mediator in the relationship between parenting styles and suicidal ideation. Perceived parenting styles can be used to predict the development of perfectionism, which can manifest as either adaptive or maladaptive perfectionism. Both the presence of parental warmth and the occurrence of parental criticism serve as a predictor in influencing the development of maladaptive perfectionism, either by providing a protective effect or by exacerbating its emergence (Damian et al., 2013; Hibbard & Walton, 2014). A study conducted in the Chinse context suggests that all negative parenting practices, such as parental criticism, parental rejection, and lack of parental warmth, are indirectly related to

suicidal ideation via maladaptive perfectionism (Ying et al., 2021).

Parental expectations will lead to perfectionistic striving and perfectionistic concerns; however, parental criticism primarily contributes to the emergence of perfectionistic concerns (Stoeber et al., 2016). According to the PSDM (Hewitt et al., 2017), individuals with high levels of perfectionistic concerns, characterised by persistent worry about mistakes and doubts about actions, tend to encounter low levels of social support. The decrease in support is associated with elevated levels of depression and suicidality (Robinson et al., 2021). High levels of perfectionistic concerns can impede the establishment of maintaining supportive social relationships with others, as those affected perceive themselves as inadequate for others' support and prompt them to engage in self-imposed isolation. Consequently, this experience of isolation and self-doubt increases individuals' susceptibility to depression and suicidal ideation (Gnilka & Broda, 2019).

In addition, it has been observed that individuals exhibiting maladaptive perfectionism tend to establish extremely lofty standards that render achieving success implausible (Abdollahi & Carlbring, 2016). They often employ maladaptive coping strategies to manage life stressors and challenges, which, in turn, correlates with an elevated risk of suicidal ideation (de Jonge-Heesen et al., 2020). The deleterious psychological outcomes arising from negative parenting styles, encompassing low self-esteem, perceived burdensomeness, limited social support, and poor psychological adjustment, may result in individuals avoiding challenging situations due to their fear of failure and parental criticism (Hibbard & Walton, 2014). When combined with the characteristics associated with maladaptive perfectionism, such as fear of others' criticism, doubts about action, concern over mistakes, and an inability to tolerate failure or imperfection, they may resort to ineffective and maladaptive coping mechanisms for managing stress, for example, suicide may emerge as a coping mechanism for these individuals (Zhu et al., 2020).

## Authoritative Parenting Style, Perfectionism, Suicidal Ideation

Authoritative parenting style is positively associated with adaptive perfectionism (Hibbard & Walton, 2014). The combination of high levels of parental expectations and high degrees of warmth can potentially cultivate high standards and adaptive perfectionism, while also mitigating the maladaptive aspects of perfectionism (Hibbard & Walton, 2014; Walton et al., 2018). The practices of authoritative parents encompass rationally guiding their children, explaining the reasons behind the rules, encouraging the development of independent thoughts and beliefs, and providing affection and support to the children (Doinita & Maria, 2015; Hong et al., 2015; Pinquart & Gerke, 2019). Therefore, individuals with authoritative parenting are more likely to engage in perfectionistic striving instead of perfectionistic concerns (Stoeber et al., 2016), where they plan for high standards while simultaneously establishing explicit and attainable performance boundaries. In other words, adaptive perfectionists tend to assess their performance based on high standards but refrain from engaging in persistent self-criticism and demonstrate a capacity for employing adaptable ways to address challenges effectively (Abdollahi & Carlbring, 2016). Not only that, but authoritative parenting may also reduce an individual's concern over mistakes, which, in turn, may reduce the likelihood of experiencing adverse psychological outcomes, including negative affect, low self-esteem, depression, and suicidal ideation (Gong et al., 2015). Research findings indicate a positive relationship between authoritative parenting and personal standards, whereas a negative correlation is shown between authoritative parenting and concern over mistakes and doubts about actions (Gong et al., 2015).

Furthermore, individuals with authoritative parents reported the use of higher levels of strategy coping and support-seeking coping (de Jonge-Heesen et al., 2020; Gong et al., 2015). Authoritative parenting is characterised by a high degree of parental warmth, which can provide a supportive family environment. This atmosphere enables individuals to approach

difficult tasks with reduced fear of failure and foster the development of realistic standards that they can reasonably expect to achieve (Hibbard & Walton, 2014). Seeking social support as a coping strategy would be especially advantageous for individuals with perfectionistic tendencies, as they are more prone to experiencing feelings of loneliness and interpersonal problems. Hence, the utilisation of adaptive coping is expected to buffer the relationship between perfectionism and suicidal ideation (de Jonge-Heesen et al., 2020). A significant positive correlation exists between authoritative parenting and parental expectations, while a significant negative correlation is observed between authoritative parenting and parental criticism (Walton et al., 2018). Consequently, individuals with higher levels of perfectionistic strivings tend to perceive greater social support from others when needed and possess a belief in the supportive nature of others. This increased social support resulted in a subsequent decrease in levels of depression and suicidal ideation (Gnilka & Broda, 2019). Moreover, self-oriented perfectionism is closely associated with positive future thinking, the ability to achieve goals, and positive affect. These factors contribute to positive psychological functioning, perhaps serving as a protective factor against the risk of suicide (Abdollahi & Carlbring, 2016; Harper et al., 2020).

Authoritative parents exhibiting high standards and an organized lifestyle are more likely to raise children who likewise possess high standards and have organizational skills. The study suggests that authoritative parenting was linked to adaptive aspects of perfectionism, where authoritative mothering was associated with characteristics such as order and high standards and authoritative fathering was associated solely with high standards (Patock-Peckham & Corbin, 2019).

## Authoritarian Parenting Style, Perfectionism, Suicidal Ideation

Authoritarian parenting style would be related to the dimensions associated with maladaptive perfectionism, such as concerns about making mistakes, doubts about abilities,

and feelings of being criticized (Damian et al., 2013; Gong et al., 2015; Hibbard & Walton, 2014). This parenting style is characterised by imposing high demands and expectations on children without showing much warmth. It may cultivate feelings of being criticized and selfdoubt regarding one's capacity to tackle new challenges, as well as a sense of constant pressure to achieve perfection (Hibbard & Walton, 2014; Walton et al., 2020). Moreover, the high levels of demands and psychological control coupled with the absence of warmth and support from authoritarian parents, are potentially significant factors contributing to the development of perfectionism. Specifically, this may be particularly relevant in the context of socially prescribed perfectionism (Ko, 2019). The development of perfectionistic tendencies in children is influenced by an environment of extreme parental expectations and criticism. These behaviours contribute to conflicts between parents and children, leading to the establishment of conditions where self-worth is contingent upon meeting excessively high standards of accomplishment and gaining approval from others (Curran & Hill, 2022). The concept of parental conditional regard encompasses the notion that children's abilities, utility, and self-worth are constrained by the degree to which their actions, behaviours, and performances align with the expectations set by their parents. As a result, this can lead to heightened concern over mistakes, engaging in self-criticism, and experiencing a sense of social disconnection (Curran et al., 2017).

In addition, due to the absence of warmth, children who experience authoritarian parenting are more prone to perceiving a dearth of social support in order to effectively manage the various stressors and difficulties encountered in life (Gnilka & Broda, 2019). Individuals who were raised in authoritarian family and exhibit socially prescribed perfectionism tend to respond to stressors with coping strategies that are considered maladaptive (e.g., avoidance, catastrophizing, rumination, self-blame), resulting in experiencing more depressive feelings, distress, and suicidal ideation (de Jonge-Heesen et al.,

2020). Research has shown that there is an anticipated association between maladaptive coping strategies and the intensification of the connection between perfectionism and suicidal ideation (de Jonge-Heesen et al., 2020). Not only that, but individuals with maladaptive perfectionism demonstrate a decreased inclination to seek help from others when facing stressful situations, as they may perceive seeking help as indicative of inadequacy or a deviation from the pursuit of perfection (Sommerfeld & Malek, 2019). They may also encounter challenges in maintaining supportive social relationships and reaching out when support is needed (Gnilka & Broda, 2019). As a result, the sense of lower perceived social support will give rise to social disconnection (e.g., loneliness, hopelessness, a sense of isolation), which may be associated with the occurrence of suicidal ideation (Etherson et al., 2022; Harper et al., 2020; Robinson et al., 2021). According to the PSDM (Hewitt et al., 2006), maladaptive perfectionism will generate social disconnection by fostering perceptions of others as critical, rejecting, and impossible to please, which, in turn, contributes to depressive symptoms and suicidal ideation (Etherson et al., 2022).

According to the social reaction model (Flett & Hewitt, 2002), children who experience a harsh or controlling environment often adopt perfectionism as a coping mechanism, as perfectionism enables these children to regain a sense of internal control of an overdemanding environment, while also serving to minimize humiliation resulting from the restriction of autonomy. Furthermore, children whose parents provided limited autonomy may have had little experience or gentle guidance in managing stressful circumstances (Gong et al., 2015). When confronted with stressful circumstances as emerging adults without parental guidance, these individuals may opt to evade addressing stressful situations as a coping mechanism, and in extreme cases, may resort to suicide as a means of managing heightened stress in response to rejection (Ying et al., 2021; Zhu et al., 2020). Those who lack the ability to endure failure, imperfection, feelings of guilt, and irrational self-criticism

may consider suicide to escape this unpleasant self-awareness associated with perceived shortcomings, failure, or lack of accomplishments (Abdollahi & Carlbring, 2016). Notably, while striving for success and setting high standards may not independently serve as reliable indicators of suicidal ideation, however, it is the combination of a fear of failure and rigid thinking that place these individuals in a vulnerable position for engaging in suicidal ideation (de Jonge-Heesen et al., 2020).

## Permissive-indulgent Parenting Style, Perfectionism, Suicidal ideation

Children with permissive-indulgent parents are associated with a decreased likelihood of experiencing suicidal ideation and are found to have no relationship with perfectionism.

The characteristics of permissive-indulgent parenting (e.g., showing a high degree of warmth and a low degree of demandingness) will buffer individuals from the development of both adaptive and maladaptive aspects of perfectionism (Yıldız et al., 2020). Since permissive-indulgent parents place few demands on their children, it may hinder the desire to achieve high standards in children, resulting in a decrease in the possibility of developing perfectionism (Hibbard & Walton, 2014). In addition, this parenting style is associated with lower levels of perceived criticism and concern over mistakes (Ko, 2019), hence reinforcing the notion that parental warmth plays a significant role in promoting positive adaptation (Walton et al., 2018). Therefore, there is no relationship between permissive-indulgent parenting, perfectionism, and suicidal ideation, as well as perfectionism, plays a mediator role between permissive-indulgent parenting and suicidality.

### Permissive-neglectful Parenting Style, Perfectionism, Suicidal Ideation

Due to the low degrees of both warmth and demands that individuals will receive from permissive-neglectful parents, they are more likely to develop high standards or perfectionistic tendencies as a way of gaining control or order in the absence of family guidance and support (Hibbard & Walton, 2014; Walton et al., 2018). However, it is

observed that the permissive-neglectful style seems to promote maladaptive aspects of perfectionism (e.g., feeling criticized and doubts about abilities), rather than leading to the more adaptive aspects of perfectionism (e.g., personal standards and organization) (Hibbard & Walton, 2014). Research has demonstrated that permissive-neglectful parenting was positively correlated with socially prescribed perfectionism, as the experiences of neglect children who were raised in this parenting style would experience were a negative predictor of maladaptive perfectionism (Ko, 2019). Indeed, individuals with permissive-neglectful parenting style prioritise the need to project an image of perfection rather than fostering an intrinsic drive for perfection. Therefore, another study suggests that permissive-neglectful parenting may have a greater impact on the development of perfectionistic self-presentation, which entails projecting an idealised and flawless image of oneself in order to gain parental recognition (Ko, 2019).

Individuals who were raised in such a family environment would perceive their parents as an unsupportive system when confronted with life stressors, which increases feelings of hopelessness (Mackin et al., 2016). Both socially prescribed perfectionism and perfectionism self-presentation are positively associated with interpersonal hopelessness, in terms of thwarted belongingness and perceived burdensomeness. This association has been identified as a potential risk factor for suicidal ideation (Etherson et al., 2022; Robinson et al., 2021). Individuals with maladaptive perfectionism tend to avoid making mistakes in public, non-display of imperfection, and perceive others expect them to be perfect which can facilitate the sense of self-loathing, hopelessness, loneliness, and isolation, ultimately heightening the risk of suicidal ideation (Shahnaz et al., 2018). Hence, it can be concluded that maladaptive perfectionism may serve as a mediator in the relationship between permissive-neglectful parenting and suicidal ideation.

### **Theoretical Framework**

The present study employed the Social Expectations Model, Perfectionism Social Disconnection Model (PSDM), and Interpersonal Theory of Suicide (IPTS) as theoretical frameworks to comprehensively examine and analyse the dynamics of this relationship.

The link between parenting styles and perfectionism was explained using the Social Expectations Model. Flett et al. (2002) proposed this model to clarify the development and transmission of perfectionism within families. This model proposes that perfectionism emerges as a consequence of the conditional approval associated with parental expectations and parental criticism (Flett et al., 2002). This striving for positive feedback can be detrimental to children because they are especially vulnerable to feelings of helplessness and hopelessness when they are unable to achieve their parents' excessively high expectations (Rasmussen & Troilo, 2016). On the contrary, the absence of expectations may also be problematic. Hamachek (1978) suggested that individuals may adopt perfectionism as a coping mechanism in response to parental neglect. When individuals are faced with a lack of clear standards and expectations, they tend to establish high personal standards as a means of navigating uncertainty regarding the potential consequences of their actions (Flett et al., 2002).

Furthermore, the Perfectionism Social Disconnection Model (PSDM; Hewitt et al., 2006) outlines the relationship between perfectionism and suicidal ideation. This model describes the manner in which perfectionism can cause psychological distress by fostering social disconnection, potentially escalating to severe consequences such as suicide. Individuals with perfectionistic tendencies often have a heightened sensitivity towards signs of interpersonal rejection, prompting them to actively avoid engaging in social interactions due to anticipated criticism and overwhelming shame (Chen et al., 2015; Visvalingam et al., 2023). Consequently, social disconnection manifests as a defence mechanism characterised

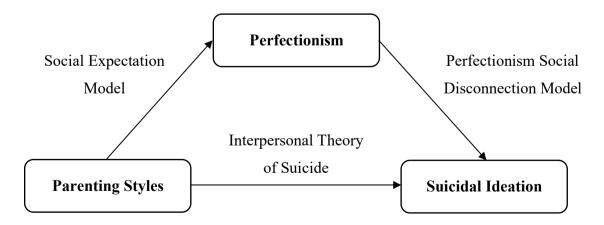
by intentional emotional and physical separation from others (Flett & Hewitt, 2019). The presence of an excessive fear towards evaluation and a constant desire for approval can negatively impact interpersonal behaviours, creating a sense of disconnectedness and a perceived lack of social support (Chen et al., 2012; Sherry et al., 2013). In addition, previous research has established a correlation between hopelessness and suicidal tendencies (Ribeiro et al., 2018; Tucker et al., 2018), with perfectionism being positively associated with the experience of hopelessness (Smith et al., 2017). The sense of social disconnection serves as a mediator in the relationship between perfectionism and various deleterious outcomes, such as suicidal ideation (Calati et al., 2019; Roxborough et al., 2012). The mediation process is driven by a perception of thwarted belongingness and perceived burdensomeness (Sommerfeld & Malek, 2019). This phenomenon can be explained by the IPTS which postulates that suicide desire arises when individuals encounter a sense of hopelessness in relation to two unfulfilled interpersonal needs, namely thwarted belongingness and perceived burdensomeness (Joiner; 2005).

Interpersonal Theory of Suicide (IPTS) outlined the relationship between parenting styles and suicidal ideation. According to IPTS, (Joiner, 2005; Van Orden et al., 2010), the most threatening form of suicidal ideation arises from the concurrent existence of two interpersonal constructs, namely thwarted belongingness (TB) and perceived burdensomeness (PB). TB refers to a subjective experience of disconnection or alienation from social interactions, while PB reflects an individual's perception of being a burden on others (Joiner et al., 2009). Apart from these risk factors, the presence of a sense of hopelessness over these conditions, along with the acquired capability will also contribute to an individual's vulnerability to suicide (Van Orden et al., 2010). Of note, the experience of either TB or PB alone will only result in the emergence of passive suicidal ideation; however, the interaction coupled with the perception that these conditions are stable and unchangeable (e.g.,

hopelessness) will cause active suicidal desire (Chu et al., 2017). The presence of acquired capability is likely to facilitate the transition from experiencing active suicidal ideation to engaging in suicidal behaviours. The acquired capability pertains to one's ability to overcome the innate instinct for self-preservation and engage in lethal self-injury, which in turn reduces one's dread of death and increases one's ability to endure physical pain (Joiner, 2005). An increasing body of research suggests that various factors could exert a significant role in adolescents' suicidality, such as unsupportive home environment, parent-child conflict, lower levels of cohesion, and maladaptive control (Cero & Sifers, 2013; Hill et al., 2019). Individuals who encounter family conflict or dysfunction may develop the perception that they are a burden on their family members, resulting in heightening their susceptibility to suicidal tendencies (Diamond et al., 2022; Hunt et al., 2021; Opperman et al., 2015). Conversely, the theory posits that positive family relationships, characterised by the expression of warmth and care, are expected to increase the experience of belongingness, thus buffering against the development of a sense of TB (Frey & Fulginiti, 2017; Van Orden et al., 2010).

