A Study on the Relationship Between Impostorism and Perfectionism in Engineering Students

Dissertation submitted in partial fulfillment of the requirements for the award of

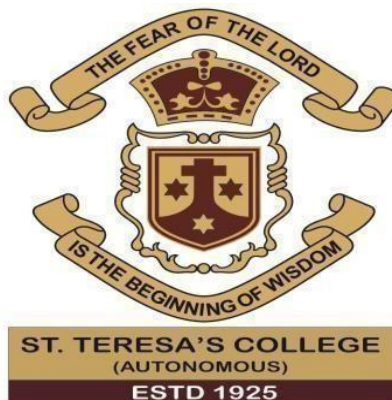Bachelor of Science in Psychology

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CERTIFICATE

This is to certify that the dissertation entitled, "A study on the relationship between Impostorism and Perfectionism in Engineering Students", is a bonafide record submitted by, Zainab Abdul Raoof (SB20PSY049), of St. Teresa's College, Ernakulam under the supervision and guidance of Ms. Anjitha Venugopal and that it has not been submitted to any other university or institution for the award of any degree or diploma, fellowship, title or recognition before.

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DECLARATION

I, Zainab Abdul Raoof do hereby declare that the work represented in the dissertation embodies the results of the original research work done by us in St. Teresa's College, Ernakulam under the supervision and guidance of Ms.Anjitha Venugopal, Assistant Professor, Department of Psychology, St. Teresa's College, Ernakulam, it has not been submitted by us to any other university or institution for the award of any degree, diploma, fellowship, title or recognition before.

Zainab Abdul Raoof

Place:

Ernakulam

Date: 15-03-23

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Thanking you,

Zainab Abdul Raoof

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Abstract

Impostor syndrome is being increasingly highlighted in popular media and non-expert literature as a significant mental health condition that can negatively impact an individual's professional performance and contribute to feelings of burnout. Impostorism refers to perceptions of fraudulence that can be experienced when individuals doubt their ability to fulfill a particular role or struggle to feel they belong in a particular group (Chrisman et al., 1995; Clance & Imes, 1978; Vergauwe et al., 2015). Perfectionists often set unrealistic standards for themselves and engage in self-criticism and self-blame when they fall short of those standards. This can lead to feelings of inadequacy and a fear of failure that can interfere with personal and professional development (Stoeber, J., & Otto, K. 2006). The aim of this research is to investigate the relationship between perfectionism and impostorism in first-year engineering students. The study involved 301 first-year engineering students aged 18-25, who were admitted on a merit basis from different colleges in Kerala. Purposive sampling was used, and data were collected through Google Forms. A correlational research design was utilized, with Pearson's correlation analysis used to analyze the data. The Multidimensional Perfectionism Scale (MPS) and Clance Impostor phenomenon Scale were the tools employed. Pearson's correlation analysis revealed a significant link between perfectionism and impostorism in first-year engineering students, with a positive correlation between self-oriented perfectionism and impostorism, and no correlation between other-oriented perfectionism and impostorism. There was also a positive correlation between impostorism and socially prescribed perfectionism.

Keywords : *Impostorism ; Perfectionism ; Self-Oriented Perfectionism ; Other-Oriented Perfectionism ; Socially Prescribed Perfectionism*

Chapter 1

Introduction

Entering university is often associated with new surroundings and challenges, which can cause

distress and might result in poor mental health. Students often doubt their abilities and

accomplishments. This can lead to decreased motivation and self-esteem as well as an increased

risk of stress and burnout. Studying at university can sometimes incite feelings of inadequacy in

students. Combine that with remote learning and the stresses of lockdown, it's no surprise that

some students may suffer from a constant sense of self-doubt. In recent times, many faculty and

students report experiencing feelings of self-doubt about their accomplishments and abilities, at

some point in their academic careers. This feeling can prevent people from fully participating in

the teaching and learning experience and make them feel like they do not belong in a scholarly

environment. As highlighted in the review by Sharp and Theiler (2018), psychological distress is

a huge issue among university students worldwide and is more prevalent in university students

than in the general population. A phenomenon that was shown to be linked to low self-esteem,

higher stress levels, anxiety, and depression in university students is the impostor phenomenon.

Impostorism is a psychological phenomenon in which individuals doubt their accomplishments

and have a persistent fear of being exposed as a "fraud". This phenomenon is particularly

relevant for students, as it can significantly impact their academic performance and mental

health.

       The impostor phenomenon describes a psychological experience of intellectual

and professional fraudulence (Clance and Imes, 1978; Matthews and Clance, 1985).

Individuals experiencing Impostorism believe others have inflated perceptions of their

abilities and fear being evaluated. These individuals also discount praise, are highly

self-critical, and attribute their achievements to external factors such as luck, hard work, or interpersonal assets, rather than internal qualities such as ability, intelligence, or skills (Harvey, 1981; Matthews and Clance, 1985). The phrase impostor phenomenon first appeared in the late 1970s following clinical observations of female clients (Clance and Imes, 1978). However, Harvey (1981) asserted a failure to internalize success and viewing oneself as an impostor was not limited to highly successful people. Rather, Impostorism is experienced when individuals are specifically faced with achievement tasks regardless of their success status or gender (Harvey and Katz, 1985). Furthermore, anticipation and exposure to achievement tasks are associated with negative emotions and self-beliefs such as anxiety, depression, and low self-esteem among individuals experiencing Impostorism (Cozzarelli and Major, 1990; Chrisman et al., 1995). This feeling of inadequacy describes the Big-Fish-Little- Pond Effect; this occurs when the comparison of one's own academic achievement with that of others impacts the development of academic self-beliefs (Marsh & Parker, 1984). Marsh and his colleagues have found that students who attend more competitive peer environments (such as high-ability schools or programs) tend to have lower academic self-concepts, at least upon entry to the school or program (Marsh et al., 2017). When students feel as though they are not as capable as their peers in a new environment, and also that they do not belong, they are experiencing what is known as the imposter phenomenon (see Rinn, 2020).