Figure 2.1

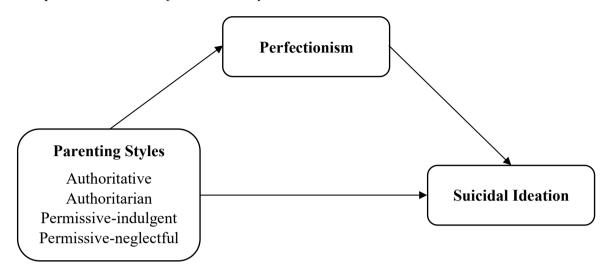
Theoretical Framework Model



## **Conceptual Framework**

Figure 2.2

Conceptual Framework of Present Study



The conceptual framework illustrated the relationship relevant to the current study (refer to Figure 2.2). In this study, perfectionism acted as a mediator in the relationship between parenting styles and suicidal ideation. According to Siqueira-Campos et al. (2021), it is anticipated that the presence of adverse parenting behaviours (authoritarian parenting and permissive-neglectful parenting) would have an impact on an individual's inclination towards suicidal ideation and engagement in suicide behaviours. Additionally, perfectionism might develop partly in response to adverse parenting behaviours in order to regain a sense of control or function as a coping mechanism (Chen et al., 2019). Individuals who adopt maladaptive perfectionism are positively associated with an elevated risk of suicidality (Abdollahi & Carlbring, 2016). On the other hand, the application of positive parenting behaviours (authoritative parenting) will buffer the development of maladaptive perfectionism and the vulnerability to suicide (Hibbard & Walton, 2014; Singh & Behmani, 2021). Indeed, positive parenting behaviours have been shown to have a significant impact on enhancing psychological adjustment and improving interpersonal behaviours (Gong et al., 2016; Gorostiaga et al., 2019).

## **Chapter III**

### Methodology

### **Research Design**

This present study employed a quantitative, descriptive, and cross-sectional research design to investigate the relationship between parenting styles and suicidal ideation, with perfectionism as the mediator among Malaysian undergraduate students. In this study, four types of parenting styles were independent variables, suicidal ideation was categorised as a dependent variable, and the mediator was perfectionism. Quantitative research is a form of research technique that utilized mathematical, computational, and statistical techniques to explain the relationship between two variables (Ahmad et al., 2019). This research method employed strategies such as surveys in data collection that produced statistical data (Mehrad & Zangeneh, 2019). The present study implemented a quantitative method in the data collection, as it collected data from a self-report online survey form and analysed the data by utilizing computer software.

A cross-sectional research design was being chosen in this present study. Cross-sectional research design was a form of observational study design that enabled researchers to simultaneously collect data from a targeted population across a specific point in time (Wang & Cheng, 2020). This research design also provided an opportunity for researchers to examine the relationship between different variables (Spector, 2019). Therefore, this had proven that it was suitable for the present study to utilize a cross-sectional research design as it enabled the researchers to collect data that was useful in assessing the relationships between parenting styles, perfectionism and suicidal ideation in a short period of time. Furthermore, this research design was considered cost-effective and convenient (Levin, 2006), as it utilized the distribution of a self-report online survey form, which was an affordable and efficient way to collect large amounts of data from targeted participants.

## **Sampling Method**

This study applied non-probability sampling, which was also referred to as non-random sampling. Non-probability sampling is a type of sampling that involved selecting cases based on specific areas of interest rather than employing a deliberate selection process (Etikan, 2017). There were several reasons for choosing the non-probability sampling method for this study. Due to the rapid diffusion of the Internet as a communication platform, this study not only could be efficiently and effectively conducted online but also an affordable option and convenient means for recruiting participants (Bacher et al., 2019). The purposive sampling, also known as judgmental sampling, was adopted in this study to recruit participants. Purposive sampling is defined as the selection that followed some judgment or unique characteristics to reach out to a kind of representative sample that fitted the objectives of this study (Vehovar et al., 2016).

## **Research Location**

The present study was conducted with samples from Malaysian university students. An online Qualtrics survey form was generated and distributed through two platforms, including both online and offline platform. For the online platform, a questionnaire containing all necessary questions was distributed to targeted participants through different social media platforms, namely WhatsApp, Instagram, Microsoft Teams, WeChat and Facebook. Furthermore, to be more effective in collecting data, the researchers were physically present in and walk around UTAR, allowing participants to scan a QR code of the survey form.

#### **Research Ethics**

Prior to initiating the data collection phase, the researchers sought ethical clearance from the UTAR Scientific and Ethical Review Committee (SERC) and other relevant parties in order to obtain permission for the inclusion of human subjects in the present study.

## Sample Size

In this study, the G\*Power software version 3.1.9.7, initially developed by Erdfelder et al. (1996) and extended by Faul et al. (2009), was employed to calculate the estimated minimum sample size. The estimated total sample size was calculated with four parameters, namely effect size ( $f^2$ ), probability alpha error ( $\alpha$  err prob), statistical power ( $1 - \beta$  err prob), and number of predictors. Cohen (1988) had proposed that the classification of effect size ranges from .02 (small effect size), .15 (moderate effect size), and .35 (large effect size).

The medium effect size of 0.2559, the statistical power of 0.95, an alpha level of error probability of 0.05, and four predictors were entered as the data to obtain the minimum sample size. The G\*Power software generated a minimum sample size of 78 (see Appendix C, p. 148). However, as a precautionary measure to address potential missing data concerns, the sample size was increased by 15%. Therefore, the minimum sample size for this study was adjusted to 90 participants.

## **Participants**

#### Inclusion Criteria

This study incorporated two specific inclusion criteria to ensure a comprehensive understanding of its objectives, specifically targeting (1) undergraduate students residing in Malaysia, encompassing those from both private and government universities, and (2) individuals of Malaysian nationality.

### **Exclusion Criteria**

The objective of this study was to examine the relationship among undergraduate students; hence, those who were not currently enrolled in university were ineligible for participation. Additionally, individuals who were not of Malaysian nationality were also excluded to maintain consistency with the inclusion criteria.

### **Instruments**

# Scale of Parenting Style (SPS)

The Scale of Parenting Style developed by Gafor and Kurukkan (2014) was used to measure an individual's four types of perceived parenting styles, namely authoritarian, authoritative, permissive-indulgent, and permissive-neglectful parenting styles. It is measured based on two dimensions, which are parental responsiveness and parental control. It is a 38item scale, with 19 items representing parental responsiveness (e.g., " Do whatever I tell), while another 19 items serve for parental control (e.g., Emphasized my success). This instrument uses a 5- point Likert scale, which ranges from very wrong (1) to very right (5). The sum scores of both parents were taken for the overall score of an item (Gafor & Kurukkan, 2014). Furthermore, in order to identify types of perceived parenting styles, a median-split method was used to categorize the level for two dimensions. Parents who scored above the median, and high in both responsiveness and control were categorized as authoritative parenting style. On the contrary, parents who had low scores in responsiveness and high scores in control, represented authoritarian parents. Moreover, when parents had high responsiveness but low control, they were characterized as indulgent parents. Lastly, when parents were rated as low in both responsiveness and control and below the median range, they were considered as practising a neglectful parenting style. The scale had high reliability for both dimensions, of which, 0.81 for parental responsiveness, and 0.83 for parental control. This selected scale also showed a good validity that ranged from 0.80 for parental responsiveness, and 0.76 for parental control. In present study, the Cronbach Alpha of this scale for pilot study was 0.88, and the actual study was 0.95, which was reported as high reliability (see Appendix D, p. 150).

## Perfectionism Cognitions Inventory (PCI)

This 25-item short version of the Perfectionism Cognitions Inventory developed by

Flett et al. (1998) is an instrument used to assess the frequency of automatic perfectionistic thoughts that are linked to perfectionism cognitions (Flett et al., 2007) For instance, the sample items are such as "I should be perfect", "I can't stand to make mistakes", and "My goals are very high". This instrument uses using 5-point Likert scale, where 0 represents not at all, whereas 4 represents all of the time. The scale is scored by summing all the items' scores. Therefore, the range of the score is 0 to 100. The higher the total score, the higher the perfectionistic thoughts that an individual had (Aydın & Yerin Güneri, 2022). The Cronbach alpha of this selected scale was 0.95, which was considered good reliability (Flett et al., 2007). In addition, the concurrent validity for this chosen scale was ranging from 0.37 to 0.63 (Flett et al., 2007). Nevertheless, this scale was tested for its reliability in this current study, yielding a reliability coefficient of 0.96 in pilot study and 0.94 in actual study. It was reported to have a high reliability (see Appendix D, p. 150).

# Beck Scale for Suicidal Ideation (BSSI)

Beck Scale for Suicidal Ideation is a 19-item self-rated scale developed by Beck et al. (1979). It can be known as an instrument to measure the presence and severity of an individual's suicidal ideation and plans (Esfahani et al., 2015). Each of the items examines characteristics such as wish to die, desire to carry out active or passive suicide attempt, time and frequency of suicidal ideation, sense of control over making suicide attempt, number of deterrents to suicide attempt, amount of actual preparation for contemplated suicide, and others (Brown et al., 2000). The sample items from the scale include phrases such as "Actual preparation for contemplated suicide" and "Sense of 'capability' to carry out attempt". Each of the items is composed of three alternative statements that are ranked in ascending order of intensity for suicidal ideation on a 3-point ordinal scale that ranges from 0 to 2 (Pinninti et al., 2002). The total score was computed by summing up each of the item's scores (Beck et al., 1979), and the total scores ranged from 0 to 38 (Brown et al., 2000). Higher scores

indicated greater suicidal ideation and plans (Beurs et al., 2015). This scale had good internal consistency, with a Cronbach alpha value of 0.96 (Beck et al., 1988). Furthermore, the concurrent validity for this scale was 0.41 (Beck et al., 1979). While the present study has examined the reliability for the pilot study (0.81) and actual study (0.89), which are also considered as high reliability (see Appendix D, p. 151).

**Table 3.1** *Reliability of Scales* 

Scales	Pilot Study	Actual Study
Scale of Parenting Styles (SPS)	0.88	0.95
Perfectionism Cognitions Inventory (PCI)	0.96	0.94
Beck Scale for Suicidal  Ideation (BSSI)	0.81	0.89

#### **Data Collection Procedures**

After getting approval from the SERC, the online survey was distributed through offline and online means to reach out to our targeted participants. Qualtrics, a web-based survey tool, was utilised to administer this survey, which consisted of electronic informed consent, demographic information, and scales for parenting styles, perfectionism, and suicidal ideation. Electronic informed consent was obtained from the participants to ensure the agreement of voluntary participation in this study, the acknowledgement of confidentiality issues, and the understanding of the purpose of this study. In addition, the researchers were allowed to ensure whether the participants fulfilled the inclusion criteria of this study with the provided demographic information, such as age, gender, nationality, and education status.

Those who unable to fulfil the inclusion criteria were removed from the data cleaning process. Social media platforms were utilised for survey distribution, including platforms like WhatsApp, Instagram, Microsoft Teams, WeChat and Facebook. Apart from that, participants were also recruited through offline methods. Researchers reached out to the participants who met the inclusion criteria around the campus. A brief introduction and a poster were attached along with the survey link and the QR code to inform the participants regarding the purpose of the study and the criteria for participation. The estimated duration to complete the survey was approximately between 15 to 20 minutes.

# **Pilot Study**

A pilot study was conducted before the actual study in order to ensure the likelihood of success of planned participant recruitment and the quality of the instruments (Lowe, 2019). Through this pilot study, researchers were allowed to identify the potential practical issues and make necessary amendments as needed. Therefore, the pilot study consisted of 30 respondents who fulfilled the inclusion criteria of this study.

# **Data Analysis**

Firstly, data cleaning was conducted to filter out the data that did not fulfil the inclusion criteria of the current study and data with incomplete information. Data cleaning is a process of detecting, identifying and removing errors and inconsistencies in order to improve the quality of data (Rahm & Do, 2000). Incomplete information, errors or missing value in dataset must be cleared out as it would affect the result of research (Ridzuan & Zainon, 2019). Missing data were identified to increase the statistical power, eliminate bias, increase the representativeness of the sample, and last but not least, to increase the accuracy of data analysis (Kang, 2013).

Secondly, the descriptive statistics were conducted to analyse the means, standard deviations, frequency, and percentage of participants' demographic information, including

age, gender and race.

Thirdly, the assumptions of normality of collected data were carried out and examined in order to ensure the populations were normally distributed before carrying out another statistical test (Singh & Masuku, 2014). The assumptions of normality were assessed through five indicators, namely histogram, quantile-quantile plot, skewness and kurtosis, and Kolmogorov-Smirnov test.

## Histogram

It refers to a graphical plot where the frequency distribution of observed values is plotted against their frequency (Das & Imon, 2016). Histogram also provides opportunities for identifying the skewness and outliers of a study. In a study that is normally distributed, the histogram is in a bell-shaped (Henderson, 2006).

## Quantile-quantile Plot

Quantile-quantile plot, or Q-Q plot, is a graphical representation that helps researchers to compare the quantiles of observed values with quantiles of expected values (Das & Imon, 2016). The data is considered as normally distributed if the points are plotted against a straight line (Tsai & Yang, 2005).

## Skewness and Kurtosis

Skewness is the measure of degree of asymmetry of a distribution that can be skewed to the left or right (Bono et al., 2019). Kurtosis is the measure of 'peakedness' of a distribution (Kim, 2013). In an ideal normally distributed data, the value for both measurements should be zero, with acceptable range between -2 to +2 (Garson, 2012).

# Kolmogorov-Smirnov Test

It is a technique that used to test the goodness of fit of a set of observed data with normally distributed data (Berger & Zhou, 2014). A data is considered as normally distributed if the *p*-value is larger than 0.05, which reflects a not significant result (Mishra et

al., 2019).

More specifically, SPSS version 27 also used to measure inferential statistics, including Pearson Product-Moment Correlation (PPMC), regression analysis and mediation effect. PPMC was used to measure the relationship between different variables (Puth et al., 2014). Also, this study applied Multiple Linear Regression (MLR) to examine the relationship between examined variables, which were parenting styles, perfectionism and suicidal ideation. The assumptions of MLR were examined, including multivariate outlier, types of variables, independent, multicollinearity, independent errors, homoscedasticity, normality of residuals, and linearity of residuals.

### Multivariate Outlier

Outliers are defined as extreme or atypical values that can decrease and distort the data in a dataset, whereas multivariate outlier is refers to the presence of data that have different relationships among variables (Wada, 2020). Outliers will differ from the majority of data, and they do not need to be exceptionally high or low for all variables in the dataset (Cabana et al., 2021). In this study, the multivariate outlier was assessed by using three methods, namely Mahalanobis Distance, Cook's Distance, and Centred-Leverage value. Mahalanobis Distance is examined through sample means and covariance matrix to detect outliers that presence in a dataset (Etherington, 2021). The benchmark for Mahalanobis Distance is the value of outliers has lower than 15 (Barnett & Lewis, 1978). Furthermore, Cook's Distance is defined as a tool that used to detect and identify one influential point or observations that affecting the regression model (Díaz-García, & González-Farías, 2004). For a case to be identified as an outlier, the value for Cook's Distance must meet the criterion, which is greater than 1 (Cook & Weisberg, 1982). Centred-Leverage value is known as a method to measure the distance between observed points and other values. This Centred-Leverage value is calculated by using the formula,  $\frac{2(k+1)}{n}$ , where k represents the number of

independent variables, and n refers to the number of cases. If the leverage value for an observation is larger than the calculated observation value, then the case is considered as an outlier (Dhakal, 2017).

# Type of Variables

Quantitative variables can be separated into two distinct categories, which are discrete and continuous variables. Discrete variables are variables that have no values in between two given values, whereas continuous variables, on the other hand, can take any values that fall between two given values (Kaliyadan, & Kulkarni, 2019).

# Independent

It is the responses that provided by participants are not correlated, and independent to each other (Flatt & Jacobs, 2019).

## Multicollinearity

Multicollinearity is the presence of correlation among independent variables in a study (Shrestha, 2020). Tolerance and Variance Inflation Factor (VIF) are used to test multicollinearity. Tolerance is the degree of variation in one predictor that unable to be explained by other predictors (Daoud, 2017), whereas VIF is the reciprocal of tolerance (Oke et al., 2019). The cutoff range for tolerance is greater than 0.10, while VIF is below than 10 (Kim, 2019).

### **Independent Errors**

This assumption assumes that there is no correlation between the examined variables and residuals (Williams et al., 2013). Durbin-Watson test is utilized to test the assumptions of independence of errors. The cut of range of the test is below 1 and greater than 3. If the value is closer than 2, then it means there is no autocorrection was found, and is considered as good score (Al-Rawabdeh et al., 2021; Lee, 2016).

# Homoscedasticity, Normality of Residuals, Linearity of Residuals

Homoscedasticity refers to the variance of residuals are being consistent across different combinations of values of independent variables, whereas normality of residuals is the normally distribution of errors (Ernst & Albers, 2017). Linearity of residuals is the linear relationship between predicted value of dependent variables and errors of predictions (Plonsky & Ghanbar, 2018). Scatterplot is the instrument that used to examine homoscedasticity, normality of residuals and linearity of residuals. Assumptions are considered met if the points are normally distributed on the scatterplot, indicating that residuals are not found (Osborne & Waters, 2019).

Lastly, Process Macro version 4 developed by Andrew Hayes (2022) was used to test the mediating role of perfectionism on the relationship between parenting styles and suicidal ideation among Malaysia undergraduate students.

**Table 3.2**Statistical Test Used to Measure Hypotheses

Hypotheses	Test
H1: There is a relationship between parenting styles (authoritative,	Pearson correlation
authoritarian, permissive-indulgent, and permissive-neglectful) and	
suicidal ideation among undergraduate students in Malaysia.	
	D 1.4
H <sub>1a</sub> : There is a relationship between authoritative parenting style and	Pearson correlation
suicidal ideation among undergraduate students in Malaysia.	
H <sub>1b</sub> : There is a relationship between authoritarian parenting style and	Pearson correlation
suicidal ideation among undergraduate students in Malaysia.	
H <sub>1c</sub> : There is a relationship between permissive-indulgent parenting style	Pearson correlation
and suicidal ideation among undergraduate students in Malaysia.	
$\mathbf{H}_{1d}$ : There is a relationship between permissive-neglectful parenting style	Pearson correlation
and suicidal ideation among undergraduate students in Malaysia.	
H2: There is a relationship between parenting styles (authoritative,	Pearson correlation
authoritarian, permissive-indulgent, and permissive-neglectful) and	
perfectionism among undergraduate students in Malaysia.	
H <sub>2a</sub> : There is a relationship between authoritative parenting style and	Pearson correlation
perfectionism among undergraduate students in Malaysia.	
H <sub>2b</sub> : There is a relationship between authoritarian parenting style and	Pearson correlation
perfectionism among undergraduate students in Malaysia.	
H <sub>2c</sub> : There is a relationship between permissive-indulgent parenting style	Pearson correlation
and perfectionism among undergraduate students in Malaysia.	
$\mathbf{H}_{2d}$ : There is a relationship between permissive-neglectful parenting style	Pearson correlation
and perfectionism among undergraduate students in Malaysia.	