Perfectionism is a personality trait characterized by striving for flawlessness and setting excessively high-performance standards, accompanied by overly critical self-evaluations and concerns regarding others' evaluations. It is the tendency to demand of others or of oneself an extremely high or even flawless level of performance, in

excess of what is required by the situation. It is associated with depression, anxiety, eating disorders, and other mental health problems. Perfectionism can be defined as trying to adhere to high standards and continuously engaging in "overly critical self-evaluation" (Curran & Hill, 2017, p. 1). Although typically referred to as a unidimensional construct, many researchers agree that Perfectionism is a multidimensional construct that can be adaptive or maladaptive (Flett & Hewitt, 2014; Frost et al., 1990; Hamachek, 1978; Hewitt & Flett, 1991; Slaney et al., 2001; Stairs et al., 2012; Stoeber & Otto, 2006).Perfectionism has been recognized as a hindrance to the psychological well-being and achievement of academically talented students (Miller & Speirs Neumeister, 2017; Speirs Neumeister, 2018) and has been examined numerous times among high-ability graduate students (see Rinn & Plucker, 2019 for an overview).

Our research intends to explore the relationship between Perfectionism and Impostorism in engineering students. The academic environment is ever-changing with the advancement of technology and the increase in the number of scholars. With the changing dynamics in the personal and academic arena career aspirations and goals have become more complex and challenging to achieve. High career aspirations and goals provide ongoing pressure on students to demonstrate their ability and grit in the classroom, which can be an overwhelming burden for them. Impostor syndrome is a feeling of inadequacy and self-doubt despite external evidence of success. Perfectionism is a desire for flawlessness and setting excessively high standards for oneself. Both can be common in engineering students, as the field often places a high value on technical proficiency and perfection. This can lead to feelings of inadequacy and self-doubt and can impact mental health and well-being. To address these issues,

students can focus on self-compassion and embracing a growth mindset, seeking help and support from peers and mentors, and setting achievable and realistic goals. First-year engineering students, are expected to master complex and challenging material in a short period of time. There are several factors that may contribute to Impostorism among first-year engineering students. These include the high academic standards and expectations placed on students, the competitive nature of engineering programs, and the perception that failure is unacceptable.Perfectionism might get manifested in first-year engineering students as a relentless pursuit of excellence, often driven by a fear of failure and a desire to impress others. This might lead to high levels of stress and anxiety, and may contribute to burnout and academic disengagement.Therefore, the present study aimed to investigate the relationship between Perfectionism, and Impostorism in first year engineering students.

Rationale of the study

According to Klynveld Peat Marwick Goerdeler's Advancing the Future of Women in Business Summit Report, 75% of female executives surveyed reported experiencing Imposter Syndrome,53% of female professionals between the ages of 25-34 are currently experiencing Imposter Syndrome, 85% of women have not spoken to someone at work about their struggles, for fear of being seen as weak. Less than 5% of employers directly address Imposter Syndrome with their staff. 50% of Imposter Syndrome sufferers are working moms, but still, have a higher focus on work than personal life due to feelings of guilt. 169 Russian college students took part in this study to find the link between Perfectionism and psychological distress. The study was conducted by Kenneth T. Wang, Marina S. Sheveleva, Tatiana M. Permyakova in 2019.

Imposter syndrome's mediating and moderating effects on the relationship between

Perfectionism and psychological distress were investigated. The findings showed that

imposter syndrome served as a partial mediator between Perfectionism and anxiety

while fully mediating the link between the two. In another study conducted to

understand the prevalence of the impostor phenomenon and its association with self-

esteem among medical interns in Goa, India, it has been found that a large number of

medical interns suffer from high Impostor Phenomenon characteristics and low

self-esteem. It is important for educators and mentors to be aware of impostor syndrome

and to provide support and encouragement to students who may be experiencing it. With

the advent of technology, students are constantly comparing themselves with peers and

have a hard time incepting their own unique abilities and strengths. The COVID-19

pandemic has created additional stressors for students, such as uncertainty, isolation, and

disruptions to their usual routines and support systems. These stressors might exacerbate

impostor syndrome and Perfectionism, which can negatively impact students' mental

health and academic performance. The study of these phenomena can help educators and

mental health professionals to better understand and address the needs of students in the

current context. This can include developing new interventions and strategies for

managing impostor syndrome and Perfectionism, in a virtual or hybrid learning

environment. The ongoing conversation on mental health and well-being among

students has been brought to the forefront in recent years, making the study of these

phenomena even more relevant. Understanding the prevalence and impact of impostor

syndrome and Perfectionism in engineering students can help to create more supportive

and inclusive educational environments for students.

Chapter II

Review of literature

First described by psychologists Suzanne Imes, Ph.D., and Pauline Rose Clance, Ph.D., in the1970s, impostor phenomenon occurs among high achievers who are unable to internalize and accept their success. They often attribute their accomplishments to luck rather than to ability, and fear that others will eventually unmask them as a fraud. A study by Clance and Imes (1978) aimed to investigate the phenomenon of "impostor syndrome" among high-achieving women. The study found that many of the participants felt like frauds and were afraid of being found out, despite their successes. The study also found that this phenomenon was not limited to women and could also be found in men. This study is considered as one of the first to have coined the term "impostor syndrome". A high level the of Impostor Phenomenon limits the acceptance of success as an outcome of one's own ability and influences feelings self-doubt and anxiety. Clance (1985) suggested that the Impostor Phenomenon is marked by six potential characteristics: (1) The Impostor Cycle, (2) The need to be special or to be the very best, (3) Superman/Superwoman aspects; (4) Fear of failure, (5) Denial of competence and Discounting praise, and (6) Fear and guilt about success. However, the existence of these characteristics in Impostors is varied. Not every Impostor has all these characteristics but to consider someone as an Impostor, a minimum of two characteristics should be found. In order to determine the prevalence of the impostor phenomenon among graduate students, Harvey et al. (2011) conducted a study. According to the study's findings, the majority of participants said they had at least once encountered the impostor phenomenon while pursuing their graduate degrees. Additionally, the research revealed that the impostor phenomenon was linked to higher levels of anxiety and poorer levels of self-esteem.

Graduate programs are often highly competitive, and students may feel pressure to excel

academically in order to secure a good job or advance in their field. They may feel that they are

not as well-prepared as their peers, and that they do not belong in their program. Impostor

phenomenon might lead to feelings of anxiety and self-doubt that may negatively impact

academic performance. If students do not feel confident in their abilities, they may be less likely

to participate in class, seek help when needed, or take on new challenges. An investigation of the

connection between the imposter phenomenon and undergraduate students' academic

performance was conducted by Krieger and colleagues in 2013. According to the study, students

who reported feeling like imposters tended to have lower marks and were more likely to drop out

of college. Impostor phenomenon was also found to be negatively correlated with academic

performance. Research has found that individuals with imposter phenomenon tend to have lower

academic self-efficacy, which is the belief in one's ability to succeed in academic tasks.