Table 3.2

Statistical Test Used to Measure Hypotheses (Continued)

	Hypotheses	Test
Н3:	There is a relationship between perfectionism and suicidal ideation	Pearson correlation
	among undergraduate students in Malaysia.	
H4:	Perfectionism mediates the relationship between parenting styles	Process Macro
	(authoritative, authoritative, permissive-indulgent, and permissive-	version 4
	neglectful) and suicidal ideation among undergraduate students in	
	Malaysia.	
H <sub>4a</sub> :	Perfectionism mediates the relationship between authoritative	Process Macro
	parenting style and suicidal ideation among undergraduate students	version 4
	in Malaysia.	
H <sub>4b</sub> : Perfectionism mediates the relationship between authoritarian		Process Macro
	parenting style and suicidal ideation among undergraduate students	version 4
	in Malaysia.	
H <sub>4c</sub> :	Perfectionism mediates the relationship between permissive-	Process Macro
	indulgent parenting style and suicidal ideation among	version 4
	undergraduate students in Malaysia.	
H <sub>4d</sub> :	Perfectionism mediates the relationship between permissive-	Process Macro
	neglectful parenting style and suicidal ideation among	version 4
	undergraduate students in Malaysia.	

## **Chapter IV**

#### **Results**

### **Data cleaning**

Prior to conducting data analysis, procedures for data cleaning were implemented to identify errors and detect missing data (Ridzuan & Wan Zainon, 2019). This process facilitated the reduction of error variance, enhancement of data quality, and improvement in the accuracy of parameter estimates, consequently decreasing the likelihood of inference errors (Osborne, 2013). A total of 315 sets of responses were collected.

#### Irrelevant Data

No irrelevant data was detected, as each of the 315 sets of responses were Malaysian undergraduate students. Therefore, 315 sets of responses were retained at this stage.

### Missing data

The issue of missing data presented a common challenge for researchers conducting cross-sectional studies (Madley-Dowd et al., 2019). Failing to appropriately address missing data during analyses can result in bias and a reduction in precision (Hughes et al., 2019). Hence, it was important to address missing data prior to proceeding with data analyses. Among of the instances of missing data, 19 cases did not provide responses for any scale; 31 cases solely offered demographic information; 15 cases responded solely to the demographic section and the SPS; and 22 cases did not complete the BSSI. As a result, a total of 87 cases were excluded, while 228 sets of complete responses were preserved as the final data set.

## **Normality Assumption**

The normality of the final data set was assessed using various tests, including histogram, Quantile-Quantile plot, Skewness test, Kurtosis test, and Kolmogorov Smirnov test.

## Histogram

Analysis of the histogram for the three variables revealed a symmetrical distribution, with the majority of observations concentrated around the centre of the range (see Appendix E, p. 152). Thus, the normality assumption based on the histogram was met.

## Quantile-Quantile plot

The Quantile-Quantile (Q-Q) plots for each variable displayed a pattern where the observed data closely clustered along the diagonal line (see Appendix E, p. 154). Therefore, the normality assumption was met in terms of Q-Q plot.

### Skewness and Kurtosis Tests

Both skewness and kurtosis values for the variables fell within the acceptable range of -2 to 2 for a normal distribution (see Appendix E, p. 156). Hence, the normality assumptions for both skewness and kurtosis tests were fulfilled.

## Kolmogorov-Smirnov Test

Results from the Kolmogorov-Smirnov (K-S) Tests for parenting styles, perfectionism, and suicidal ideation were as follows: D (228) = .062, p = .036, D (228) = .076, p = .003, and D (228) = .070, p = .009, respectively (see Appendix E, p. 156). Based on the K-S test results, the normally assumption was deemed to be satisfied.

### Summary

None of the five aforementioned normality assumptions were found to be violated.

Therefore, this data set was deemed to exhibit a normal distribution.

### **Outliers**

#### Univariate outliers

Boxplot was used to identify the univariate outliers that appeared in this current study (see Appendix F, p. 157). As shown in the boxplot for each variable, none of the univariate outliers was found.

### Multivariate outliers

This present study utilized the indicators of Mahalanobis Distance, Cook's Distance, and Centred Leverage as the analysis tools to investigate and remove the multivariate outliers or influential cases. According to the casewise diagnostics (see Appendix F, p. 159), there were seven potential multivariate outliers were identified as they exceeded two standard deviations, which were Case 3, Case 7, Case 11, Case 13, Case 150, Case 153, and Case 193. The results of Mahalanobis Distance, Cook's Distance, and Centred Leverage were summarized (see Appendix F, p. 159). As according to the benchmark of Mahalanobis Distance, the value for Case 3 (6.77496), Case 7 (5.90591), Case 11 (4.68462), Case 13 (4.13242), Case 150 (1.26671), Case 153 (3.23918), and Case 193 (1.97850) has lower than 15 (Barnett & Lewis, 1978). Besides, for all the seven potential multivariate outliers, once their Cook Distance is greater than is greater than 1, then these cases might be outliers (Cook & Weisberg, 1982). However, the value of Cook's Distance for the Case 3 (.03745), Case 7 (.03428), Case 11 (.02968), Case 13 (.03286), Case 150 (.01063), Case 153 (.03151), and Case 193 (.01493) were not exceeded 1. While the calculated range of Centred Leverage Value by using the formula,  $2\left(\frac{2+1}{228}\right) = 0.02631$ , the value for Case 3 (.02985), Case 7 (.02602), Case 11 (.02064), Case 13 (.01820), Case 150 (.00558), Case 153 (.01427), and Case 193 (.00872) were not twice higher than the calculated leverage value. As a result, all the seven cases were not removed as they have not breached the benchmark of Mahalanobis Distance, Cook's Distance, and Centred Leverage. Therefore, no outlier was found in this present study.

### **Descriptive Statistics**

The descriptive information of demographic variables of participants was shown in Appendix G. From the descriptive statistics, the total sample of this present study has involved a total of 228 participants (36% male, 61.4% female, and 2.6% prefer not to say)

which from different universities in Malaysia. Among the sample, the age range for the participants are between 18 to 26 (M = 21.54, SD = 1.43). Majority of the participants were aged 22 (32.9%), followed by aged 21 (23.7%), and 20 years old (18.0%). Present study shown that 95.2% of participants were Chinese (n = 217), 3.5% were Indian (n = 8), and lastly Malay was accounted for 1.3% (n = 3). Furthermore, majority of respondents were studied at University Tunku Abdul Rahman (UTAR) (n = 181), while the remaining were from different universities in Malaysia.

According to the descriptive statistics for four main variables in the present study, the mean and standard deviation that indicated for parental responsiveness (M = 57.85, SD = 22.47), parental control (M = 65.12, SD = 17.37), perfectionism cognitions (M = 57.39, SD = 20.19), and suicidal ideation (M = 15.03, SD = 8.88), respectively (see Appendix G, p. 164).

### **Multiple Linear Regression Assumptions**

# Type of Variables

All of the predictors were a quantitative nature, while the outcome variable was continuous, thereby aligning with the assumption of Multiple Linear Regression (MLR).

### Independent

It was ensured that each respondent's provided values remained independent of those collected from all other respondents, thus adhering to the independence assumption of MLR.

\*\*Multicollinearity\*\*

In order to evaluate multicollinearity among the three independent variables — parenting styles, perfectionism, and suicidal ideation — the Variance Inflation Factor (VIF) and tolerance were employed. If the value of VIF is lower than 10 and the value of tolerance is greater than .10, the assumption of multicollinearity is not violated (Shrestha, 2020). The values of VIF for parental responsiveness, parental control, and perfectionism were 1.296, 1.025, 1.298, respectively, where all of the values were lower than 10. The values of

tolerances for parental responsiveness, parental control, and perfectionism were .772, .976, .770, respectively, which all of the values were greater than .10 (see Appendix H, p. 167). The indicators of VIF and tolerance did not support multicollinearity, thereby meeting the assumption of MLR.

### **Independent errors**

Durbin Watson (DW) statistic was utilized to assess the serial correlation among residuals. Acceptable range of the DW statistic fall between 1 and 3. In this study, the DW statistic yielded a value of 1.614 (see Appendix H, p. 167), falling within the acceptable range and indicating no violation of this assumption.

# Homoscedasticity, Normality of Residuals, Linearity of Residuals

A scatterplot was generated to illustrate the distribution of residuals (see Appendix H, p. 168). The visual representation indicated an even dispersion of residuals along the zero line, suggesting no violation of the assumptions of homoscedasticity, normality of residuals, and linearity.

# Summary

Preliminary analyses were conducted to ensure no violation of the assumptions of multicollinearity, independence of residuals, homoscedasticity, normality of residuals, and linearity of variables. This data set met the assumption of MLR.

### **Pearson Product-Moment Correlation (PPMC)**

In order to discover the linear relationship between two variables, a Pearson correlation analysis was employed prior to proceeding with MLR.

H1: There is a relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia.

 $H_{1a}$ : There is a relationship between authoritative parenting style and suicidal ideation

among undergraduate students in Malaysia.

 $H_{1b}$ : There is a relationship between authoritarian parenting style and suicidal ideation among undergraduate students in Malaysia.

 $H_{1c}$ : There is a relationship between permissive-indulgent parenting style and suicidal ideation among undergraduate students in Malaysia.

 $H_{1d}$ : There is a relationship between permissive-neglectful parenting style and suicidal ideation among undergraduate students in Malaysia.

Correlation analysis was conducted to examine this relationship (see Appendix I, p. 169). The results of PPMC showed that authoritative and permissive-indulgent parenting styles were negatively and significantly related to suicidal ideation, with r(103) = -.721, p < .001 and r(40) = -.789, p < .001, respectively, indicating a strong relationship. On the other hand, authoritarian and permissive-neglectful parenting styles demonstrated a statistically significant positive correlation with suicidal ideation, with r(61) = .617, p < .001 and r(16) = .557, p = .016, respectively, indicating a moderate relationship. Therefore, these findings provided statistical support for Hypothesis 1.

H2: There is a relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and perfectionism among undergraduate students in Malaysia.

 $H_{2a}$ : There is a relationship between authoritative parenting style and perfectionism among undergraduate students in Malaysia.

 $H_{2b}$ : There is a relationship between authoritarian parenting style and perfectionism among undergraduate students in Malaysia.

H<sub>2c</sub>: There is a relationship between permissive-indulgent parenting style and perfectionism among undergraduate students in Malaysia.

 $H_{2d}$ : There is a relationship between permissive-neglectful parenting style and

### perfectionism among undergraduate students in Malaysia.

Correlation analysis was conducted to examine the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, permissive-neglectful) and perfectionism (see Appendix I, p. 170). The results indicated statistically significant positive correlations between authoritative, authoritarian, and permissive-neglectful parenting styles and perfectionism, with r(103) = .634, p < .001, r(61) = .664, p < .001, and r(16) = .474, p = .047, respectively. However, no statistically significant correlation was observed between permissive-indulgent parenting style and perfectionism, r(40) = .142, p = .369. As a result, Hypothesis 2 was partially supported statistically. Additionally, authoritative, authoritarian, and permissive-neglectful parenting styles showed a moderate relationship with suicidal ideation.

# H<sub>3</sub>: There is a relationship between perfectionism and suicidal ideation among undergraduate students in Malaysia.

The relationship between perfectionism and suicidal ideation was positive and statistically significant, r(226) = .449, p < .001, indicating a moderate relationship (see Appendix I, p. 171). Hence, this hypothesis was support statistically.

# **Multiple Linear Regression Analysis**

To examine this proposed model, a MLR analysis was conducted without the violation of any MLR assumption.

### Authoritative Parenting Style, Perfectionism, and Suicidal Ideation

The regression revealed a statistically significant model, F(2, 102) = 55.751, p < .001, explaining 51.3% of the variance. Authoritative parenting style ( $\beta = -.765$ , p < .001) significantly predicted suicidal ideation, while perfectionism ( $\beta = .069$ , p = .436) was not a significant predictor of suicidal ideation (see Appendix J, p. 172).

### Authoritarian Parenting Style, Perfectionism, and Suicidal Ideation

In terms of the relationship among authoritarian parenting style, perfectionism, and suicidal ideation, the analysis demonstrated a significant relationship, F(2, 60) = 18.415, p < .001, while accounting for 36% of the variance. Authoritarian parenting style ( $\beta = .602$ , p < .001) significantly predicted suicidal ideation, whereas perfectionism ( $\beta = .021$ , p = .877) was not statistically predicted suicidal ideation (see Appendix J, p. 173).

### Permissive-Indulgent Parenting Style, Perfectionism, and Suicidal Ideation

The regression model for permissive-indulgent parenting style, perfectionism, and suicidal ideation yielded a significant result, F(2, 39) = 35.065, p < .001, accounting for 62.4% of the variance. Permissive-indulgent parenting style ( $\beta = -.809$ , p < .001) significantly predicted suicidal ideation, however, perfectionism ( $\beta = .141$ , p = .152), showed not significantly predicted to suicidal ideation (see Appendix J, p. 174).

# Permissive-Neglectful Parenting Style, Perfectionism, and Suicidal Ideation

The regression model result for permissive-neglectful, perfectionism, and suicidal ideation was not statistically significant, F(2, 15) = 3.449, p = .059, while accounting for 22.4% of the variance (see Appendix J, p. 175).

### **Mediational Analysis**

Process Macro version 4 that developed by Hayes (2022) was used to examine the mediating effect of perfectionism on the relationship between authoritative parenting style and suicidal ideation, authoritarian parenting style and suicidal ideation, permissive-indulgent parenting style and suicidal ideation, and permissive-neglectful parenting style and suicidal ideation. The numbers of bootstrap samples were set as 10,000 and confidence interval was 95% as followed the default setting. To confirm the mediating role of perfectionism, the value zero should not fall between the lower level of confidence interval (LLCI) and upper level of confidence interval (ULCI). If the confidence interval of indirect effect does not

contain zero, a mediation effect is supported statistically (Hayes, 2017).

H4: Perfectionism mediates the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia.

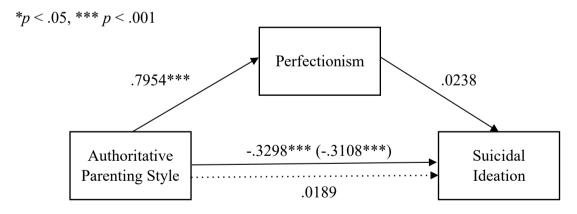
 $H_{4a}$ : Perfectionism mediates the relationship between authoritative parenting style and suicidal ideation among undergraduate students in Malaysia.

The result was shown in Appendix K. According to the result, the indirect effect of authoritative parenting style on suicidal ideation through perfectionism was positive but not statistically significant, B = .0189, SE = .0235, 95% CI [-.028, .065]. Therefore, perfectionism had no mediating effect in the association between authoritative parenting style and suicidal ideation.

Figure 4.1

Mediating Effect of Perfectionism on Authoritative Parenting Style – Suicidal Ideation

Association



*Note.* The total effect is in brackets.

Direct pathway

Indirect pathway

 $H_{4b}$ : Perfectionism mediates the relationship between authoritarian parenting style and suicidal ideation among undergraduate students in Malaysia.

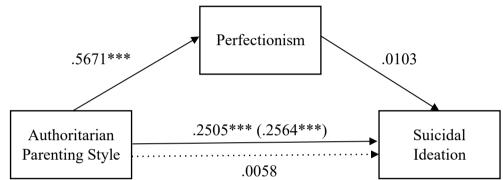
The result (see Appendix K, p. 178) of this study revealed that the indirect effect of

authoritarian parenting style on suicidal ideation through perfectionism was positive but not statistically significant, B = .0058, SE = .0423, 95% CI [-.074, .096]. Therefore, perfectionism had no mediating effect in the relationship between authoritarian parenting style and suicidal ideation.

Figure 4.2

Mediating Effect of Perfectionism on Authoritarian Parenting Style – Suicidal Ideation

Association



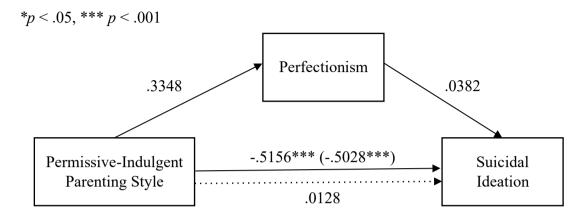
*Note.* The total effect is in brackets.

Direct pathway Indirect pathway

 $H_{4c}$ : Perfectionism mediates the relationship between permissive-indulgent parenting style and suicidal ideation among undergraduate students in Malaysia.

According to the results in Appendix K, the indirect effect of permissive-indulgent parenting style on suicidal ideation through perfectionism was positive but not statistically significant, B = .0128, SE = .0190, 95% CI [-.017, .059]. Therefore, the result has shown that perfectionism had no mediating effect in the relationship between permissive-indulgent parenting style and suicidal ideation.

**Figure 4.3**Mediating Effect of Perfectionism on Permissive-Indulgent Parenting Style – Suicidal Ideation Association



*Note.* The total effect is in brackets.

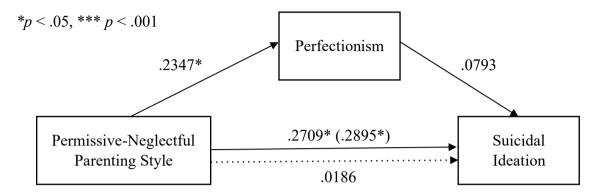
Direct pathway Indirect pathway

 $H_{4d}$ : Perfectionism mediates the relationship between permissive-neglectful parenting style and suicidal ideation among undergraduate students in Malaysia.

The analysis result (see Appendix K, p. 182) found out that the indirect effect of permissive-neglectful parenting style on suicidal ideation through the mediating role of perfectionism was positive but not statistically significant, B = .0186, SE = .0633, 95% CI [-.123, .134]. Therefore, this has shown that perfectionism has no mediating effect in the relationship between permissive-neglectful parenting style and suicidal ideation.

Figure 4.4

Mediating Effect of Perfectionism on Permissive-Neglectful Parenting Style – Suicidal Ideation Association



*Note.* The total effect is in brackets.

Direct pathway

Indirect pathway

Hence, in a conclusion, according to the mediational analysis, it shown that hypothesis 4, hypothesis 4a, hypothesis 4b, hypothesis 4c, and hypothesis 4d were not supported.

# **Summary of Findings**

**Table 4.1**Summary of Results

	Hypotheses	Decision
H1:	There is a relationship between parenting styles (authoritative,	Supported
	authoritarian, permissive-indulgent, and permissive-neglectful) and	
	suicidal ideation among undergraduate students in Malaysia.	
H <sub>1a</sub> :	There is a relationship between authoritative parenting style and	Supported
	suicidal ideation among undergraduate students in Malaysia.	
H <sub>1b</sub> :	There is a relationship between authoritarian parenting style and	Supported
	suicidal ideation among undergraduate students in Malaysia.	
H <sub>1c</sub> :	There is a relationship between permissive-indulgent parenting style	Supported
	and suicidal ideation among undergraduate students in Malaysia.	
H <sub>1d</sub> :	There is a relationship between permissive-neglectful parenting style	Supported
	and suicidal ideation among undergraduate students in Malaysia.	
H2:	There is a relationship between parenting styles (authoritative,	Partially
	authoritarian, permissive-indulgent, and permissive-neglectful) and	Supported
	suicidal ideation among undergraduate students in Malaysia.	
H <sub>2a</sub> :	There is a relationship between authoritative parenting style and	Supported
	perfectionism among undergraduate students in Malaysia.	
H <sub>2b</sub> :	There is a relationship between authoritarian parenting style and	Supported
	perfectionism among undergraduate students in Malaysia.	
H <sub>2c</sub> :	There is a relationship between permissive-indulgent parenting style	Not Supported
	and perfectionism among undergraduate students in Malaysia.	

Table 4.1

Summary of Results (Continued)

	Hypotheses	Decision
H <sub>2d</sub> :	There is a relationship between permissive-neglectful parenting style	Supported
	and perfectionism among undergraduate students in Malaysia.	
Н3:	There is a relationship between perfectionism and suicidal ideation	Supported
	among undergraduate students in Malaysia.	
H4:	Perfectionism mediates the relationship between parenting styles	Not Supported
	(authoritative, authoritarian, permissive-indulgent, and permissive-	
	neglectful) and suicidal ideation among undergraduate students in	
	Malaysia.	
H <sub>4a</sub> :	Perfectionism mediates the relationship between authoritative	Not Supported
	parenting style and suicidal ideation among undergraduate students	
	in Malaysia.	
H <sub>4b</sub> :	Perfectionism mediates the relationship between authoritarian	Not Supported
	parenting style and suicidal ideation among undergraduate students	
	in Malaysia.	
H <sub>4c</sub> :	Perfectionism mediates the relationship between permissive-	Not Supported
	indulgent parenting style and suicidal ideation among	
	undergraduate students in Malaysia.	
H <sub>4d</sub> :	Perfectionism mediates the relationship between permissive-	Not Supported
	neglectful parenting style and suicidal ideation among	
	undergraduate students in Malaysia.	
H <sub>4c</sub> :	parenting style and suicidal ideation among undergraduate students in Malaysia.  Perfectionism mediates the relationship between permissive-indulgent parenting style and suicidal ideation among undergraduate students in Malaysia.  Perfectionism mediates the relationship between permissive-neglectful parenting style and suicidal ideation among	Not Supported

### Chapter V

#### Discussion

### **Parenting Styles and Suicidal Ideation**

H1: There is a relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia.

The first hypothesis was supported in the present study, where parenting styles shown correlation with suicidal ideation among undergraduate students in Malaysia. Specifically, authoritative and permissive-indulgent parenting styles were negatively correlated with suicidal ideation, whereas authoritarian and permissive-neglectful parenting styles were positively correlated with suicidal ideation.

 $H_{1a}$ : There is a relationship between authoritative parenting style and suicidal ideation among undergraduate students in Malaysia.

The results of the present study indicated a significant negative correlation between authoritative parenting style and suicidal ideation. This result was aligning with previous research (Donath et al., 2014; Reddy et al., 2022; Singh & Behmani, 2021).

For example, according to Yterdal (2016), as individuals with this parenting style exhibit better psychological adjustments, reducing the likelihood of internalizing or externalizing behaviours, where serves as protective factor against suicidal ideation.

Secondly, according to Li et al. (2015), this parenting style also exhibits a negative association with hopelessness due to the strong emotional connections within the family unit, thus reducing the risk of internalizing symptoms and suicidal ideation.

This can be explained by the presence of positive parental characteristics, such as emotional responsiveness and the use of appropriate boundaries (Baumrind, 2005). As a result, individuals raised in an authoritative parenting style are better equipped to manage

negative emotions and experiences (Morris et al., 2007), facilitating the development of adaptive internal working models of self and others (Li et al., 2015). Therefore, they are less likely to consider suicidal ideation as an effective coping mechanism for managing stress or obstacles.

 $H_{1b}$ : There is a relationship between authoritarian parenting style and suicidal ideation among undergraduate students in Malaysia.

The findings of this study revealed a significant positive correlation between the authoritarian parenting style and suicidal ideation. It demonstrated that individuals who perceived their parents as employing authoritarian parenting style faced an elevated risk of experiencing suicidal ideation. This outcome was supported by previous study (Gorostiaga et al., 2019; King et al., 2018; Sun et al., 2017; Uwaoma et al., 2023). For instance, according to Gorostiaga et al. (2019), the presence of harsh control and psychological control that characterized by authoritarian parenting style are positively correlated with suicidal ideation.

This is because the absence of parental support may lead individuals to perceive low levels of familial acceptance and involvement, potentially prompting thoughts of suicide as an escape mechanism (Miller et al., 2015). Authoritarian parents, with their excessively high expectations and lack of responsiveness, often diminish their children's resilience and self-esteem (Sun & Ban, 2022). This parenting style not only discourages open communication but also fosters an environment where obedience is paramount, potentially hindering the development of problem-solving and decision-making skills (Karunaharan et al., 2021). Consequently, individuals raised under this parenting style may struggle to form positive Internal Working Models (IWM), leading to difficulties in developing a sense of competence, self-worth, and supportive perceptions of others (Otani et al., 2016). Moreover, the absence of family support exacerbates adverse psychological adjustment, leading individuals with authoritarian parenting style to resort most aggressive coping mechanism when faced with

obstacles and distress (Choi et al., 2020). Eventually, they may perceive suicide as a means to escape the overly strict and unsympathetic home environment.

 $H_{1c}$ : There is a relationship between permissive-indulgent parenting style and suicidal ideation among undergraduate students in Malaysia.

The present study indicated a significant negative correlation between permissive-indulgent parenting style and suicidal ideation, consistent with previous research findings (Arafat et al., 2022; Uwaoma et al., 2023). This suggests that individuals with permissive-indulgent parenting style, characterized by high levels of responsiveness and low levels of control, were less likely to experience suicidal ideation.

For example, a study revealed that suicidal ideation is less likely to be associated with permissive-indulgent parenting style, where individuals with this parenting style tend to have higher moral reasoning levels and unlikely to form an accepting attitude toward suicide (Choi et al., 2020). Furthermore, according to Singh and Behmani (2021), individuals who perceive their parents adopting permissive-indulgent parenting style were more probable to reduce negative impact of suicidal ideation, with family cohesion works as a defence measure for suicidal ideation.

The characteristic of high level of responsiveness possess by this parenting style can contribute to positive perceptions of parenting, thereby offering a protective effect against suicidal ideation (Kushal et al., 2021). This can be explained by the communication and reasoning employed by permissive-indulgent parents, fostering independence and reflecting a friendly parenting attitude (Yterdal, 2016). Individuals raised under the permissive-indulgent parenting style perceive higher levels of parental support, crucial during the transitional phase of emerging adulthood (Scardera et al., 2020). This parenting style emphasizes acceptance and involvement, with parents consistently offering love and support for their children's decision. Unlike the authoritarian parenting style, the permissive-indulgent style provides

high levels of parental support, acting as a buffer against suicidal ideation (Mackin et al., 2016). According to the stress-buffering model, elevated parental support are protective factor against suicidal ideation, particularly during periods of experiencing high levels of interpersonal stress (Hazel et al., 2014).

 $H_{1d}$ : There is a relationship between permissive-neglectful parenting style and suicidal ideation among undergraduate students in Malaysia.

The present study showed a significant positive correlation between permissive-neglectful parenting style and suicidal ideation among undergraduate students. This suggests that individuals with both low responsiveness and demandingness, as characterized by permissive-neglectful parenting style, are more vulnerable to the risk of engaging in suicidal ideation. This finding was in line with the previous research (Nunes & Mota, 2017; Tugnoli et al., 2022).

For example, a study indicated that individuals who have low connectedness with their parents have been reported to be associated with suicidal ideation (Kuramoto-Crawford et al., 2017). A study conducted among undergraduate students revealed that there is a higher rate of suicidal ideation than the general population, especially the students who perceived the parenting style as permissive-neglectful parenting style (Tugnoli et al., 2022).

The absence of parental responsiveness and support in permissive-neglectful parenting leads individuals to employ ineffective coping strategies, increasing the risk of suicide (Kuppens & Ceulemans, 2019; Nunes & Mota, 2017). With little guidance or demands from parents, individuals raised in this style exhibit unfavourable outcomes and may resort to escape mechanism like substance abuse, dropping out, and even suicide (Skinner & Zimmer-Gembeck, 2016). This is because the lack of parental warmth contributes to higher stress reactivity, causing individuals to perceive life as threatening and potentially leading to suicidal ideation (Otsuka et al., 2019). In short, inadequate parental responsiveness

fosters ineffective coping strategies and heightens the risk of suicide.

Parents who employed permissive-neglectful parenting style lack trust, engagement, and control over their children, resulting in poor impulse control and adverse psychological outcomes (Sun et al., 2017). This style contributes to a dysfunctional attribution style, leading individuals to feel incapable of handling stressors, fostering self-doubt, hopelessness, and low self-esteem (Yterdal, 2016). As a result, individuals with permissive-indulgent parenting style may experience feelings of thwarted belongingness and perceived burdensomeness, increasing the risk of suicidal ideation that align with IPTS (Tucker et al., 2018).

# **Parenting Styles and Perfectionism**

H2: There is a relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and perfectionism among undergraduate students in Malaysia.

The hypothesis in this present study was partially supported, with parenting styles showing a correlation with perfectionism among undergraduate students in Malaysia.

Specifically, three out of four parenting styles were positively correlated with perfectionism. However, permissive-indulgent parenting style was not significantly associated with perfectionism.

H<sub>2a</sub>: There is a relationship between authoritative parenting style and perfectionism among undergraduate students in Malaysia.

The result of this current study showed that authoritative parenting style was positively and significantly correlated with perfectionism, which was consistent with past studies (Sapieja et al., 2011; Craddock et al., 2009), supporting the idea that authoritative parenting style is more likely to be connected with adaptive perfectionism.

For example, according to Patock-Peckham and Corbin (2019), authoritative parenting style is positively associated with adaptive perfectionism, such as high personal

standards. Moreover, another study conducted by Turner and Turner (2011) revealed that children who received parental warmth are negatively associated with maladaptive perfectionism.

A nurturing environment characterized by a balanced combination of parental support, guidance, and expectations is unlikely to contribute to the development of high standards or the imposition of perfectionistic pressures on individuals (Hibbard & Walton, 2014). This supportive environment could have affected their children's self-evaluation and cognitive expectancies, contributing to a negative correlation between authoritative parenting styles and maladaptive perfectionism (Soysa & Weiss, 2014).

Furthermore, authoritative parenting style promotes adaptive perfectionism in children, especially in the dimensions of personal standard or organization. Children who perceive their parents as authoritative are more likely to contribute higher effort and commitment to overcome challenges and difficulties (Watabe, 2018). The realistic expectations of parents enable children not to feel overwhelmed by pressure to achieve reasonable standards. Instead, they tend to achieve parental demands by developing their own self-standards and establish behavioural tendencies through organization or structure that enhance their ability to achieve these standards (Sapieja et al., 2011), thereby enabling them to have better resilience in dealing with challenges.

 $H_{2b}$ : There is a relationship between authoritarian parenting style and perfectionism among undergraduate students in Malaysia.

The findings of this present study indicated that authoritarian parenting style had a significant positive relationship with perfectionism, which is consistent with similar results from several past studies (Damian et al., 2022; Mahmood et al., 2023; Walton et al., 2018).

For instance, in a study conducted by Kawamura et al. (2002), it was found out that authoritarian and harsh parents was associated with maladaptive perfectionism, such as

concern over mistakes and doubts about actions. This result is further supported by research conducted by Walton et al. (2018), who revealed that parents who set high demands and expectations for perfection in children without displaying sufficient affection or warmth appears to be associated with feelings of criticized, self-doubt, and the belief that one must always strive for perfection.

There are several reasons that lead to the development of perfectionism in children who grow up with an authoritarian parenting style. Firstly, the expansion of cognitive abilities, such as self-consciousness and awareness of social standards, directly affects individuals, making them particularly vulnerable to expectations and feedback from others (Flett et al., 2002). Strict and controlling parents may foster ambiguous self-cognition in their children, leading to the development of reverse psychology, where failure to meet parental expectations results in negative self-perception and both internalized and externalized behaviours (Feng et al., 2021). The negative self-representation leads individuals to prioritize the pursuit of nearly unattainable goals as central, eventually resulting in the development of maladaptive perfectionistic cognitions marked by negative self-evaluation (Soenens et al., 2008).

Other than that, the development of maladaptive perfectionism in children raised under an authoritarian parenting style may also stem from the quality of the parent-child relationship (Ko, 2019). Attachment insecurity leads individuals to develop perfectionistic tendencies and behaviours as a means to fulfil the needs for acceptance from others. They learn and believe that they can only be accepted by others when they are perfect (Ko, 2019). Therefore, these children highly develop harsh self-criticism, fear of making mistakes, and concern about their mistakes, which subsequently lead to the perfectionistic expectations and development of perfectionism (Kawamura et al., 2002).

 $H_{2c}$ : There is a relationship between permissive-indulgent parenting style and

### perfectionism among undergraduate students in Malaysia.

According to the result of this present study, it was shown that the permissive-indulgent parenting style was positively but not statistically significant correlated with perfectionism. However, the majority of past studies have found that the permissive-indulgent parenting style has no relationship with perfectionism (Craddock et al., 2009; Hibbard & Walton, 2014). For instance, according to research carried out by Hibbard and Walton (2014), they found that the permissive-indulgent parenting style buffers individuals from developing perfectionism. Additionally, Walton et al. (2018) also revealed that the permissive-indulgent parenting style protects children from the sense of being criticized, which leads to positive adjustment.

According to the social expectations model, it is proposed that social expectations, composed of parental expectations and parental criticism, are integral parts of the causes that contribute to the development of perfectionism (Smith et al., 2022). Permissive-indulgent parents, characterized by high warmth and low demands on their children (Tehrani et al., 2024), may inadvertently fail to instil a drive for achieving high standards in their children, as the absence of pressure from parents to meet high expectations may diminish their motivation (Hibbard & Walton, 2014). Other than that, permissive-indulgent parents may buffer the adverse effects of psychological controls on externalizing problems (Beyarslan & Uzer, 2022), which protect their children from feelings of being criticized and concern about making mistakes (Hibbard & Walton, 2014).

Furthermore, permissive-indulgent parents are more likely to show unconditional love and acceptance to their children (Baumrind, 1975). This can be helpful for children to feel secure in the love of their parent, which, in turn, promotes unconditional self-acceptance in children (Hall et al., 2009). The unconditional love from parents will have a positive impact on children as they will experience less nervousness derived from failure to achieve

expectations (Yim, 2022), as well as learn active coping skills to deal with failures and setbacks (Ada et al., 2018). Therefore, this will protect the children from developing perfectionistic cognitions.

H<sub>2d</sub>: There is a relationship between permissive-neglectful parenting style and perfectionism among undergraduate students in Malaysia.

The result of the current study showed that permissive-neglectful parenting style had a significant positive relationship with perfectionism, consistent with past studies (Ko et al., 2019; Maloney et al., 2014; Walton et al., 2018). For instance, Zikopoulou et al. (2021) discovered that children who reported having permissive-neglectful parents tended to develop perfectionistic tendencies. Similarly, Ko et al. (2019) found similar results, indicating that an adverse parenting style lacking parental warmth and affection was associated with perfectionism.

This can be explained by children raised under permissive-neglectful parenting style experiencing physical and emotional neglect by their parents, which is associated with insecure attachment, shame, and perfectionism. These manifestations include socially prescribed perfectionism, concern over mistakes, doubts about actions, and perfectionistic self-presentation (Ko et al., 2019). The low level of care and responsiveness from neglectful parents leads individuals to believe that they are flawed and unworthy of affection (Deas et al., 2011). Therefore, children might respond to parental neglect by exhibiting perfectionistic behaviours as a coping mechanism, believing that becoming flawless will help them them to regain a sense of control and the affection they lack from their parents (Alpheis & Altenmüller, 2022).

Furthermore, the lack of emotional or physical support affects children's self-regulation, resilience, and self-esteem (Kuppens & Ceulemans, 2019), making them more vulnerable to higher levels of stress due to fear of failure and evaluation anxiety (Huang et

al., 2022). Consequently, they tend to be more concerned about their mistakes and place higher demands on themselves, leading to increased self-criticism when they fail to meet the standards (Ying et al., 2021), which perpetuating the development of perfectionism.

### Perfectionism and Suicidal Ideation

 $H_3$ : There is a relationship between perfectionism and suicidal ideation among undergraduate students in Malaysia.

The findings of the present study supported the third hypothesis, indicating that perfectionism was statistically significantly positively correlated with suicidal ideation, aligning with several past studies (Hamilton & Schweitzer, 2000; Liu et al., 2023; Smith et al., 2018; You et al., 2022). For example, a study conducted by Shahnaz et al. (2018) found that individuals with a perfectionistic orientation have higher levels of suicidal ideations. This finding is further supported by another study indicating that perfectionistic concerns are positively associated with suicidal ideation (Zeifman et al., 2020).

For perfectionistic individuals, they have stringent criteria and rigid thinking for the evaluation of success and failure (Hewitt et al., 1997). They not only possess perfectionistic traits but also strive to maintain and present a perfect image to others while concealing imperfections in public (Hewitt et al., 2003). Their perfectionistic cognitions are found to be associated with maladjustment, heightened instances of failures, and increased stress level, which can lead individuals to develop a sense of hopelessness connected with suicidal ideations and behaviours (Shahnaz et al., 2018).