Furthermore, imposter phenomenon is negatively correlated with academic performance, and it

is also positively correlated with academic stress and anxiety.

Guillaume and colleagues (2015) conducted a study to look into how the imposter

phenomenon affects undergraduate students' mental health. According to the study, students who

reported experiencing impostor syndrome were more likely to seek mental health assistance.

Impostor syndrome was also linked to higher levels of anxiety and sadness. Students who

experience feelings of inadequacy, anxiety, and self-doubt may struggle with low self-esteem and

confidence, which can lead to depression, burnout, and even suicidal ideation. Addressing

impostor phenomenon can help students develop a more positive self-concept, greater

self-esteem, and better coping skills, which can ultimately improve their mental health and

well-being.

Self-compassion involves treating oneself with kindness, understanding, and acceptance, rather than self-criticism and judgment. When individuals experience impostor phenomenon, they may be overly critical of themselves, which can exacerbate feelings of inadequacy and self- doubt.By practicing self-compassion, individuals can cultivate a more positive and accepting relationship with themselves. This can involve acknowledging and accepting one's imperfections and mistakes, rather than viewing them as evidence of incompetence or fraudulence. It can also involve treating oneself with the same kindness and care that one would offer to a friend or loved one who is experiencing similar feelings of self-doubt or inadequacy (Neff, K. D.2012). Neff and colleagues (2016) study looked into the impact of self-compassion on graduate students' experiences with impostor syndrome. The study discovered that the impostor phenomenon and self-compassion were mutually exclusive, and that students who reported higher levels of self- compassion were less likely to experience impostor syndrome.

Individuals who exhibit maladaptive Perfectionism often set unrealistic and unattainable standards for themselves, and engage in self-critical thinking when these standards are not met. Individuals who experience impostor phenomenon may engage in maladaptive Perfectionism asa way to compensate for their feelings of inadequacy and self-doubt. In a study on Maladaptive Perfectionism, Impostor Phenomenon, and Suicidal Ideation Among Medical Students conducted by Emma Brennan-Wydra ,Hye Won Chung, Nancy Angoff , Jessica Chenfeng and Amelia Phillips (2021)it was found that medical students who exhibit maladaptive Perfectionism are at increased risk for feelings of impostor phenomenon, which translates into increased risk for suicide. These results suggest that an intervention targeted at reducing feelings of impostor

phenomenon among maladaptive perfectionists may be effective in reducing their higher risk for suicide.

In the year 2018, a group of researchers led by Von R. Mascarenhas, Delia D'Souza, and Abhishek Bicholkar conducted a study on the prevalence of the impostor phenomenon and its association with self-esteem among medical interns in Goa, India. The study aimed to determine how often impostor phenomenon occurs among medical interns, and whether it has any impact on their self-esteem. Impostor phenomenon, they found, is an internal experience of intellectual phoniness that affects individuals who feel fraudulent and worthless, despite outstanding academic or professional accomplishments. It is highly desirable for medical students and interns to have high self-esteem and low impostor characteristics, as this will help them become successful medical practitioners. The researchers found that a large number of medical interns had high impostor phenomenon characteristics and low self-esteem. Moreover, impostor characteristics were significantly associated with sleep patterns, suggesting a relationship between feelings of fraudulence and skewed sleep. The study also revealed a significant negative correlation between self-esteem and impostor phenomenon. Individuals with stronger impostor characteristics had lower self-esteem, and vice versa. Therefore, low impostor phenomenon characteristics and high self- esteem are crucial for efficient medical practice. The researchers concluded that measures should be taken to increase the level of confidence and self-esteem among medical students and interns. The study highlights the importance of recognizing impostor phenomenon and its effects on individuals, and the need for strategies to help medical interns build their self-esteem and overcome feelings of fraudulence.

In 2018 focused on graduate students, who are often neglected in Perfectionism research. The study found that socially prescribed Perfectionism predicted some, but not all,

aspects of academic difficulties. Non-display of imperfection was found to incrementally predict all academic problems beyond trait Perfectionism. Women showed greater imposter syndrome and academic stress, but the results did not support gender moderation. The study highlighted the need for continued research in this area.

In 2020, a study by Matilda Sorkkila and Kaisa Aunola explored the risk factors for parental burnout among Finnish parents. The study found that socially prescribed Perfectionism was the most crucial risk factor for burning out as a parent. The higher the level of socially prescribed Perfectionism reported by the parents, the higher the level of their parental burnout. The relationship between gender and parental burnout was mediated via Perfectionism, with mothers reporting more socially prescribed and self-oriented Perfectionism than fathers.

A study conducted by Joachim Stoeber, Aneta V. Lalova, and Ellen J. Lumley in 2020 examined the relationships between Perfectionism, self-compassion, and subjective well-being. The study found that self-oriented and socially prescribed Perfectionism were negatively related to self- compassion, while other-oriented and socially prescribed Perfectionism were negatively related to compassion for others. Self-oriented Perfectionism showed a positive relationship with self- compassion. Both self-compassion and compassion for others positively predicted subjective well- being, and both fully mediated the relationships between Perfectionism and subjective well-being. The findings suggest that self-compassion may explain why some dimensions of Perfectionism show negative relationships with subjective well-being.

In 2020, a group of researchers led by Anne N. Rinn, Kacey Crutchfield, Jessica K. Ottwein, Jaret Hodges, and Rachel U. Mun , they noted that academically gifted students in undergraduate honors programs could be more vulnerable to the imposter phenomenon than

other undergraduates due to their experiences surrounding Perfectionism and participation in

highly selective programs. The researchers aimed to examine the relationship between gender,

honors program participation, Perfectionism, and the imposter phenomenon among

undergraduates. To do so, they analyzed a sample of undergraduate students using hierarchical

regression analysis. The results of the study were surprising. The researchers found that socially

prescribed Perfectionism and participation in honors programs were significantly related to

higher levels of imposter feelings in undergraduate students. These findings suggest that

academically talented students who participate in honors programs may be particularly

susceptible to feelings of fraudulence and worthlessness, despite their outstanding academic

achievements. The study sheds light on the importance of understanding the relationship between

Perfectionism, honors program participation, and the imposter phenomenon. It highlights the

need for educators and counselors to recognize the unique challenges faced by academically

talented students and to implement strategies that can help them overcome feelings of

Impostorism. Ultimately, the study underscores the importance of creating a supportive and

inclusive academic environment that fosters the development of self- confidence and

self-efficacy.