Additionally, individuals with a high level of perfectionism feel that others have extremely high expectations of them and are oversensitive to rejection and criticism when they fail to achieve these expectations (Chen et al., 2015; Magson et al., 2019). They tend to feel that others are disappointed in them, which amplifies the sense of hopelessness (Levine, 2007). The sense of hopelessness caused by failing to live up to expectations can lead to

social isolation, severe loneliness, and ultimately, depression and suicide (Heisel et al., 2003).

Apart from that, parental-driven perfectionism has also been associated with thwarted belongingness in perfectionists. They develop a belief that they are unaccepted and unloved by their parents due to their failure to meet unattainable expectations (Sommerfeld & Malek, 2019). When perfectionists perceive social rejection or disconnection from others, it can diminish their sense of relatedness. This reduced sense of relatedness increases their feelings of loneliness, decreases social support, and subsequently leads to a higher level of suicidal ideation (Groholt et al., 2000).

# Parenting Styles, Perfectionism, and Suicidal Ideation

H4: Perfectionism mediates the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful) and suicidal ideation among undergraduate students in Malaysia.

 $H_{4a}$ : Perfectionism mediates the relationship between authoritative parenting style and suicidal ideation among undergraduate students in Malaysia.

H<sub>4b</sub>: Perfectionism mediates the relationship between authoritarian parenting style and suicidal ideation among undergraduate students in Malaysia.

 $H_{4c}$ : Perfectionism mediates the relationship between permissive-indulgent parenting style and suicidal ideation among undergraduate students in Malaysia.

 $H_{4d}$ : Perfectionism mediates the relationship between permissive-neglectful parenting styles and suicidal ideation among undergraduate students in Malaysia.

The findings of the present study indicated that the relationship between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful parenting styles) and suicidal ideation, mediated by perfectionism, did not yield statistically significant results. This suggests that perfectionism did not serve as a significant mediator between parenting styles and suicidal ideation, as hypotheses 4a, 4b, 4c, and 4d were not supported.

Previous research has also reported that not all parenting styles predict suicidal ideation through the mediator of perfectionism (Ying et al., 2021). For instance, only negative parenting styles, namely authoritarian and permissive-neglectful parenting styles, were significantly related to suicidal ideation via maladaptive perfectionism, especially for those experiencing parental rejection (Ying et al., 2021).

This indicates the necessity of considering additional factors as mediators or moderators when examining the relationship between parenting styles and suicidal ideation. For example, gender may play a crucial role in mediating this relationship (Fernández-García et al., 2022). A study conducted in Hong Kong suggested that parents may have higher expectations for their sons than for their daughters. (Chui & Wong, 2016). In other words, high parental expectations can have profound effects on children's psychological well-being. Males who perceive the need to meet exceptionally high standards set by their parents may experience heightened stress, anxiety, and self-criticism (Lee & Kang, 2018). This internalized pressure to excel can exacerbate perfectionistic tendencies, as individuals may feel compelled to strive for flawlessness to meet parental expectations, resulting in negative emotions such as depression and suicidal ideation (Ma et al., 2018). However, gender was not considered as a variable in this present study, despite a higher proportion of females in the sample compared to males.

Secondly, research has underscored the significant role of social support as a protective factor, highlighting its ability to reduce the likelihood of experiencing suicidal ideation (Madjar et al., 2018). Positive peer relationships provide emotional, instrumental, and informational support, which can buffer against the development of suicidal ideation (Wan et al., 2022). Studies have shown the crucial role of positive peer relationships in buffering the vulnerability of suicidal ideation, where supportive peer relationships contribute significantly to individuals' social, emotional, and relational well-being (Cui et al., 2010).

Moreover, peer support fosters a sense of social connectedness, which can counteract feelings of isolation and loneliness (Mackin et al., 2016). This connectedness acts as a protective factor by mitigating the impact of life stressors on mental health. Research by Mackin et al. (2016) suggested that social support can alleviate feelings of thwarted belongingness and perceived burdensomeness, two constructs central to Interpersonal Theory of Suicide. On top of that, higher levels of social support have been associated with improved psychological outcomes and the adoption of adaptive coping strategies (Ye et al., 2020). Individuals with greater social support tend to exhibit lower levels of psychological distress and are better equipped to cope with stressors (Zhang et al., 2018). Adaptive coping strategies, such as seeking support from others, problem-solving, and positive reframing, are essential for managing life challenges and reducing the vulnerability of suicidal ideation (Zhang et al., 2022).

Last but not least, as the development of suicidal ideation is a multifaceted outcome influenced by a convergence of various predisposing, precipitating, and perpetuating factors, thus, it is essential to consider additional variables when investigating this phenomenon. Particularly, acknowledging the psychological factors of individuals is crucial in assessing susceptibility to suicidal ideation. A study conducted in Malaysia shed light to the correlation between hopelessness, depression, anxiety, and stress with suicidal ideation, highlighting hopelessness and depression as significant predictors of suicidal ideation (Ibrahim et al., 2017). Therefore, although the interrelationships among parenting styles, perfectionism, and suicidal ideation yielded statistically significant result individually, it was noteworthy that perfectionism did not emerge as a stronger mediator in the relationship between parenting styles and suicidal ideation. This underscores the complexity of suicidal ideation and emphasizes the importance of considering a broader array of psychological factors in understanding its etiologic and manifestation.

### **Implications**

### Theoretical Implications

The present study adopted the Interpersonal Theory of Suicide (IPTS), Social Expectations Model, and Perfectionism Social Disconnection Model (PSDM) to examine the interrelationships between parenting styles, perfectionism, and suicidal ideation.

The IPTS by Van Orden et al. (2010) suggested that the concurrent existence of two interpersonal constructs, namely thwarted belongingness (TB) and perceived burdensomeness (PB), heightens the susceptibility to suicidal ideation. Based on the results of the current study, the IPTS supported the negative parenting styles (authoritarian and permissive-neglectful parenting styles) exhibit a negative relationship with suicidal ideation. As these parenting styles, characterized by a lack of responsiveness toward children, may contribute to the emergence of feelings of TB and PB. On the contrary, positive parenting styles, such as authoritative and permissive-indulgent parenting styles, with the presence of responsiveness, are more likely to foster a sense of belongingness and serve as a buffer against TB (Hunt et al., 2021). This supported the notion that the presence of TB and PB would increase the vulnerability to suicidal ideation. These outcomes not only validated the IPTS but also provided valuable information for future research exploring the relationship between parenting styles and suicidal ideation. By affirming the reliability of the theory, this study contributed to the existing body of knowledge and underscores the importance of considering interpersonal dynamics in understanding suicidal ideation.

Furthermore, social expectations theory by Flett et al. (2002) was used to investigate the relationship between parenting styles and perfectionism in the current study. The present study empirically supported the application of social expectations theory in understanding the development of perfectionism within the context of different parenting styles. The hypothesis has been supported, as the development of perfectionism results from the conditional

approval associated with parental expectations and parental criticism. This insight deepens our understanding of the underlying mechanisms that drive the development of perfectionistic tendencies and emphasizes the importance of considering the contextual influences of parenting styles in shaping both adaptive and maladaptive perfectionism. It was worth noting that both authoritarian and permissive-neglectful parenting styles may foster the development of maladaptive perfectionism, as children may adopt perfectionism as a coping strategy to obtain conditional approval from their parents. Hence, this study served as a pathway for the future researchers to investigate the specific mechanisms through which different parenting styles influence the development of perfectionism and examine the long-term effects on mental health and well-being.

Last but not least, the PSDM developed by Hewitt et al. (2006) was utilized to examine the relationship between perfectionism and suicidal ideation. The findings of the present study aligned with the model, suggesting that individuals with high levels of perfectionism are more prone to experience social disconnection and hopelessness, thereby heightening the susceptibility to suicidal ideation. However, the mediating analysis conducted in the current study was not supported by this model. Specifically, perfectionism did not emerge as a significant mediator in the relationship between parenting styles and suicidal ideation. Nonetheless, this study might serve as a reference for future research to explore specific subconstructs of the PSDM and their potential mediating roles in the relationship between parenting styles and suicidal ideation.

### **Practical Implications**

This present study contributes to and strengthens public knowledge about the interplay of the variables, including parenting styles, perfectionism, and suicidal ideation.

This present study helps raise public awareness about the impact of different parenting styles on the mental health of undergraduate students. It provides a stepping stone towards creating

educational programs that target parents, educators, and policy makers, highlighting the benefits of authoritative parenting style and the potential risks associated with other negative parenting styles. Additionally, these programs can also benefit parents by helping them understand the importance of providing both warmth and demands for their children, which can be helpful in reducing children's tendency to have suicidal ideation. Increasing public awareness helps create a supportive environment for emerging adults to thrive and keeps them away from suicidal ideation.

Moreover, this study demonstrates that perfectionism is a significant factor associated to suicidal ideation. Therefore, integrating education about perfectionism into existing academic and mental health program can be beneficial. It can offer an idea for the students to recognize and address their perfectionistic cognitions early on and reduce their tendency to develop suicidal ideation. Besides, the authorities can develop an intervention plan to help individuals understand the way of engaging in adaptive perfectionism as well as diminish suicidal thoughts and behaviours. On top of that, the authorities can advocate for policies that support the mental health and well-being of emerging adults and undergraduate students. These policies include work-life balance, reduce academic pressure, and support for parents to practice positive parenting style.

In addition, there is also a need to increase mental help support services for undergraduate students. This can include Cognitive Behavioural Therapy (Wu et al., 2022), Dialectical Behaviour Therapy (McCauley et al., 2018), and mindfulness-based interventions (Schmelefske et al., 2022) that specifically address issues related to parenting styles, perfectionism, and suicidal ideation. Additionally, workshops or support groups can help individuals develop healthy coping mechanism to alleviate their issues more effectively.

In short, suicidal ideation among individuals is highly influenced by parenting styles and perfectionism. By implementing different approaches, this can help individuals to have a

better understanding of the importance of parenting styles and perfectionism, which eventually influences their suicidal thoughts and behaviours. Individuals who struggle to deal with deleterious outcomes related to the key variables can also benefit from the above useful information by referring to the implementation plan, which can help them reduce the harmful effects of parenting styles, perfectionism, and suicidal ideation.

### **Limitations of Study**

In this present study, there are a few limitations to be addressed. First and foremost, this study has applied a cross-sectional research design to examine the relationships between parenting styles, perfectionism, and suicidal ideation among undergraduate students in Malaysia. There is a limitation for cross-sectional study because it only measures exposure and outcome once, and it is challenging to establish causal relationship through cross-sectional research design (Setia, 2016). In short, all variables in this study were only measured once. However, variables such as perfectionism and suicidal ideation might change over time due to environmental factors and personal experiences. Therefore, a cross-sectional research design limits researchers' ability to study changes over time, as it only investigates the prevalence of events at one time and provides a static view of the population.

Other than that, the second limitation of this current study is that all the questionnaires were self-reported, which could threaten the internal validity and influence the results of this study. The self-reported questionnaire is associated with possible biases, such as social desirability, as the respondents may answer the questions in a socially acceptable manner rather than expressing their true opinions and feelings (Grimm, 2010; Presser & Stinson, 1998). This can lead to inaccuracies in the data, as responses may not reflect the respondents' actual thoughts and behaviours.

Lastly, the generalizability of this study is limited by several factors. The targeted participants of this study were limited to the context of Malaysia, which restricts the

generalization across different countries and cultures. Moreover, the targeted participants were restricted to undergraduate students, with the majority of respondents studying at University Tunku Abdul Rahman (UTAR). Furthermore, the ratio of sexes and races was not proportionate. The majority of the respondents were Chinese, comprising 95.2%, and females, comprising 61.4%. Therefore, this might lead to biased results, as females or Chinese individuals may be more likely to report suicidal ideation compared to males.

### **Recommendations of Study**

Future studies are recommended to employ a longitudinal research design instead of a cross-sectional approach to study the relationships between parenting styles, perfectionism, and suicidal ideation. Unlike cross-sectional studies, which only offer correlations of a phenomenon, longitudinal studies involve the continuous or repeated collection of data from the same group of participants over time (Caruana et al., 2015). This allows researchers to track changes within individuals and establish temporal precedence, which is crucial for identifying risk factors (Ribeiro et al., 2015). By employing longitudinal methods, researchers can explore whether negative parenting styles, such as authoritarian and indulgent-neglectful parenting styles, along with maladaptive perfectionism, such as concerns about mistakes, predict suicidal ideation among undergraduate students. This approach enables a deeper understanding of how these factors interact and evolve over time. Therefore, utilizing a longitudinal research design addresses the limitations of the present study by gathering data at multiple time points, offering a more nuanced perspective on the relationships between parenting styles, perfectionism, and suicidal ideation.

Secondly, the presence of social desirability bias poses a significant challenge, particularly when assessing socially sensitive constructs. To mitigate potential biases stemming from this phenomenon, future research can integrate validity checks within surveys to detect inconsistent or socially desirable responses (Durmaz et al., 2020). This might entail

incorporating reverse-coded items or consistency checks to ensure respondents provide genuine and attentive responses. Additionally, utilizing indirect measurement techniques in survey can be beneficial. By utilizing validated scales that assess constructs related to suicidal ideation, such as perceived burdensomeness and thwarted belongingness (Blair et al., 2020), researchers can indirectly explore the relationships while reducing the salience of suicidal ideation as the primary focus. This approach helps alleviate social desirability bias by making it less apparent that suicidal ideation is the primary area of interest in the survey.

Last but not least, in order to ensure a balanced representation of respondents from various universities in Malaysia, it is advisable for future research to collaborate with multiple universities to gather data from undergraduate students. This collaborative approach enables the inclusion of a more diverse participant pool, capturing a broader spectrum of demographic characteristics. By accessing data from undergraduate students across different universities, researchers can enhance the generalizability of the findings beyond the boundaries of a single institution or locality. This broader scope facilitates the applicability of research outcomes to a wider population and contributes to a more comprehensive understanding of the phenomenon under investigation.

### Conclusion

To sum up, the present study has successfully explored the interrelationships among parenting styles, perfectionism, and suicidal ideation, as well as the mediating role of perfectionism in the relationship between parenting styles and suicidal ideation among undergraduate students in Malaysia. The findings supported three out of four proposed hypotheses, which including (1) there is a relationship between parenting styles and suicidal ideation, (2) there is a relationship between parenting styles and perfectionism, and (3) there is a relationship between perfectionism and suicidal ideation. However, it did not find evidence to support the last hypothesis, (4) perfectionism mediates the relationship between

parenting styles and suicidal ideation.

In summary, these results provide a solid foundation for future studies focusing on understanding the correlation between parenting styles (authoritative, authoritarian, permissive-indulgent, and permissive-neglectful), perfectionism, and suicidal ideation among undergraduate students. By addressing this gap in the literature, the study offers a more comprehensive understanding of the influence of parenting styles on suicidal ideation within the context of undergraduate students – a crucial stage of life where individuals are particularly vulnerable to various stressors and societal pressures, making the role of parents as primary social agents and sources of support particularly crucial. Thus, investigating whether different parenting styles serve as protective or risk factors against suicidal ideation is imperative. Although the present study did not find a direct mediating effect of perfectionism on the relationship between parenting styles and suicidal ideation, this does not diminish the significance of the findings. Rather, it highlights the complexity of these interactions and underscores the need for continued research to unravel the underlying mechanism. By shedding light on these relationships, it is crucial to pave the way for more targeted interventions and support systems that can effectively address the challenges and needs of this population.

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#### **Appendices**

#### Appendix A

#### **Ethical Clearance Letter**



## UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)

Wholly owned by UTAR Education Foundation

Re: U/SERC/78-185/2024

5 January 2024

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,

Website: www.utar.edu.my

#### 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 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.	A Study of Perceived Social Support, Self-Esteem and Anxiety as Predictors of Life Satisfaction Among University Students in Malaysia			5 T 2024
2.	The Mediating Role of Perfectionism in the Relationship Between Parenting Styles and Suicidal Ideation Among Undergraduate Students in Malaysia	Cheng Jia Shan     Kong Kah Man	Ms Teoh Xi Yao	5 January 2024 – 4 January 2025

The conduct of this research is subject to the following:

- 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.



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

Thank you.

Yours sincerely.

Professor Ts Dr Faidz bin Abd Rahman

Chairman

UTAR Scientific and Ethical Review Committee

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



#### Appendix B

#### Questionnaire

#### PERSONAL DATA PROTECTION NOTICE

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

- 1. Personal data refers to any information which may directly or indirectly identify a person which could include 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) Employment History
  - g) Medical History
  - h) Blood type
  - i) Race
  - j) Religion
  - k) Photo
  - 1) 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
  - d) For advertorial and news
  - e) For general administration and record purposes
  - f) For enhancing the value of education
  - g) For educational and related purposes consequential to UTAR
  - h) For replying any responds to complaints and enquiries
  - i) For the purpose of our corporate governance
  - j) For the purposes of conducting research/ collaboration
- 3. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of 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 in accordance with our retention policy applicable for us in the event such information is no longer required.
- 5. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy 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.

#### Consent:

- 6. By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to 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 fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.
- 8. You may access and update your personal data by writing to us at: Cheng Jia Shan, jiashan1004@1utar.my
  Kong Kah Man, kahmankong@1utar.my

By proceeding with this form, I declare that I am:

- a) a Malaysian
- b) undergraduate student, aged between 18 to 25 years old

#### 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.

# **Section A: Demographic Information**

Kindly complete the	following	questions	regarding	your	general	demographic.	It will b	e kept
strictly confidential.								

Age:	
Sex	
	Male
	Female
	Prefer not to say
Race	
	Malay
	Chinese
	Indian
	Others (please specify):
Natio	onality
	Malaysian
	Others (please specify):
Are y	you currently pursuing a bachelor's degree in Malaysia?
	Yes
	No
Whic	th institution are you studying at? (e.g., UTAR)

## **Section B: Scale of Parenting Style**

Instruction: Given below are statements to know how your parents deals with you. For each statement 5 options from 1 (Very Wrong) to 5 (Very Right) are given. Tick Mark against each statement on the option that suites the behaviour of your parents in relation to you.