In 2021, a study by Chelsey L. Holden, Lindsay E. Wright, Angel M. Herring, and Pat

L. Sims examined imposter syndrome, Perfectionism, and stress among first- and continuing-

generation college students. The results showed that both groups experience similar levels of

imposter syndrome and stress. Socially prescribed Perfectionism was found to be significantly

correlated with imposter syndrome and stress for both groups. However, imposter syndrome was

more strongly associated with stress among first-generation students.Sophie C. Dahlenburg,

David H. Gleaves, and Amanda D. Hutchinson conducted a meta-analysis of anorexia nervosa

(AN) and Perfectionism in 2019. The results showed that those diagnosed with AN were more perfectionistic compared to the non-clinical group and other psychiatric diagnosis groups. Additionally, people with AN had higher levels of adaptive Perfectionism levels than those without. Despite publication bias, the findings suggest that maladaptive Perfectionism is a factor associated with both AN and BN.

Kurtovic, Vrdoljak, and Idzanovic aimed to investigate the relationship between academic achievement, self-efficacy, Perfectionism, and procrastination among university students. 227 students completed various scales and provided data on academic achievement. The results showed that procrastination was negatively correlated with academic achievement, self-efficacy, and adaptive Perfectionism, while it was positively correlated with maladaptive Perfectionism. Self- efficacy was positively correlated with adaptive Perfectionism and negatively with maladaptive Perfectionism. Maladaptive Perfectionism was a positive predictor of procrastination, while academic achievement, self-efficacy, and adaptive Perfectionism were negative predictors. The study also found that self-efficacy and both adaptive and maladaptive Perfectionism mediated the relationship between academic achievement and procrastination, and between self-efficacy and procrastination.

A study featured in the International Journal of Environmental Research and Public Health in 2022 aimed to analyse the association between Perfectionism, psychological well-being, and suicidal ideation in college students. The study found that academic Perfectionism had a positive correlation with academic achievement and a negative correlation with many aspects of psychological well-being in both men and women. While there was a favourable relationship between Perfectionism and academic success and psychological well-being, there was a positive relationship between Perfectionism and suicidal ideation, despite

both factors having some minor predictive power. The results suggest that Perfectionism is a complex personality trait that can be associated with both good and bad indicators of mental health. Two studies were conducted to understand the relationship between Perfectionism and mental health. The first study in Hungary found that socially prescribed Perfectionism was linked to reduced wellbeing and self-esteem, while socially prescribed and self-oriented Perfectionism were linked to increased psychological distress. The second study in the Philippines found that self-compassion can mediate the impact of Perfectionism on psychological resilience, where self-oriented and socially prescribed Perfectionism indirectly influenced psychological resilience through self-compassion. The findings suggest that Perfectionism can negatively impact mental health and strategies like self-compassion training can be useful in improving resilience.

Chapter III

Methodology

Aim

The aim of this research is to investigate the relationship between Perfectionism and

Impostorism in engineering students and to assess if Perfectionism can predict Impostorism.

Research Question

To find if there is a significant relationship between Impostorism and Perfectionism in first year

engineering students.

Objective

To find if there is a significant relationship between Impostorism and Perfectionism in first year

engineering students.

Hypotheses

H1 : There will be a significant relationship between Perfectionism and Impostorism in

engineering students.

H2 : There will be a significant relationship between self-oriented Perfectionism and

Impostorism in engineering students.

H3 : There will be a significant relationship between other-oriented Perfectionism and

Impostorism in engineering students.

H4 : There will be a significant relationship between socially prescribed Perfectionism and

Impostorism in engineering students.

H5:Perfectionism will significantly predict Impostorism in engineering students

H6 : There will be a significant difference in Impostorism among males and females.

H7 : There will be a significant difference in Perfectionism among males and females.

Research design

It will be an exploratory research, it is a research used to investigate a problem which is not

clearly defined. It is conducted to have a better understanding of the existing problem.

Correlational study and regression will be used for this research. A correlational study is a type

of quantitative research that investigates the relationship between two or more variables. The

goal of a correlational study is to identify patterns and associations between variables,

Correlational studies involve collecting data from a group of participants and measuring two or

more variables. The data is then analysed to determine the strength and direction of the

relationship between the variables. Regression allows us to extend the findings of a correlation to

predict the future from the past. Here we will be using regression in order to find whether

Perfectionism can predict Impostorism. The goal of regression analysis is to identify the

underlying factors that influence the dependent variable, and to understand how these factors

interact with each other.

Operational definition

Perfectionism according to the Multidimensional Perfectionism Scale would involve measuring

scores on each of the three dimensions of Perfectionism through the use of the MPS

questionnaire. Perfectionism is operationally defined as the total score obtained by the participant in the (a)self-oriented Perfectionism (b) other-oriented Perfectionism and (c) socially prescribed Perfectionism dimensions of the forty-five items of the Multidimensional Perfectionism Scale developed by Hewitt & Flett (1991).

Level of Impostorism is what is obtained from Clance impostor phenomenon scale .After taking the Impostor Test, the total score obtained by the participant for the twenty items Clance impostor phenomenon scale indicates the level of Impostorism exhibited by the participant (CIPS; Clance, 1985).

Sample

The sample that was chosen for the study is first engineering merit students . These are individuals within the age group 18-25. This sample is chosen as they are the category of students who have just succeeded in an entrance exam, and they are high achievers.

Population

Population – emerging adults from India.

Sampling design

Purposive Sampling

The sampling method opted was purposive sampling, which is a method of selecting participants for a study in which the researcher actively chooses individuals who have certain characteristics that are deemed important for the research. In this study with first year engineering students, purposive sampling was used to select participants who have just got into an engineering college

after cracking the entrance exam . This type of sampling allows to focus on a specific subgroup

of the population and gain a deeper understanding of their experiences and perspectives.

Inclusion Criteria

- Participants of age 18 – 25 years.

- Participants who are currently doing their first year in an engineering college.

    Participants who got into an engineering college in merit basis.

- Participants who are willing to participate.

Exclusion Criteria

- Subject with certain medical conditions or illnesses.

- Participants currently taking certain medications may be excluded from a study.

- Participants who do not speak the language used in the study may be excluded

Tools used for data collection

1. Consent form

The consent form provides potential research subjects sufficient written information to decide

whether to participate in a research study or not based on an explanation of the proposed research

and the nature of the participation that is requested of them.

2. Sociodemographic data sheet

Socio-demographics are nothing more than characteristics of a population. Generally, characteristics such as age, gender, ethnicity, education level, income, type of client, years of experience, location, etc. are being considered as socio-demographics

3. Multidimensional Perfectionism Scale (Hewitt & Flett, 1991, 2004)

The Multidimensional Perfectionism Scale (FMPS) was created in the early 1990s by Frost et al. and the Multidimensional Perfectionism Scale (MPS) by Hewitt and Flett. The Multidimensional Perfectionism Scale (MPS) is a 45-item measure that measures self-oriented, other-oriented, and socially prescribed Perfectionism, with a 7-point scale ranging from strongly disagree to strongly agree. Self-oriented Perfectionism involves setting exacting standards for one self and stringently evaluating and censuring one's own behavior, while the other-oriented perfectionist is believed to have unrealistic standards for significant others, places importance on other people being perfect, and evaluates others' performance. Social prescribed Perfectionism involves the perceived need to attain standards and expectations prescribed by significant others.

4. Clance Impostor Syndrome Scale

This scale was developed by Clance in 1985. It is a 20 items scale. Each item is scored on 1 to 5 Likert scale ranging from 1 not at all true to 5 very true. The score ranges that 20 to 100. The higher the score, the more frequently and seriously the Impostor Phenomenon interferes in a person's life. The internal consistencies are between .69 and .92.

Procedure

The information in this study was gathered by distributing an online questionnaire via Google Forms to members of the population. Prior to the questionnaire, participants were presented with an informed consent form to ensure that their data would be kept confidential.After obtaining informed consent, the study proceeded to ask a series of questions aimed at gathering demographic information from the participants. The questionnaire of Multidimensional Perfectionism Scale that contained 45 items followed by the questionnaire of Clance Impostor Syndrome Scale with 20 items was presented to the participants. It was made sure that the participant has attended each question in the google form in total. And most of them took 15min-20min to successfully complete the form.The scoring guidelines provided within the questionnaires were used to score them, and the final results were analysed and calculated using the SPSS software version 29 .

Ethical Considerations

- Consent was obtained from the participants prior to the study. It was ensured that the research data remains confidential to an appropriate degree.

- Anonymity and privacy of the participant was maintained.

- Deception or exaggeration about the study was avoided

Data analysis

The Data Analysis used in the study is Statistical Package for Social Sciences (SPSS), which is a software package that provides a wide range of statistical analysis tools for researchers. Post SPSS is a user-friendly software that allows for a variety of data manipulation, data

transformation, data preparation, and data analysis. It also allows for the creation of custom

tables, charts, and plots. It can also handle large data sets, and it can output the results in a

variety of formats, including tables and charts . Regression and correlation will be used for

analyzing the data .

Table 3.1

Normality table

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Impostorism	.073	301	<.001	.982	301	<.001
Perfectionism	.061	301	.009	.987	301	.009

The Shapiro-Wilk test and the Kolmogorov-Smirnov test were both used to assess normality of

Impostorism and Perfectionism. The p-value for Impostorism associated with the Shapiro-Wilk

test and Kolmogorov-Smirnov test were .001, which is less than .05, indicating that the

distribution of scores is significantly normal. The p-value for Perfectionism associated with the

Shapiro-Wilk test and Kolmogorov-Smirnov test were .009, which is less than .05, suggesting

that the distribution of scores is significantly different from a normal distribution. This indicates

that a parametric test is to be used. Parametric tests are statistical tests that assume that the data

being analyzed follows a specific probability distribution, most commonly the normal

distribution. These tests make use of the population parameters, such as the mean and standard

deviation, to estimate the probability of observing a specific sample mean or sample statistic.

t-test was used to compare the means of two independent groups and Pearson correlation was

used to measure the strength of the linear relationship between two continuous variables

Chapter IV

Result and Discussion

Section 1 - Descriptive statistics

Table 4.1

Mean and Standard Deviation of Perfectionism and Impostorism

	N	Minimum	Maximum	Mean	Std. Deviation
Perfectionism	301	125	275	195.69	27.214
Impostorism	301	32	100	70.48	13.608
Valid N (listwise)	301				

Above table shows the descriptive statistics for the sample (N=301). On average, participants reported moderately high levels of Impostorism, with a mean score of 70.8 (SD=13.6) on the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991). For Perfectionism, participants reported relatively high levels of Perfectionism, with a mean score of 195.69 (SD=27.27) on the Clance Imposter Syndrome Scale.

The aim of this research was to investigate the relationship between Perfectionism and Impostorism in first year engineering students and to assess if Perfectionism can predict Impostorism. Pearson's correlation was used to find the relationship between the variables.

Section 2 – Correlation analysis

Table 4.2

Correlation between Perfectionism and Impostorism

		Perfectionism	Impostorism
Perfectionism	Pearson Correlation	1	.415**
	Sig. (2-tailed)		<.001
	N	301	301
Impostorism	Pearson Correlation	.415**	1
	Sig. (2-tailed)	<.001	
	N	301	301

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

The study examined the relationship between Perfectionism and Impostorism, with

Perfectionism as the independent variable and Impostorism as the dependent variable. Pearson's

correlation was utilized to determine the extent of this relationship, and the results showed a

significant positive correlation between the two variables. In a study published in the Journal of

Counseling Psychology, researchers found that high levels of Impostorism were associated with

higher levels of Perfectionism among college students (Chrisman et al., 1995). As a result, the

study's primary objective was confirmed.

The significance value is $\alpha=0.01$. And therefore, the p value is less than 0.05. This indicate that

we can reject the null hypothesis and accept the alternate. That is, the null hypothesis "H0: there

is no significant relationship between Perfectionism and Impostorism in engineering students "is

rejected and the alternate hypothesis "H1: there is a significant relationship between

Perfectionism and Impostorism in engineering students " is accepted.