1 2 3 4 5

Very Wrong Mostly Wrong Sometimes Right, Sometime Wrong Mostly Right Very Right

	1	2	3	4	5
Does whatever I tell.					
Spends free time with me.					
Points out my mistakes in the manner that I understand.					
Gives money for my needs.					
Discusses the benefits and detriments of my learning topics.					
Considers my likes in food.					
Controls my game when in excess.					
Shows love to me.					
Enquires the reason for my failure.					
Helps me in studying.					
Confers responsibilities in accordance with my growth.					
Has faith in me.					
Enquires the reasons for reaching home late.					
Accepts my privacy.					
Takes care of my dressing.					
Fulfils my desires with available means.					
Makes me aware that the responsibility of what I do is mine itself.					
Accepts when I say no to what I dislike.					
Tells how I should behave with their friends.					
Talks to me praising about their friends.					
Tries to frame my likes and dislikes.					
Appreciates when I try to become independent.					
Punishes for my mistakes.					
Shows love when I do any mistakes.					

Enquires who my friends are.			
Has given me freedom to select the subject to study.			
Organizes time for my play.			
Gives priorities to my preferences in studies.			
Demands me to be systematic in studies.			
Emphasizes my successes.			
Advices me.			
Celebrates in my success with me.			
Discourages unhealthy foods.			
Gets anxious when I am late to reach home.			
Inquires how I spend money.			
Buy dresses for me according to the latest trends.			
Enquires how I spend my free time.			
Gives me timely advices.			

# **Section C: Perfectionism Cognitions Inventory**

Instructions: Listed below are a variety of thoughts about perfectionism that sometimes pop into people's heads. Please read each thought and indicate how frequently, if at all, the thoughts occurred to you over the last week.

0	1	2	3			4		
Not At All	Sometimes	Moderately Often	Ofte	en	All	Of Th	e Tim	e
				0	1	2	3	4
Why can't I be perfe	ct.							
I need to do better.								
I should be perfect.								
I should never make	e the same mistal	ke twice.						
I've got to keep wor	rking on my goal	s.						
I have to be the best	t.							
I should be doing m	ore.							
I can't stand to mak	e mistake.							
I have to work hard	all the time.							
No matter how muc	h I do, it's never	enough.						
People expect me to	be perfect.							
I must be efficient a	t all times.							
My goals are very h	igh.							
I can always do bett	ter, even if things	s are almost perfect.						
I expect to be perfec	et.							
Why can't things be	e perfect?							
My work has to be	superior.							
It would be great if	everything in my	life was perfect.						
My work should be flawless.								
Things are seldom ideal.								
How well am I doing?								
I can't do this perfectly.								
I certainly have high standards.								
Maybe I should lower my goals.								
I am too much of a								

## **Section D: Beck Scale For Suicidal Ideation**

Instruction: Please carefully read each statement below. Mark the one statement that best describe how you have been feeling in the lifetime. Be sure to read all the statement before making a choice.

Wish to live	□ 0. Moderate to strong
	□ 1. Weak
	□ 2. None
Wish to die	□ 0. None
wish to the	
	□ 1. Weak
	□ 2. Moderate to strong
Reasons for living/dying	□ 0. For living outweigh for dying
	□ 1. About equal
	□ 2. For dying outweigh for living
Desire to make active	□ 0. None
suicide attempt	□ 1. Weak
	□ 2. Moderate to strong
Passive suicidal desire	□ 0. Would take precautions to save life
	□ 1. Would leave life/death to chance
	☐ 2. Would avoid steps necessary to save or maintain life
Time dimension: Duration of	□ 0. Brief, fleeting periods
suicide ideation/wish	□ 1. Longer periods
	□ 2. Continuous (chronic) or almost continuous
Time dimension: Frequency	□ 0. Rare, occasional
of suicide	□ 1. Intermittent
	□ 2. Persistent or continuous
Attitude toward	□ 0. Rejecting
ideation/wish	□ 1. Ambivalent; indifferent
	□ 2. Accepting

Control over suicidal	□ 0. Has sense of control
action/acting-out wish	□ 1. Unsure of control
	□ 2. Has no sense of control
Deterrents to active attempt	□ 0. Would not attempt because of a deterrent
(e.g., family, religion,	☐ 1. Some concern about deterrents
irreversibility)	☐ 2. Minimal or no concern about deterrents
Reason for contemplated	□ 0. To manipulate the environment; get attention, revenge
attempt	□ 1. Combination of 0 and 2
	□ 2. Escape, surcease, solve problems
Method: Specificity/planning	□ 0. Not considered
of contemplated attempt	□ 1. Considered, but details not worked out
	☐ 2. Details worked out/well formulated
Method: Availability/	□ 0. Method not available; no opportunity
Opportunity for	□ 1. Method would take time/effort; opportunity not
contemplated attempt	readily available
	☐ 2a. Method and opportunity available
	☐ 2b. Future opportunity or availability of method anticipated
Sense of "capability" to	□ 0. No courage, too weak, afraid, incompetent
carry out attempt	□ 1. Unsure of courage, competence
	□ 2. Sure of competence, courage
Expectancy/anticipation of	□ 0. No
actual attempt	□ 1. Uncertain, not sure
	□ 2. Yes
Actual preparation for	□ 0. None
contemplated attempt	☐ 1. Partial (e.g., starting to collect pills)
	☐ 2. Complete (e.g., had pills, loaded gun)
Suicide note	□ 0. None
	□ 1. Started but not completed; only thought about
	□ 2. Completed

Final acts in anticipation of	□ 0. None	
death (e.g., insurance, will)	□ 1. Thought about or made some arrangements	
	☐ 2. Made definite plans or completed arrangements	
Deception/concealment of	□ 0. Revealed ideas openly	
contemplated suicide	□ 1. Held back on revealing	
	☐ 2. Attempted to deceive, conceal, lie	

## Appendix C

### **Sample Size Calculation**

Effect Size of Parental Responsiveness

$$f^2 = \frac{(-0.29)^2}{1 - (-0.29)^2} = 0.0918$$

Effect Size of Parental Control

$$f^2 = \frac{(0.21)^2}{1 - (0.21)^2} = 0.0461$$

Effect Size of Adaptive Perfectionism

$$f^2 = \frac{(-0.59)^2}{1 - (-0.59)^2} = 0.5340$$

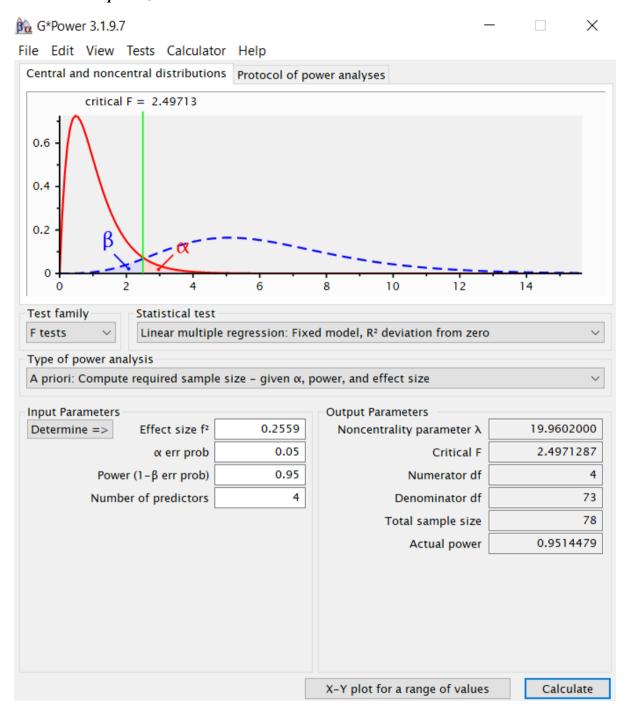
Effect Size of Maladaptive Perfectionism

$$f^2 = \frac{(0.51)^2}{1 - (0.51)^2} = 0.3515$$

Average Effect Size

$$f^2 = \frac{(0.0918 + 0.0461 + 0.5340 + 0.3515)}{4} = 0.2559$$

## G\*Power Sample Size Calculation



Appendix D

**SPSS Output: Reliability** 

Table D1

Reliability for Scale of Parenting Style (SPS) in Pilot Study

#### **Reliability Statistics**

itenability Statistics						
	Cronbach's					
	Alpha Based					
	on					
Cronbach's	Standardized					
Alpha	Items	N of Items				
.877	.868	38				

#### Table D2

Reliability for Scale of Parenting Style (SPS) in Actual Study

#### **Reliability Statistics**

	Cronbach's	
	Alpha Based	
	on	
Cronbach's	Standardized	
Alpha	Items	N of Items
.946	.945	38

## Table D3

Reliability for Perfectionism Cognitions Inventory (PCI) in Pilot Study

#### **Reliability Statistics**

	. •	
	Cronbach's	
	Alpha Based	
	on	
Cronbach's	Standardized	
Alpha	Items	N of Items
.955	.955	25

Table D4

Reliability for Perfectionism Cognitions Inventory (PCI) in Actual Study

#### **Reliability Statistics**

	•	
	Cronbach's	
	Alpha Based	
	on	
Cronbach's	Standardized	
Alpha	Items	N of Items
.936	.935	25

## Table D5

Reliability for Beck Scale for Suicidal Ideation (BSSI) in Pilot Study

#### **Reliability Statistics**

	Cronbach's Alpha Based	
Cronbach's	on Standardized	
Alpha	Items	N of Items
.812	.877	20

#### **Table D6**

Reliability for Beck Scale for Suicidal Ideation (BSSI) in actual study

## **Reliability Statistics**

	Cronbach's Alpha Based	
	on	
Cronbach's	Standardized	
Alpha	Items	N of Items
.886	.886	19

Appendix E

# **SPSS Output: Normality Assumptions**

# **Histogram for Each Distribution**

**Figure E1**Histogram of Parenting Styles

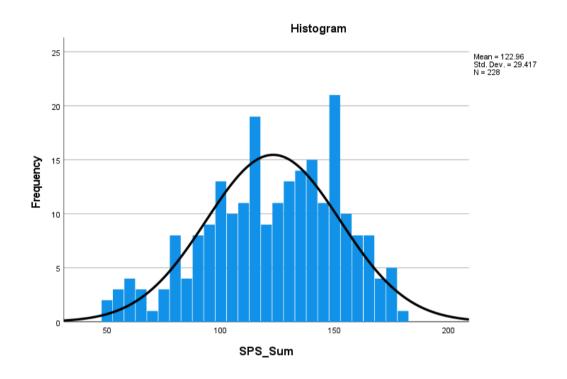
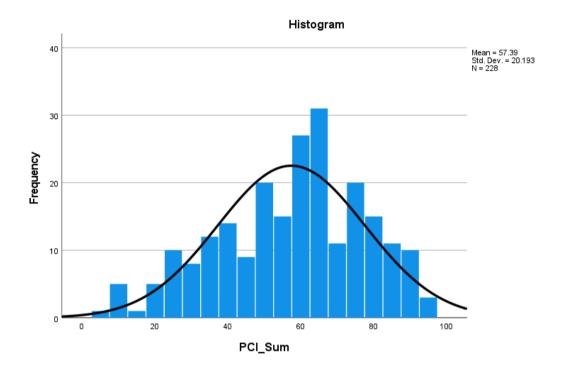
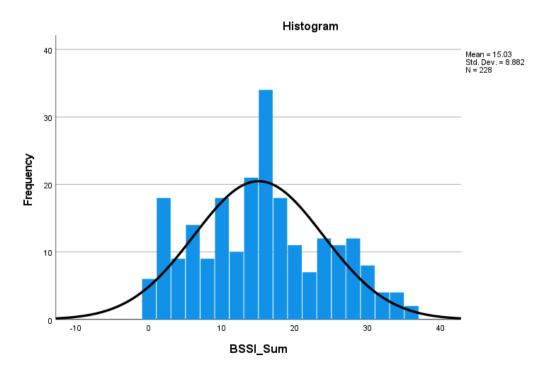


Figure E2

Histogram of Perfectionism



**Figure E3**Histogram of Suicidal Ideation



# Normal Q-Q plots for Each Distribution

Figure E4

Q-Q Plot of Parenting Styles

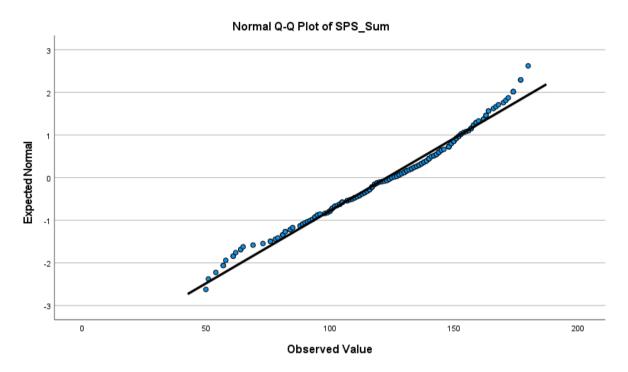
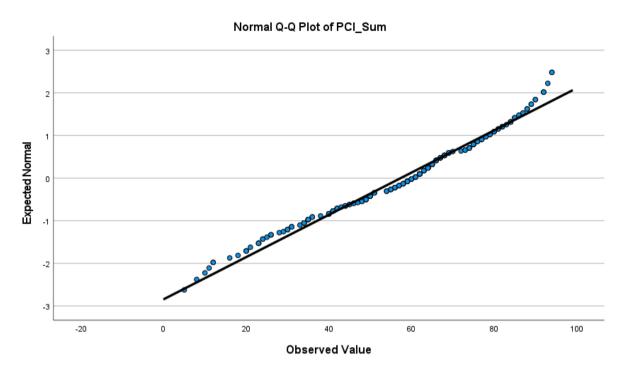
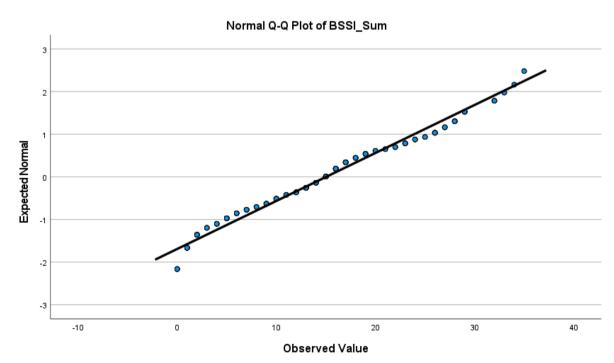


Figure E5

Q-Q Plot of Perfectionism



**Figure E6**Q-Q Plot of Suicidal Ideation



## **Skewness and Kurtosis Tests for Each Distribution**

**Table E1**Skewness and Kurtosis Tests

#### **Skewness and Kurtosis Tests**

		Parenting Style	Perfectionism	Suicidal Ideation
N	Valid	228	228	228
_	Missing	0	0	0
Skew	ness	367	390	.196
Std. 1	Error of Skewness	.161	.161	.161
Kurto	osis	483	457	720
Std. 1	Error of Kurtosis	.321	.321	.321

## Kolmogorov-Smirnov (K-S) Test for Each Distribution

Table E2

Kolmogorov-Smirnov Test

# **Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>				Shapiro-Wilk	
	Statistic	df	Sig.	Statistic	df	Sig.
Parenting Style	.062	228	.036	.979	228	.002
Perfectionism	.076	228	.003	.977	228	.001
Suicidal Ideation	.070	228	.009	.971	228	.000

a. Lilliefors Significance Correction

# Appendix F

# **SPSS Output: Outliers**

# **Boxplot for Each Variable**

**Figure F1**Boxplot of Parenting Styles

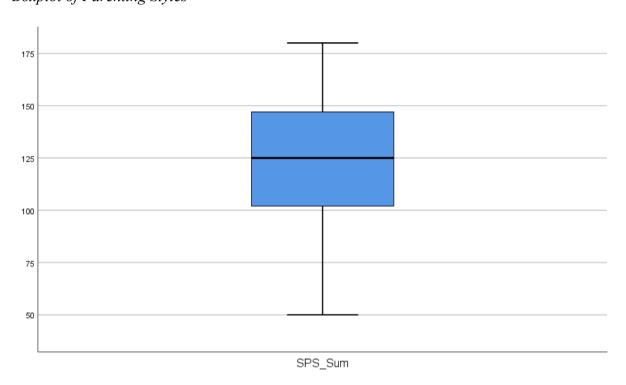
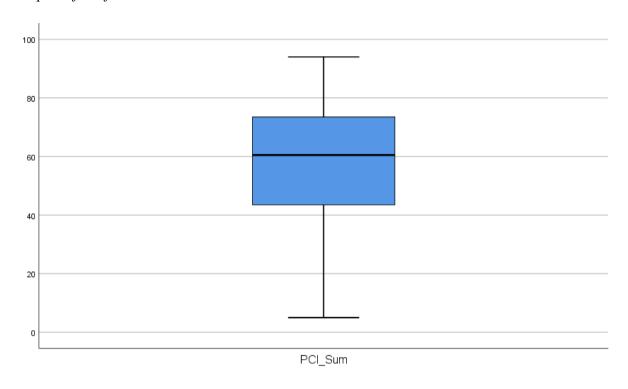
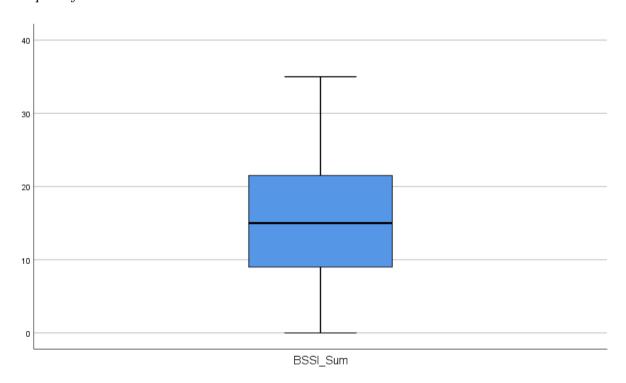


Figure F2

Boxplot of Perfectionism



**Figure F3**Boxplot of Suicidal Ideation



**Table F1**The Casewise Diagnostics for Suicidal Ideation

Casewise Diagnostics<sup>a</sup>

Case Number	Std. Residual	BSSI_Sum	Predicted Value	Residual
3	-2.020	13	23.06	-10.063
7	-2.059	13	23.26	-10.256
11	-2.124	13	23.58	-10.578
13	-2.358	13	24.74	-11.743
150	2.045	17	6.81	10.188
153	-2.551	1	13.71	-12.705
193	-2.107	2	12.50	-10.496

a. Dependent Variable: BSSI\_Sum

Table F2

The Case Summaries for The Residuals Statistics (Mahalanobis Distance, Cook's Distance, and Leverage)