A study Perfectionism, the impostor phenomenon and psychological adjustment in medical,

dental, nursing and pharmacy students was conducted by Kris Henning, Sydney Ey, Darlene

Shaw in 2002. According to the study, a larger proportion of students than anticipated (27.5%)

were experiencing high levels of psychiatric distress. The study found significant connections

between current psychological distress, Perfectionism, and feelings of Impostorism within each

program, and these personality traits were stronger predictors of psychological adjustment than

most of the demographic factors that were previously linked to distress in health professional

students.

Similarly , the significant relationship between Perfectionism and Impostorism in engineering

students can be explained by the high standards and expectations that are inherent in their field.

Engineering students are often highly motivated and academically successful, leading them to set

high standards for themselves and strive for flawlessness in all aspects of life. However, the fear

of not meeting these standards can lead to feelings of inadequacy and Impostorism, as they worry

that they have only succeeded due to luck or circumstance rather than their own abilities. This

cycle of self-doubt and anxiety can have negative outcomes on their mental health and

well-being.

Table 4.3

Correlation between self-oriented Perfectionism and Impostorism

		Impostorism	Self-oriented perfectionism
Impostorism	Pearson Correlation	1	.351**
	Sig. (2-tailed)		<.001
	N	301	301
Self-oriented perfectionism	Pearson Correlation	.351**	1
	Sig. (2-tailed)	<.001	
	N	301	301

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

The independent variable is self-oriented Perfectionism and dependent variable is Impostorism.

Pearson's correlation was computed to assess the relationship between the two variables , and the

results showed a significant positive correlation between the two variables.The significance

value is

$\alpha=0.01$. Therefore the p value is less than 0.05. This indicate that we can reject the null

hypothesis and accept the alternate hypothesis . That is , the null hypothesis "H0: there is no

significant relationship between self-oriented Perfectionism and Impostorism in engineering

students " is rejected and the alternate hypothesis "H1: there is a significant relationship between

self-oriented Perfectionism and Impostorism in engineering students " is accepted. Self-oriented

Perfectionism is characterized by the act of establishing elevated standards and expectations for

oneself and then engaging in self-criticism when those standards are not attained. Conversely,

Impostorism refers to the sensation of being a counterfeit or impostor, despite having

accomplished much and possessing abilities.The correlation between self-oriented Perfectionism

and Impostorism in engineering students suggests that those who have a habit of setting very

high standards for themselves and are overly self-critical are more prone to experiencing

Impostorism, regardless of their accomplishments. This link may also imply that such students

are at a greater risk of negative psychological effects associated with Impostorism, including low

self-esteem, anxiety, and depression.

Table 4.4

Correlation between Other-oriented Perfectionism and Impostorism

		Impostorism	Other-oriented perfectionism
Impostorism	Pearson Correlation	1	-.061
	Sig. (2-tailed)		.292
	N	301	301
Other-oriented perfectionism	Pearson Correlation	-.061	1
	Sig. (2-tailed)	.292	
	N	301	301

Here the independent variable is Other-oriented Perfectionism and the dependent variable is

Impostorism. Pearson's correlation was computed to assess the relationship between the two

variables. There is no correlation between other Oriented Perfectionism and Impostorism. The

significance level obtained is 0.292. The p-value for Other oriented Perfectionism is more than

0.05. In the study "Fear of Being Exposed: The Trait- Relatedness of the Impostor Phenomenon

and Its Relevance in the Work Context" by Vergauwe, Wille, Feys, De Fruyt, and Anseel (2015).

In this study, the authors investigated the relationship between different dimensions of Perfectionism and Impostorism in a sample of 377 Belgian employees. The results of the study showed that other- oriented Perfectionism was not significantly related to Impostorism. The authors suggested that the lack of significant relationship between other- oriented Perfectionism and Impostorism may be due to the fact that other-oriented Perfectionism focuses on setting high standards for others, rather than for oneself. As such, individuals high in other-oriented Perfectionism may not experience the same level of self-doubt and feelings of fraudulence that are characteristic of Impostorism. The lack of The null hypothesis of "Ho: There will be no significant relationship between Other oriented Perfectionism and Impostorism among engineering students" is accepted and the alternate hypothesis of "H1: There will be a significant relationship between Other oriented Perfectionism And Impostorism among engineering students" is rejected. Hence, there is no significant relationship between Other oriented Perfectionism and Impostorism among engineering students.

Table 4.5

Correlation between Impostorism and Socially prescribed perfectionism.

		Impostorism	Socially prescribed perfectionism
Impostorism	Pearson Correlation	1	.542**
	Sig. (2-tailed)		<.001
	N	301	301
Socially prescribed perfectionism	Pearson Correlation	.542**	1
	Sig. (2-tailed)	<.001	
	N	301	301

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

Here the dependent variable is Impostorism and the independent variable is socially prescribed Perfectionism. Pearson's correlation was computed to assess the relationship between the two variables. There is a strong positive correlation between Impostorism and socially prescribed Perfectionism. Hence the objective of the study is thus confirmed. The significance level is 0.01. The p- value for socially prescribed Perfectionism is less than 0.05. The positive correlation supports the findings of the study "Positive Conceptions of Perfectionism: Approaches, Evidence, Challenges" by Stoeber and Otto (2006). In this study, the authors investigated the relationship between different dimensions of Perfectionism and Impostorism in a sample of 224 British university students. The results of the study showed that socially prescribed Perfectionism was positively related to Impostorism. The authors suggested that socially prescribed Perfectionism may be particularly relevant to Impostorism because it involves a belief that one's worth is dependent on meeting the expectations of others. Individuals high in socially prescribed Perfectionism may feel like impostors because they believe that they are only successful due to external validation, rather than their own inherent abilities. The significant relationship between socially prescribed Perfectionism and Impostorism in engineering college students suggests that the belief that one's worth is dependent on meeting the expectations of others can contribute to feelings of fraudulence and self-doubt. This finding highlights the importance of addressing socially prescribed Perfectionism in interventions aimed at reducing Impostorism in this population. The null hypothesis of Ho:there is no significant relationship between Impostorism and socially prescribed Perfectionism is rejected and the alternate hypothesis of H1: there is a significant relationship between Impostorism and socially prescribed Perfectionism is accepted. Hence there is a significant relationship between Impostorism and socially prescribed Perfectionism in engineering students.