			Case Sumn	naries		
				Mahalanobis		Centered
			Case Number	Distance	Cook's Distance	Leverage Value
GROUP_P	0	1	1	7.74622	.00054	.03412
		2	2	7.97612	.03616	.03514
		3	4	6.00826	.01581	.02647
		4	5	5.33308	.00245	.02349
		5	6	5.73733	.02557	.02527
		6	8	4.71439	.02017	.02077
		7	9	4.78359	.00028	.02107
		8	10	4.99269	.01871	.02199
		9	12	3.86091	.00245	.01701
		10	14	3.34288	.00246	.01473
		11	15	3.04613	.00196	.01342
		12	16	3.08876	.00048	.01361
		13	17	2.87960	.00053	.01269
		14	18	2.79807	.00001	.01233
		15	19	2.56853	.00340	.01132
		16	20	1.06086	.00206	.00467
		17	21	2.12315	.00336	.00935
		18	22	2.15927	.00154	.00951
		19	23	2.42743	.00187	.01069
		20	24	1.33022	.00130	.00586
		21	25	2.36968	.00535	.01044
		22	26	2.14576	.00006	.00945
		23	27	2.41653	.00712	.01065
		24	28	1.63681	.00230	.00721
		25	29	2.11250	.00377	.00931
		26	30	1.12014	.00001	.00493
		27	31	2.11469	.00038	.00932
		28	32	3.13286	.00001	.01380

29	33	2.59069	.01134	.01141
30	34	2.66340	.00597	.01173
31	35	2.10921	.00542	.00929
32	36	1.01929	.00059	.00449
33	37	1.46711	.00030	.00646
_34	38	1.91038	.00031	.00842
35	39	1.99656	.00021	.00880
36	40	2.17953	.00024	.00960
_37	41	2.00081	.00020	.00881
_38	42	3.03878	.00741	.01339
39	43	2.56507	.00715	.01130
40	44	1.78686	.00648	.00787
41	45	2.00850	.00123	.00885
42	46	1.76435	.00752	.00777
43	47	1.70048	.00741	.00749
44	48	1.72942	.00154	.00762
45	49	1.48803	.00333	.00656
46	50	2.02302	.00150	.00891
47	51	1.95279	.00228	.00860
48	52	2.12417	.00008	.00936
49	53	2.13566	.00005	.00941
50	54	2.93265	.00498	.01292
51	55	2.65400	.00047	.01169
52	56	2.97217	.00984	.01309
53	57	1.75239	.00015	.00772
54	58	2.82558	.01703	.01245
55	59	3.21088	.01558	.01414
56	60	2.23386	.00884	.00984
57	61	2.60450	.01004	.01147
58	62	2.87726	.00084	.01268
59	63	1.73969	.00385	.00766
60	64	1.82537	.00232	.00804
61	65	2.36751	.00053	.01043
62	66	2.41519	.00207	.01064
63	67	2.58111	.00084	.01137
64	68	3.63280	.00485	.01600
65	69	2.61807	.00267	.01153
66	70	3.03593	.00166	.01337
67	71	3.37732	.00266	.01488
68	72	2.92049	.00408	.01287
69	73	3.93524	.00177	.01734
70	74	3.89803	.00204	.01717
71	75	3.09990	.00084	.01366
72	76	4.22851	.00281	.01863
73	77	3.22937	.00006	.01423
74	78	3.22751	.00173	.01422
75	79	3.50799	.00023	.01545
76	80	4.54117	.00032	.02001
77	81	5.53633	.01977	.02439
78	82	2.88074	.00077	.01269
79	83	2.08885	.00667	.00920
80	84	4.76405	.00870	.02099
81	85	2.16483	.00036	.00954
82	86	5.51886	.00157	.02431
83	87	3.06428	.00003	.01350

84	88	5.56767	.00718	.02453
85	89	3.81551	.00075	.01681
86	90	3.46884	.00362	.01528
87	91	3.39610	.00110	.01496
88	92	3.46134	.00290	.01525
89	93	3.03954	.00280	.01339
90	94	1.92286	.00143	.00847
91	95	4.79491	.00040	.02112
_92	96	6.70097	.00298	.02952
_93	97	3.15906	.00266	.01392
94	98	2.78832	.00051	.01228
95	99	2.82474	.00070	.01244
96	100	4.62766	.00790	.02039
97	101	4.36599	.00146	.01923
98	102	2.70767	.00331	.01193
99	103	3.00698	.00106	.01325
100	104	3.97433	.00098	.01751
101	105	2.83568	.00005	.01249
102	106	3.24230	.01013	.01428
103	107	2.96983	.00491	.01308
104	108	4.17151	.00397	.01838
105	109	4.99745	.01453	.02202
106	110	4.22864	.01337	.01863
107	111	3.35012	.00746	.01476
108	112	2.50609	.00320	.01104
109	113	7.19211	.00276	.03168
110	114	9.21123	.00387	.04058
111	115	6.73487	.00046	.02967
112	116	3.49823	.00622	.01541
113	117	2.81538	.00751	.01240
114	118	3.14307	.00047	.01385
115	119	1.66953	.00036	.00735
116	120	3.03154	.00246	.01335
117	121	7.69813	.01134	.03391
118	122	2.82307	.00531	.01244
119	123	3.37212	.00009	.01486
120	124	.73678	.00030	.00325
121	125	1.80697	.00030	.00796
122	126	.45156	.00131	.00199
123	127	8.35727	.00265	.03682
124	128	.91648	.00009	.00404
125	129	5.80796	.00443	.02559
126	130	1.26714	.00175	.00558
120	131	.63168	.00102	.00338
127	131	7.37757	.00243	.03250
129	133	2.59262	.00554	.01142
130	134	1.95995	.00348	.00863
131	135	2.90440	.00133	.01279
132	136	2.00678	.00026	.00884
133	137	1.66423	.01172	.00733
134	138	.81080	.00463	.00357
135	139	9.64941	.00039	.04251
136	140	.73475	.00167	.00324
137	141	3.30974	.00210	.01458
138	142	7.30791	.00212	.03219

139					
141				.00017	.02696
142					
143					
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160					
161         167         2.39486         .00887         .01055           162         168         2.21474         .00200         .00976           163         169         2.47424         .00741         .01090           164         170         .83679         .00206         .00369           165         171         2.14632         .00299         .00946           166         172         .37443         .00082         .00165           167         173         .22625         .00050         .00100           168         174         .41087         .00000         .00181           169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176 <t< th=""><th></th><th></th><th></th><th></th><th></th></t<>					
162         168         2.21474         .00200         .00976           163         169         2.47424         .00741         .01090           164         170         .83679         .00206         .00369           165         171         2.14632         .00299         .00946           166         172         .37443         .00082         .00165           167         173         .22625         .00050         .00100           168         174         .41087         .00000         .00181           169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177 <t< th=""><th>_16</th><th></th><th></th><th>.00588</th><th></th></t<>	_16			.00588	
163         169         2.47424         .00741         .01090           164         170         .83679         .00206         .00369           165         171         2.14632         .00299         .00946           166         172         .37443         .00082         .00165           167         173         .22625         .00050         .00100           168         174         .41087         .00000         .00181           169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178 <t< th=""><th></th><th></th><th></th><th>.00887</th><th></th></t<>				.00887	
164         170         .83679         .00206         .00369           165         171         2.14632         .00299         .00946           166         172         .37443         .00082         .00165           167         173         .22625         .00050         .00100           168         174         .41087         .00000         .0181           169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .0076           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179				.00200	.00976
165         171         2.14632         .00299         .00946           166         172         .37443         .00082         .00165           167         173         .22625         .00050         .00100           168         174         .41087         .00000         .00181           169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .0076           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .0036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180 <td< th=""><th>_16</th><th></th><th></th><th>.00741</th><th></th></td<>	_16			.00741	
166         172         .37443         .00082         .00165           167         173         .22625         .00050         .00100           168         174         .41087         .00000         .00181           169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         <					
167         173         .22625         .00050         .00100           168         174         .41087         .00000         .00181           169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182					
168         174         .41087         .00000         .00181           169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.5288         .00138         .00674           182         188         2.03166         .00042         .00895           183					
169         175         3.40555         .00751         .01500           170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184					
170         176         4.44600         .00133         .01959           171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185					
171         177         1.76049         .00147         .00776           172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         <					
172         178         .94893         .00325         .00418           173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187 <t< th=""><th></th><th></th><th></th><th></th><th></th></t<>					
173         179         .41376         .00240         .00182           174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         <					
174         180         6.55300         .00166         .02887           175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189					
175         181         8.14649         .00124         .03589           176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190	_17	73 179		.00240	
176         182         1.53335         .00662         .00675           177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191					
177         183         1.77378         .00036         .00781           178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191         198         1.39111         .00177         .00613           192					
178         184         2.00703         .00460         .00884           179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191         198         1.39111         .00177         .00613           192         199         3.81483         .00195         .01681					
179         185         2.05490         .00005         .00905           180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191         198         1.39111         .00177         .00613           192         199         3.81483         .00195         .01681					
180         186         3.81564         .00622         .01681           181         187         1.52888         .00138         .00674           182         188         2.03166         .00042         .00895           183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191         198         1.39111         .00177         .00613           192         199         3.81483         .00195         .01681					
181       187       1.52888       .00138       .00674         182       188       2.03166       .00042       .00895         183       189       .92613       .00299       .00408         184       190       .45804       .00231       .00202         185       191       .98548       .00087       .00434         186       192       .42563       .00180       .00188         187       194       1.82327       .00043       .00803         188       195       2.09928       .01098       .00925         189       196       1.64670       .00002       .00725         190       197       1.14356       .00160       .00504         191       198       1.39111       .00177       .00613         192       199       3.81483       .00195       .01681					
182       188       2.03166       .00042       .00895         183       189       .92613       .00299       .00408         184       190       .45804       .00231       .00202         185       191       .98548       .00087       .00434         186       192       .42563       .00180       .00188         187       194       1.82327       .00043       .00803         188       195       2.09928       .01098       .00925         189       196       1.64670       .00002       .00725         190       197       1.14356       .00160       .00504         191       198       1.39111       .00177       .00613         192       199       3.81483       .00195       .01681					
183         189         .92613         .00299         .00408           184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191         198         1.39111         .00177         .00613           192         199         3.81483         .00195         .01681					
184         190         .45804         .00231         .00202           185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191         198         1.39111         .00177         .00613           192         199         3.81483         .00195         .01681					
185         191         .98548         .00087         .00434           186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191         198         1.39111         .00177         .00613           192         199         3.81483         .00195         .01681					
186         192         .42563         .00180         .00188           187         194         1.82327         .00043         .00803           188         195         2.09928         .01098         .00925           189         196         1.64670         .00002         .00725           190         197         1.14356         .00160         .00504           191         198         1.39111         .00177         .00613           192         199         3.81483         .00195         .01681					
187     194     1.82327     .00043     .00803       188     195     2.09928     .01098     .00925       189     196     1.64670     .00002     .00725       190     197     1.14356     .00160     .00504       191     198     1.39111     .00177     .00613       192     199     3.81483     .00195     .01681					
188       195       2.09928       .01098       .00925         189       196       1.64670       .00002       .00725         190       197       1.14356       .00160       .00504         191       198       1.39111       .00177       .00613         192       199       3.81483       .00195       .01681					
189     196     1.64670     .00002     .00725       190     197     1.14356     .00160     .00504       191     198     1.39111     .00177     .00613       192     199     3.81483     .00195     .01681					
190     197     1.14356     .00160     .00504       191     198     1.39111     .00177     .00613       192     199     3.81483     .00195     .01681					
191     198     1.39111     .00177     .00613       192     199     3.81483     .00195     .01681					
192         199         3.81483         .00195         .01681					
193 200 1.76049 .00262 .00776					
	19	200	1.76049	.00262	.00776

	_				
	194	201	2.57435	.00453	.01134
	195	202	1.81244	.00143	.00798
	196	203	2.20158	.01008	.00970
	197	204	2.10637	.00589	.00928
	198	205	7.21847	.00992	.03180
	199	206	2.83762	.00832	.01250
	200	207	1.51571	.00069	.00668
	201	208	1.55324	.00332	.00684
	202	209	3.30686	.00579	.01457
	203	210	1.86857	.00149	.00823
	204	211	1.44648	.00037	.00637
	205	212	.52123	.00470	.00230
	206	213	.54496	.00122	.00240
	207	214	1.07291	.00017	.00473
	208	215	3.32257	.00850	.01464
	209	216	3.22310	.00249	.01420
	210	217	2.44793	.00694	.01078
	211	218	4.22713	.01034	.01862
	212	219	3.57150	.00285	.01573
	213	220	4.67617	.00584	.02060
	214	221	1.44040	.00866	.00635
	215	222	.98412	.00583	.00434
	216	223	2.35689	.00080	.01038
	217	224	3.41453	.00231	.01504
	218	225	6.30686	.00141	.02778
	219	226	3.26000	.00035	.01436
	220	227	2.61673	.00715	.01153
	221	228	4.68734	.01043	.02065
	Total N		221	221	221
1	1	3	6.77496	.03745	.02985
	2	7	5.90591	.03428	.02602
	3	11	4.68462	.02968	.02064
	4	13	4.13242	.03286	.01820
	5	150	1.26671	.01063	.00558
	6	153	3.23918	.03151	.01427
	7	193	1.97850	.01493	.00872
	Total N		7	7	7
Total	N		228	228	228

# Appendix G

# **SPSS Output: Descriptive Statistics**

# **Descriptive Statistics of Demographic Variables**

**Table G1**Descriptive Statistics of Sex

	Sex								
		_	_		Cumulative				
		Frequency	Percent	Valid Percent	Percent				
Valid	Male	82	36.0	36.0	36.0				
	Female	140	61.4	61.4	97.4				
	Prefer not to say	6	2.6	2.6	100.0				
	Total	228	100.0	100.0					

**Table G2**Descriptive Statistics of Age

			Age				
					Cumulative	Mean	Standard
		Frequency	Percent	Valid Percent	Percent		deviation
Valid	18	4	1.8	1.8	1.8	21.54	1.43
	19	8	3.5	3.5	5.3		
	20	41	18.0	18.0	23.2		
	21	54	23.7	23.7	46.9		
	22	75	32.9	32.9	79.8		
	23	24	10.5	10.5	90.4		
	24	17	7.5	7.5	97.8		
	25	3	1.3	1.3	99.1		
	26	2	.9	.9	100.0		
	Total	228	100.0	100.0			

**Table G3**Descriptive Statistics of Race

			Race		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	3	1.3	1.3	1.3
	Chinese	217	95.2	95.2	96.5
	Indian	8	3.5	3.5	100.0
	Total	228	100.0	100.0	

**Table G4**Descriptive Statistics of Institutions

		Instituti	ions		
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Aberystwyth University	1	.4	.4	.4
	BAC	1	.4	.4	.9
	HELP	1	.4	.4	1.3
	Heriot watt	1	.4	.4	1.8
	ICS	1	.4	.4	2.2
	IMU	3	1.3	1.3	3.5
	INTI	2	.9	.9	4.4
	MK	1	.4	.4	4.8
	Monash	1	.4	.4	5.3
	Monash University	1	.4	.4	5.7
	Sunway	1	.4	.4	6.1
	SUNWAY	1	.4	.4	6.6
	TARUMT	4	1.8	1.8	8.3
	Taylor	1	.4	.4	8.8
	UCSI	1	.4	.4	9.2
	UKM	2	.9	.9	10.1
	UM	3	1.3	1.3	11.4
	UMS	1	.4	.4	11.8
	Universiti Sains Malaysia	1	.4	.4	12.3
	University of Nottingham	1	.4	.4	12.7
	Malaysia	4	1.8	1.8	14.5
	UPM UPSI	2	.9	.9	15.4
	USM	6	2.6	2.6	18.0
	Utar	1	.4	.4	18.4
	UTAR	181	79.4	79.4	97.8
	UTHM	181			98.2
			.4	.4	
	UTM	3	1.3	1.3	98.7
	UUM				100.0
	Total	228	100.0	100.0	

**Table G5**Descriptive Statistics for Main Variables

# **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
P_Responsiveness	228	23	95	57.85	22.472
P_Control	228	23	91	65.12	17.371
PCI_Sum	228	5	94	57.39	20.193
BSSI_Sum	228	0	35	15.03	8.882
Valid N (listwise)	228				

## Appendix H

## **SPSS Output: Multiple Linear Regression**

Table H1

Durbin-Watson Test

Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	Durbin-Watson
1	.830a	.690	.686	4.981	1.614

a. Predictors: (Constant), P\_Control, P\_Responsiveness, PCI\_Sum b. Dependent Variable: BSSI\_Sum

Table H2

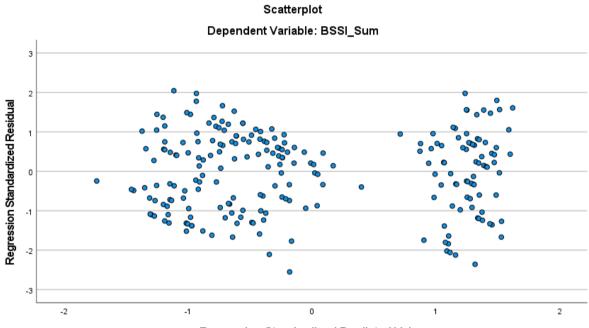
The Values of Variance Inflation Factor and Tolerance

Coefficients <sup>a</sup>									
Unstandardized			Standardized						
	Coefficients		Coefficients			Collinearity	Statistics		
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF		
1 (Constant)	29.268	2.016		14.519	.000				
PCI_Sum	.033	.019	.075	1.763	.079	.770	1.298		
P_Responsiveness	314	.017	795	-18.757	.000	.772	1.296		
P Control	.031	.019	.061	1.629	.105	.976	1.025		

a. Dependent Variable: BSSI\_Sum

Figure H1

The Scatterplot of Homoscedasticity, Linearity of Residuals, and Multivariate Normality for All Main Variables