Section 3 – Variance Analysis

Table 4.6

Variance of Impostorism in males and females

		Levene's Test for Equality of Variances		t-test for Equality of Means		Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	95% Confidence Interval of the Difference Upper
		F	Sig.	t	df						
Impostoris m	Equal variances assumed	3.94 3	.048	2. 33 7	29 8	.010	.020	3.71 1	1.58 8	.586	6.83 6
	Equal variances not assumed			2. 29 2	24 3. 62 8	.011	.023	3.71 1	1.62 0	.521	6.90 1

Here it can be observed that there is a significant variance in Impostorism in male and female (α=0.048) which indicates that Impostorism is higher in male than that of female. The reason behind this might be that men and women may be socialized differently in terms of their expectations for success and failure. For example, boys are encouraged to take risks and be competitive, while girls are encouraged to be cautious and avoid failure. This could lead men to feel more pressure to succeed and to view their successes as less deserving, which in turn could contribute to feelings of Impostorism.Ac cording to a study published in the Journal of Career Development, it was observed that men who were high achievers were more likely to experience

Impostorism compared to women who were high achievers. The study surveyed 406

undergraduate students, and the authors found that men who had high levels of self-esteem and

academic achievement were more likely to experience Impostorism compared to women with

similar levels of self-esteem and achievement.

Table 4.7

Variance of Perfectionism in males and females

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | t-test for Equality of Means | | | |
		F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Upper	Lower
Perfecti onism	Equal varianc es assume d	.027	.870	.2 34	298	.408	.815	.75 0	3.2 04	-5.5 56	7.05 6
	Equal varianc es not assume d			.2 35	265 .21 1	.407	.815	.75 0	3.1 95	-5.5 41	7.04 1

It is observed that there is a significant variance in Perfectionism in male and female (α=0.870)

which indicate that Perfectionism doesn't vary in male and female . This indicates that both

genders are equally likely to exhibit perfectionistic tendencies. The factors that contribute to the

development of Perfectionism may be similar for both genders. For example, environmental

factors such as family dynamics, social pressure, and cultural norms may affect both men and

women in similar ways. A study of college students found that there were no significant

differences in Perfectionism between male and female students, although both genders exhibited

high levels of Perfectionism (Stoeber & Rennert, 2008).

Chapter V

Conclusion

Findings

The aim of this research is to investigate the relationship between Perfectionism and Impostorism in engineering students and to assess if Perfectionism can predict Impostorism . After doing Pearson's correlation analysis it was found that there exist a significant relationship between Impostorism and Perfectionism in first year engineering students. Both the variables show a high positive correlation . The subscales of Perfectionism i.e self-oriented and socially prescribed Perfectionism also show a high positive correlation with Impostorism . But the other sub-scale i.e other-oriented Perfectionism seems to have a strong negative correlation with Impostorism .

Limitations

1. Sampling bias: The study may have recruited participants from a specific engineering program or university, which may not be representative of the wider population of engineering students. Therefore, the results may not be generalizable to other engineering students from different backgrounds or institutions.

2. Self-report bias: The study may rely on self-reported measures, which may not accurately reflect participants' actual thoughts or behaviors. Participants may underreport or overreport their levels of Impostorism or Perfectionism, which could affect the study's results.

3. Cross-sectional design: The study may be cross-sectional, meaning that data is collected at a single point in time. This limits the ability to establish causality or determine the directionality of the relationship between Impostorism and Perfectionism among engineering students.

4. Limited scope: The study may focus on only a few aspects of Impostorism or Perfectionism, which may not capture the full extent of these phenomena. For example, the study may only

   focus on academic achievement or social comparison, while neglecting other factors that may contribute to Impostorism or Perfectionism.

5. Social desirability bias: Engineering students may feel pressure to present themselves in a positive light, which may result in social desirability bias. Participants may report their experiences of Impostorism or Perfectionism in a way that is more socially acceptable rather than their true feelings.

6. Limited comparison groups: The study may only compare engineering students to other groups of students, rather than examining differences within the engineering population. This can limit the understanding of how Impostorism and Perfectionism manifest in the specific context of engineering.

Suggestion for future research

The relationship between impostorism and perfectionism can be affected by various factors such as personality traits, social support, culture, gender, academic environment and cognitive factors. Since the study was restricted to only 1st year engineering students in India. Future research

could replicate the study with larger sample size and a wider geographic scope to improve the generalizability of the results. Additionally, exploring coping mechanisms and interventions to reduce negative consequences can help to improve the well-being and academic success of engineering students. Further research can also examine the impact of impostorism and perfectionism on academic performance, faculty and institutional responses, cross-cultural comparisons, and industry perspectives to gain a more comprehensive understanding of these phenomena in engineering students.

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Appendix A

Informed Consent Form

We are Chandana S, Dhaytha Backer and Zainab Abdul Raoof from St Teresa's College, Erunakulam. We are final year students doing BSc Psychology. As part of the third year research, we intend to find the relationship between Perfectionism and Impostorism in Engineering students. This is a survey conducted for the topic Relationship between Perfectionism and Impostorism in Engineering students. In the following survey, you will be asked to fill out questions relating to Perfectionism and Impostorism. The study typically takes no more than 15 minutes. Please read the questions carefully and do provide honest responses.

Kindly fill out the form only if you belong to the age range of 18-25 years and are currently in your First Year pursuing a Degree in Engineering. Participation in the study is voluntary. You may withdraw from this study at any time you wish to discontinue. All the data collected will solely be used for academic purposes. All the responses will be kept confidential.

If you need any clarification or queries, you may contact the researcher at zainabpsy20@teresas.ac.in, dhaythapsy20@teresas.ac.in or chandanapsy20@teresas.ac.in

Thank you,

Regards,

Zainab Abdul, Dhaytha Backer, Chandana S

BSc Psychology Student, St Teresa's College, Ernakulam

By clicking "I Agree" below,

1. You have read the above description of the study

2. You attest that you are within the age group 18-25

3. You have freely consented to participate in this research study.

4. I have understood that I have the right to withdraw at any time during the study.

○ I agree to participate in this study

○ I do not agree to participate in this study

Appendix B

Sociodemographic Data Form

Name (Initials)

Age

Gender

☐ Male

☐ Female

☐ Prefer not to say

Name of the Institution

The quota that you've applied through

☐   Merit

☐   Management

☐   Other

Appendix C

Form B (Perfectionism)

Listed below are a number of statements concerning personal characteristics and traits.