Regression Standardized Predicted Value

Appendix I

# **SPSS Output: Pearson Product-Moment Correlation (PPMC)**

**Table I1**PPMC for Parenting Styles and Suicidal Ideation

Correlations									
			BSSI_		BSSI_		BSSI_		BSSI_
		ATT	ATT	ATR	ATR	PI	PI	PN	PN
ATT	Pearson Correlation	1	721**	.055	.101	005	037	.129	012
	Sig. (2-tailed)		.000	.666	.430	.975	.817	.610	.962
	N	105	105	63	63	42	42	18	18
BSSI_ATT	Pearson Correlation	721**	1	.054	062	.132	131	068	.081
	Sig. (2-tailed)	.000		.676	.629	.404	.408	.790	.749
	N	105	105	63	63	42	42	18	18
ATR	Pearson Correlation	.055	.054	1	.617**	058	.232	.427	089
	Sig. (2-tailed)	.666	.676		.000	.717	.140	.077	.725
	N	63	63	63	63	42	42	18	18
BSSI_ATR	Pearson Correlation	.101	062	.617**	1	085	.200	.003	039
_	Sig. (2-tailed)	.430	.629	.000		.593	.204	.990	.876
	N	63	63	63	63	42	42	18	18
PI	Pearson Correlation	005	.132	058	085	1	789**	.165	.674**
	Sig. (2-tailed)	.975	.404	.717	.593		.000	.512	.002
	N	42	42	42	42	42	42	18	18
BSSI_PI	Pearson Correlation	037	131	.232	.200	789**	1	.035	557*
_	Sig. (2-tailed)	.817	.408	.140	.204	.000		.889	.016
	N	42	42	42	42	42	42	18	18
PN	Pearson Correlation	.129	068	.427	.003	.165	.035	1	.557*
	Sig. (2-tailed)	.610	.790	.077	.990	.512	.889		.016
	N	18	18	18	18	18	18	18	18
BSSI_PN	Pearson Correlation	012	.081	089	039	.674**	557*	.557*	1
_	Sig. (2-tailed)	.962	.749	.725	.876	.002	.016	.016	
	N	18	18	18	18	18	18	18	18

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Notes: ATT: Authoritative Parenting Style; ATR: Authoritarian Parenting Style; PI: Permissive-Indulgent Parenting Style; PN: Permissive-Neglectful Parenting Style; BSSI: Suicidal Ideation

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

**Table 12**PPMC for Parenting Styles and Perfectionism

	Correlations									
			PCI_		PCI_		PCI_		PCI_	
		ATT	ATT	ATR	ATR	PI	PI	PN	PN	
ATT	Pearson Correlation	1	.634**	.055	.011	005	091	.129	282	
	Sig. (2-tailed)		.000	.666	.930	.975	.568	.610	.257	
	N	105	105	63	63	42	42	18	18	
PCI_ATT	Pearson Correlation	.634**	1	036	064	.013	140	.150	204	
	Sig. (2-tailed)	.000		.777	.617	.936	.377	.553	.417	
	N	105	105	63	63	42	42	18	18	
ATR	Pearson Correlation	.055	036	1	.664**	058	.321*	.427	.258	
	Sig. (2-tailed)	.666	.777		.000	.717	.038	.077	.300	
	N	63	63	63	63	42	42	18	18	
PCI_ATR	Pearson Correlation	.011	064	.664**	1	.175	.146	.578*	.722**	
	Sig. (2-tailed)	.930	.617	.000		.268	.355	.012	.001	
	N	63	63	63	63	42	42	18	18	
PI	Pearson Correlation	005	.013	058	.175	1	.142	.165	.519*	
	Sig. (2-tailed)	.975	.936	.717	.268		.369	.512	.027	
	N	42	42	42	42	42	42	18	18	
PCI_PI	Pearson Correlation	091	140	.321*	.146	.142	1	.314	.160	
	Sig. (2-tailed)	.568	.377	.038	.355	.369		.204	.527	
	N	42	42	42	42	42	42	18	18	
PN	Pearson Correlation	.129	.150	.427	.578*	.165	.314	1	.474*	
	Sig. (2-tailed)	.610	.553	.077	.012	.512	.204		.047	
	N	18	18	18	18	18	18	18	18	
PCI_PN	Pearson Correlation	282	204	.258	.722**	.519*	.160	.474*	1	
	Sig. (2-tailed)	.257	.417	.300	.001	.027	.527	.047		
	N	18	18	18	18	18	18	18	18	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Notes: ATT: Authoritative Parenting Style; ATR: Authoritarian Parenting Style; PI: Permissive-Indulgent Parenting Style; PN: Permissive-Neglectful Parenting Style; PCI: Perfectionism

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

 Table I3

 PPMC for Perfectionism and Suicidal Ideation

### Correlations

		PCI_Sum	BSSI_Sum
PCI_Sum	Pearson Correlation	1	.449**
	Sig. (2-tailed)		.000
	N	228	228
BSSI_Sum	Pearson Correlation	.449**	1
	Sig. (2-tailed)	.000	
	N	228	228

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Notes: PCI: Perfectionism; BSSI: Suicidal Ideation

### Appendix J

# **SPSS Output: Multiple Linear Regression Analysis**

Table J1

MLR Analysis for Authoritative Parenting Style, Perfectionism, and Suicidal Ideation

	ANOVA								
Model		Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	1909.906	2	954.953	55.751	.000b			
	Residual	1747.142	102	17.129					
	Total	3657.048	104						

a. Dependent Variable: BSSI\_ATT b. Predictors: (Constant), PCI\_ATT, ATT

Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.723ª	.522	.513	4.139

a. Predictors: (Constant), PCI\_ATT, ATTb. Dependent Variable: BSSI\_ATT

### Coefficients<sup>a</sup>

			000111010110			
				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	58.017	4.899		11.842	.000
	ATT	330	.038	765	-8.636	.000
	PCI_ATT	.024	.030	.069	.782	.436

a. Dependent Variable: BSSI\_ATT

Table J2

MLR Analysis for Authoritarian Parenting Style, Perfectionism, and Suicidal Ideation

### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	500.627	2	250.314	18.415	.000b
,	Residual	815.595	60	13.593		
	Total	1316.222	62			

a. Dependent Variable: BSSI\_ATRb. Predictors: (Constant), PCI\_ATR, ATR

# Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.617a	.380	.360	3.687

a. Predictors: (Constant), PCI\_ATR, ATR b. Dependent Variable: BSSI\_ATR

### Coefficients<sup>a</sup>

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.269	4.443		.061	.952
1	(Constant) ATR	.269	.056	.602	.061 4.434	.952

a. Dependent Variable: BSSI ATR

Table J3

MLR Analysis for Permissive-Indulgent Parenting Style, Perfectionism, and Suicidal Ideation

	ANOVA <sup>a</sup>							
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	665.519	2	332.760	35.065	.000b		
	Residual	370.100	39	9.490				
	Total	1035.619	41					

a. Dependent Variable: BSSI\_PI b. Predictors: (Constant), PCI\_PI, PI

# Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.802ª	.643	.624	3.081

a. Predictors: (Constant), PCI\_PI, PIb. Dependent Variable: BSSI\_PI

### Coefficients<sup>a</sup>

			000111010110			
		Unstandardize	d Coefficients	Standardized Coefficients		
Mo	odel	В	Std. Error	Beta	t	Sig.
1	(Constant)	69.545	7.375		9.430	.000
	PI	516	.062	809	-8.370	.000
	PCI_PI	.038	.026	.141	1.462	.152

a. Dependent Variable: BSSI\_PI

**Table J3**MLR Analysis for Permissive-Neglectful Parenting Style, Perfectionism, and Suicidal Ideation

### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	134.196	2	67.098	3.449	.059b
	Residual	291.804	15	19.454		
	Total	426.000	17			

a. Dependent Variable: BSSI\_PN
b. Predictors: (Constant), PCI\_PN, PN

# Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.561ª	.315	.224	4.411

a. Predictors: (Constant), PCI\_PN, PN b. Dependent Variable: BSSI\_PN

### Coefficients<sup>a</sup>

	Unstandardized Coefficients		d Coefficients	Standardized Coefficients			
Mod	del	В	Std. Error	Beta	t	Sig.	
1	(Constant)	-4.599	17.451		264	.796	
	PN	.271	.126	.521	2.148	.048	
	PCI_PN	.079	.255	.076	.311	.760	

a. Dependent Variable: BSSI\_PN

#### Appendix K

#### **SPSS Output: Mediation Analysis**

#### Table K1

The Mediating Effects of Perfectionism on Authoritative Parenting Style – Suicidal Ideation

Association

Standardized coefficients

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 \*\*\*\*\*\*\*\*\*\*\*\*\*\* Y : BSSI ATT X : ATT M : PCI ATT Sample Size: 105 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* OUTCOME VARIABLE: PCI ATT Model Summary R R-sq MSE F df1 df2 p .6344 .4025 179.2621 69.3740 1.0000 103.0000 .0000 Model 
 coeff
 se
 t
 p
 LLCI
 ULCI

 -71.0596
 14.2185
 -4.9977
 .0000
 -99.2587
 -42.8605

 .7954
 .0955
 8.3291
 .0000
 .6060
 .9848
 Standardized coefficients coeff .6344 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* OUTCOME VARIABLE: BSSI ATT Model Summary R R-sq MSE F df1 df2 p
.7227 .5223 17.1288 55.7512 2.0000 102.0000 .0000 Model 
 coeff
 se
 t
 p
 LLCI
 ULCI

 constant
 58.0170
 4.8991
 11.8423
 .0000
 48.2995
 67.7345

 ATT
 -.3298
 .0382
 -8.6360
 .0000
 -.4055
 -.2540

 PCI\_ATT
 .0238
 .0305
 .7816
 .4363
 -.0366
 .0842

coeff ATT -.7646 PCI ATT .0692 OUTCOME VARIABLE: BSSI ATT Model Summary df2 .0000 R R-sq MSE F df1 df2 .7207 .5194 17.0641 111.3120 1.0000 103.0000 Model 
 coeff
 se
 t
 p
 LLCI
 ULCI

 constant
 56.3254
 4.3868
 12.8396
 .0000
 47.6251
 65.0256

 ATT
 -.3108
 .0295
 -10.5504
 .0000
 -.3693
 -.2524
 Standardized coefficients coeff ATT -.7207 \*\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*\*\*\* Total effect of X on Y se t p LLCI ULCI c\_cs
.0295 -10.5504 .0000 -.3693 -.2524 -.7207 Effect se -.3108 Direct effect of X on Y Effect se t p LLCI ULCI c'\_cs -.3298 .0382 -8.6360 .0000 -.4055 -.2540 -.7646 Indirect effect(s) of X on Y: Effect BootSE BootLLCI BootULCI PCI ATT .0189 .0235 -.0281 Completely standardized indirect effect(s) of X on Y: Effect BootSE BootLLCI BootULCI .0553 -.0629 .0439 PCI ATT .1570 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Level of confidence for all confidence intervals in output: 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

10000

---- END MATRIX ----

Table K2

The Mediating Effects of Perfectionism on Authoritarian Parenting Style – Suicidal Ideation

Association

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 : BSSI\_ATR X : ATR M : PCI ATR Sample Size: 63 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* OUTCOME VARIABLE: PCI ATR Model Summary R R-sq MSE F df1 df2 p .6637 .4406 50.9705 48.0367 1.0000 61.0000 .0000 Model 
 coeff
 se
 t
 p
 LLCI
 ULCI

 constant
 21.3492
 8.1570
 2.6173
 .0112
 5.0382
 37.6603

 ATR
 .5671
 .0818
 6.9308
 .0000
 .4035
 .7307
 Standardized coefficients coeff .6637 ATR \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* OUTCOME VARIABLE: BSSI ATR Model Summary R-sq MSE F df1 df2 p .3804 13.5932 18.4146 2.0000 60.0000 .0000 R .6167 Model 
 coeff
 se
 t
 p
 LLCI

 .2693
 4.4427
 .0606
 .9519
 -8.6174

 .2505
 .0565
 4.4343
 .0000
 .1375

 .0103
 .0661
 .1557
 .8768
 -.1220
 ULCI 9.1561 constant ATR
PCI\_ATR .3635 -.1220 .1426 Standardized coefficients coeff .6025 PCI ATR .0211

OUTCOME VARIABLE:
BSSI ATR

Model Summary

R R-sq MSE F df1 df2 p .6165 .3801 13.3758 37.4032 1.0000 61.0000 .0000

Model

 coeff
 se
 t
 p
 LLCI
 ULCI

 constant
 .4891
 4.1786
 .1170
 .9072
 -7.8667
 8.8448

 ATR
 .2564
 .0419
 6.1158
 .0000
 .1725
 .3402

Standardized coefficients

coeff

ATR .6165

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

Total effect of X on Y

Effect se t p LLCI ULCI c\_cs .2564 .0419 6.1158 .0000 .1725 .3402 .6165

Direct effect of X on Y

Effect se t p LLCI ULCI c'\_cs
.2505 .0565 4.4343 .0000 .1375 .3635 .6025

Indirect effect(s) of X on Y:

Effect BootSE BootLLCI BootULCI PCI\_ATR .0058 .0423 -.0735 .0962

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

Effect BootSE BootLLCI BootULCI PCI\_ATR .0140 .1019 -.1787 .2286

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

Level of confidence for all confidence intervals in output:

Number of bootstrap samples for percentile bootstrap confidence intervals: 10000

---- END MATRIX ----

Table K3

The Mediating Effects of Perfectionism on Permissive-Indulgent Parenting Style – Suicidal

```
Ideation Association
```

```
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 : BSSI_PI
     X : PI
     M : PCI PI
Sample
Size: 42
******************
OUTCOME VARIABLE:
PCI PI
Model Summary
        R R-sq MSE F df1 df2 p
.1421 .0202 347.0002 .8245 1.0000 40.0000 .3693
Model

        coeff
        se
        t
        p
        LLCI
        ULCI

        constant
        9.0169
        44.5711
        .2023
        .8407
        -81.0659
        99.0996

        PI
        .3348
        .3688
        .9080
        .3693
        -.4104
        1.0801

Standardized coefficients
        coeff
         .1421
PΙ
*******************
OUTCOME VARIABLE:
BSSI PI
Model Summary
          R
                     R-sq MSE F df1 df2 p
.6426 9.4897 35.0652 2.0000 39.0000 .0000
        .8016
Model

        coeff
        se
        t
        p
        LLCI
        ULCI

        constant
        69.5450
        7.3746
        9.4304
        .0000
        54.6283
        84.4617

        PI
        -.5156
        .0616
        -8.3699
        .0000
        -.6402
        -.3910

        PCI_PI
        .0382
        .0261
        1.4620
        .1517
        -.0147
        .0911

Standardized coefficients
              coeff
              -.8094
PCI PI
                .1414
```

OUTCOME VARIABLE: BSSI PI

Model Summary

df1 df2 p R R-sq MSE F df1 df2
.7893 .6230 9.7596 66.1128 1.0000 40.0000

Model

 coeff
 se
 t
 p
 LLCI
 ULCI

 constant
 69.8897
 7.4749
 9.3499
 .0000
 54.7822
 84.9972

 PI
 -.5028
 .0618
 -8.1310
 .0000
 -.6278
 -.3778

Standardized coefficients

coeff

-.7893

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

Total effect of X on Y

Effect se t p LLCI ULCI c\_cs -.5028 .0618 -8.1310 .0000 -.6278 -.3778 -.7893

Direct effect of X on Y

Indirect effect(s) of X on Y:

Effect BootSE BootLLCI BootULCI .0128 .0190 -.0168 .0591 PCI PI

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

Effect BootSE BootLLCI BootULCI

PCI PI .0201 .0309 -.0251 .0969

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

Level of confidence for all confidence intervals in output:

Number of bootstrap samples for percentile bootstrap confidence intervals: 10000

----- END MATRIX ----

Table K4

Ideation Association

The Mediating Effects of Perfectionism on Permissive-Neglectful Parenting Style – Suicidal

```
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 : BSSI_PN
    X : PN
    M : PCI PN
Sample
Size: 18
******************
OUTCOME VARIABLE:
PCI PN
Model Summary
       R R-sq MSE F df1 df2 p
.4743 .2250 18.7191 4.6444 1.0000 16.0000 .0467
Model

        coeff
        se
        t
        p
        LLCI
        ULCI

        constant
        62.3200
        7.0917
        8.7877
        .0000
        47.2849
        77.3551

        PN
        .2347
        .1089
        2.1551
        .0467
        .0038
        .4656

Standardized coefficients
       coeff
        .4743
PN
******************
OUTCOME VARIABLE:
BSSI PN
Model Summary
                  R-sq MSE F df1 df2 p
.3150 19.4536 3.4491 2.0000 15.0000 .0586
         R
       .5613
Model

    coeff
    se
    t
    p
    LLCI
    ULCI

    -4.5995
    17.4507
    -.2636
    .7957
    -41.7988
    32.5999

    .2709
    .1261
    2.1484
    .0484
    .0021
    .5397

    .0793
    .2549
    .3111
    .7600
    -.4640
    .6226

constant
PCI PN
Standardized coefficients
            coeff
PN
              .5215
PCI PN
              .0755
```

OUTCOME VARIABLE: BSSI PN

Model Summary

df1 df2 p R R-sq MSE F df1 df2 .5573 .3106 18.3554 7.2084 1.0000 16.0000

Model

 
 coeff
 se
 t
 p
 LLCI
 ULCI

 .3417
 7.0225
 .0487
 .9618
 -14.5467
 15.2301

 .2895
 .1078
 2.6848
 .0163
 .0609
 .5182
 constant

Standardized coefficients

coeff

.5573

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

Total effect of X on Y

t p LLCI 2.6848 .0163 .0609 LLCI ULCI .0609 .5182 Effect se ULCI c\_cs .1078 2.6848 .2895 . 5573

Direct effect of X on Y

t p LLCI ULCI c'\_cs 2.1484 .0484 .0021 .5397 .5215 Effect se t .2709 .1261 2.1484

Indirect effect(s) of X on Y:

Effect BootSE BootLLCI BootULCI .0186 .0633 -.1234 .1339 PCI PN

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

Effect BootSE BootLLCI BootULCI

PCI PN .0358 .1130 -.2082 .2495

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

Level of confidence for all confidence intervals in output:

Number of bootstrap samples for percentile bootstrap confidence intervals: 10000

---- END MATRIX ----