Read each item and decide whether you agree or disagree and to what extent. If you

strongly agree, select 7; if you strongly disagree, select 1; if you feel somewhere in

between, select any one of the numbers between 1 and 7. If you feel neutral and

undecided the midpoint is 4.

1. When I am working on something, I cannot relax until it is perfect

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

2. I am not likely to criticize someone for giving up too easily

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

3. It is not important that the people I am close to are successful

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

4. I seldom criticize my friends for accepting second best

	1	2	3	4	5	6	7	

Strongly Disagree   O   O   O   O   O   O   O   Strongly Agree

5. I find it difficult to meet others' expectations of me

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

6. Everything that others do must be of top-notch quality

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

7. I never aim for perfection in my work *

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

8. Those around me readily accept that I can make mistakes too*

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

9. It doesn't matter when someone close to me does not do their absolute best*

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

10. The better I do, the better I am expected to do*

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

11. I seldom feel the need to be perfect*

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

12. One of my goals is to be perfect in everything I do

Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

13. Anything I do that is less than excellent will be seen as poor work by those around me

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

14. I strive to be as perfect as I can be

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

15. It is very important that I am perfect in everything I attempt

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

16. I have high expectations for the people who are important to me.

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

17. I strive to be the best at everything I do

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

18. The people around me expect me to succeed at everything I do

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

19. I do not have very high expectations for those around me

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

20. I demand nothing less than perfection from myself

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

21. Others will like me even if I don't excel at everything

	1	2	3	4	5	6	7	
Strongly Disagree	O	O	O	O	O	O	O	Strongly Agree

22. I can't be bothered with people who won't strive to better themselves

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

23. It makes me uneasy to see an error in my work

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

24. I do not expect a lot from my friends

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

25. Success means that I work even harder to please others

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

26. If I ask someone to do something, I expect it to be done flawlessly

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

27. I cannot stand to see people close to me make mistakes

	1	2	3	4	5	6	7

Strongly Disagree   ○   ○   ○   ○   ○   ○   ○   Strongly Agree

28. I am perfectionistic in setting my goals

1   2   3   4   5   6   7

Strongly Disagree   ○   ○   ○   ○   ○   ○   ○   Strongly Agree

29. The people who matter to me should never let me down

1   2   3   4   5   6   7

Strongly Disagree   ○   ○   ○   ○   ○   ○   ○   Strongly Agree

30. Others think I am okay, even when I do not succeed

1   2   3   4   5   6   7

Strongly Disagree   ○   ○   ○   ○   ○   ○   ○   Strongly Agree

31. I feel that people are too demanding of me

1   2   3   4   5   6   7

Strongly Disagree   ○   ○   ○   ○   ○   ○   ○   Strongly Agree

32. I must work to my full potential at all times

1   2   3   4   5   6   7

Strongly Disagree   ○   ○   ○   ○   ○   ○   ○   Strongly Agree

33. Although they may not show it, other people get very upset with me when I slip up

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

34. I do not have to be the best at whatever I am doing

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

35. My family expects me to be perfect

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

36. I do not have very high goals for myself

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

37. My parents rarely expected me to excel in all aspects of my life

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

38. I respect people who are average

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

39. People expect nothing less than perfection from me

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

40. I set very high standards for myself

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

41. People expect more from me than I am capable of giving

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

42. I must always be successful at school or work

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

43. It does not matter to me when a close friend does not try their hardest

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

44. People around me think I am still competent even if I make a mistake

	1	2	3	4	5	6	7

Strongly Disagree   ○   ○   ○   ○   ○   ○   ○   Strongly Agree

45. I seldom expect others to excel at whatever they do

         1   2   3   4   5   6   7

Strongly Disagree   ○   ○   ○   ○   ○   ○   ○   Strongly Agree

Appendix D

Form C (Impostorism)

For each question, please select the number that best indicates how true the statement is of you. It is best to give the first response that enters your mind rather than dwelling on each statement and thinking about it over and over.

1. I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task.

	1	2	3	4	5	
Not at all true	○	○	○	○	○	Very true

2. I can give the impression that I'm more competent than I really am.

	1	2	3	4	5	
Not at all true	○	○	○	○	○	Very true

3. I avoid evaluations if possible and have a dread of others evaluating me

	1	2	3	4	5	
Not at all true	○	○	○	○	○	Very true

4. When people praise me for something I've accomplished, I'm afraid I won't be able to live up to their expectations of me in the future.

	1	2	3	4	5	
Not at all true	○	○	○	○	○	Very true

5. I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people.

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

6. I'm afraid people important to me may find out that I'm not as capable as they think I am.

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

7.   I tend to remember the incidents in which I have not done my best more than those times I have done my best

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

8. I rarely do a project or task as well as I'd like to do it.

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

9. Sometimes I feel or believe that my success in my life or in my job has been the result of some kind of error

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

10. It's hard for me to accept compliments or praise about my intelligence or accomplishments

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

11. At times, I feel my success has been due to some kind of luck

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

12.   I'm disappointed at times in my present accomplishments and think I should
   have accomplished much more.

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

13. Sometimes I'm afraid others will discover how much knowledge or ability I really lack

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

14.   I'm often afraid that I may fail at a new assignment or undertaking even though
   I generally do well at what I attempt

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

15.   When I've succeeded at something and received recognition for my
   accomplishments, I have doubts that I can keep repeating that success

	1	2	3	4	5	
Not at all true	O	O	O	O	O	Very true

16. If I receive a great deal of praise and recognition for something I've accomplished, I tend to discount the importance of what I've done.

                    1   2   3   4   5

Not at all true   ○   ○   ○   ○   ○   Very true

17. I often compare my ability to those around me and think they may be more intelligent than I am

                    1   2   3   4   5

Not at all true   ○   ○   ○   ○   ○   Very true

18. I often worry about not succeeding with a project or examination, even though others around me have considerable confidence that I will do well.

                    1   2   3   4   5

Not at all true   ○   ○   ○   ○   ○   Very true

19. If I'm going to receive a promotion or gain recognition of some kind, I hesitate to tell others until it is an accomplished fact.

                    1   2   3   4   5

Not at all true   ○   ○   ○   ○   ○   Very true

20. I feel bad and discouraged if I'm not "the best" or at least "very special" in situations that involve achievement

                    1   2   3   4   5

Not at all true   ○   ○   ○   ○   ○   Very true