

AN ABSTRACT OF THE THESIS OF

Linda A. Yoakem for the Master of Science

in Psychology presented on August 12, 1988

Title: The Imposter Phenomenon by Gender and Plans to Attend

College in a High School Sample

Abstract approved: Cooper B. Holmes

The present study was designed to investigate the Imposter Phenomenon in relation to gender and educational plans following high school graduation. The subjects consisted of 40 eighteen year old high school seniors (20 males and 20 females) selected from Senior English classes in a rural mountain high school. All subjects completed a demographic questionnaire and the Harvey IP Scale.

The results indicated no significant difference in scores between males and females, or between college-bound and non-college-bound students. A nonsignificant interaction effect was noted. The results suggest that male and female high school students experience the Imposter Phenomenon to the same extent regardless of their being college-bound or non-college-bound. Further investigation is necessary before firm conclusions can be drawn.

THE IMPOSTER PHENOMENON  
BY GENDER AND PLANS TO ATTEND COLLEGE  
IN A HIGH SCHOOL SAMPLE

---

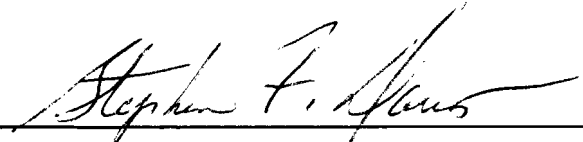
A Thesis  
Presented to  
the Division of Psychology and Special Education  
EMPORIA STATE UNIVERSITY

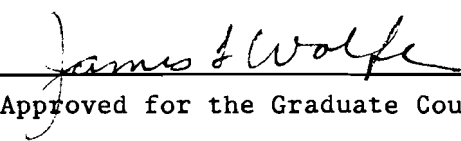
---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science

---

By  
Linda A. Yoakem  
December, 1988

  
Approved for the Major Department

  
Approved for the Graduate Council

465154 DP MAR 21 '89

## ACKNOWLEDGEMENTS

The completion of this thesis was a long and frustrating experience for me, and I owe much to the the support of friends and family. I would like to specifically acknowledge Mel, who has accompanied me through the entire process of this thesis, and has added her own special touches by walking across my keyboard, chasing paper wads, chewing on the corners of books, and distracting me at strategic intervals. She has kept a constant vigil on the typing of each revision and has listened to my comments, mutterings, and gripes without complaint. I wish to thank Julie Portenier, Mike and Kathy Schneider, Jim Balazs, and my parents, Wayne and Joan Yoakem, for their faith in me and the frequent kicks in the seat of the pants when I've needed them. I thank my grandparents, Cecil and Viola Yoakem, for the many stress-relieving games of "canasty", and my grandmother, Pearl Pherigo, for the many "Grandma Rolls", of which many crumbs still remain under my keyboard. Thanks also goes to Joan Waters for everything she's done to help. I also wish to thank the Smith Corona corporation for their development of the PWP System 12, for without this fine machine I would have given up long ago.

My deepest appreciation goes to the Superintendent of Clear Creek Secondary School, Dan Johnson, the Principal, Dick Bryant, and Senior English teacher, Mike Dallas for facilitating in the acquisition of subjects. Thanks to the Class of 1988 for providing data for this thesis.

Oh yes, and of course, thanks to my thesis committee members, both past and present.

## TABLE OF CONTENTS

	page
LIST OF TABLES .....	ii
CHAPTER	
1. INTRODUCTION .....	1
Statement of the Problem .....	13
Statement of Significance .....	13
Limitations of the Study .....	14
2. METHOD .....	15
Subjects .....	15
Instruments .....	15
Procedure .....	17
3. RESULTS .....	20
4. DISCUSSION .....	23
REFERENCES .....	27
APPENDICES .....	31
A. Informed Consent Form .....	31
B. Demographic Questionnaire .....	33
C. Harvey IP Scale .....	35

LIST OF TABLES

page

Table 1: Mean Harvey IP Scale Scores by Gender and Post-High-School Plans .....	21
Table 2: ANOVA Summary Table of Harvey IP Scores by Gender and College Plans .....	22

## CHAPTER 1

### INTRODUCTION

The term "Imposter Phenomenon" is a term used to indicate persons who strongly believe that they are not really as intelligent as people believe them to be. This belief is accompanied by the fear that eventually some significant person will discover that the "Imposter" has fooled everyone. The persons who experience this phenomenon attribute their success to causes outside their own efforts, talent or intellect (Clance, 1985a, 1985b; Harvey & Katz, 1984; Hirschfeld, 1982b; Imes, 1979; Matthews & Clance, 1985). It is a necessary condition for the Imposter Phenomenon that a state of dissonance exist between one's public image as a high achiever and one's private feelings of incompetence (Harvey, 1982). Recurring themes in the research include such characteristics as a failure to internalize success, the perception that one has multiple self-presentations (Harvey, 1980, 1984; Lawler, 1985), and inability to discern a causal relationship between one's abilities or traits and the resulting success (Hirschfeld, 1982a; Flewelling, 1985). The Imposter Phenomenon is a construct which is distinguishable from such broad terms as insecurity (Harvey & Katz, 1984) and related, but not identical constructs such as self-monitoring and self-esteem (Harvey, 1982; Topping, 1983). In fact, persons with Imposter feelings may actually have a high level of self-esteem (Harvey & Katz, 1984).

Harvey & Katz (1984) inferred that 70% of all successful people have experienced the Imposter Phenomenon at some point in their lives in relation to their work or career. It is believed that how the

Imposter feels about his or her success is more important than the level of success. Imposter feelings often extend into other areas of life, such as personal relationships with friends, lovers, spouses, or in roles as parents, children, or adults. There are also varying degrees of the Imposter Phenomenon ranging from extremely mild to a level of severity that can seriously impair daily functioning (Harvey & Katz, 1984).

It has been established that all races and genders are vulnerable to this phenomenon (Harvey, 1984) as well as those in any occupation (Harvey & Katz, 1984). Imposter feelings may also be felt by those who experience an early career success or by those who have early pressures to appear more confident than they actually feel (Matthews & Clance, 1984, 1985). When a person tackles a new project, takes on a new position, or receives a promotion, Imposter feelings may surface. Students tend to score higher on measures of the Imposter Phenomenon than any other group. Imposter fears also seem to occur more acutely when those experiencing the phenomenon enter motherhood (Clance, 1985a, 1985b). Though taking on a new role tends to bring out Imposter feelings, many Imposters overcome their fears when they become accustomed to their new role (Harvey & Katz, 1984).

The Imposter Phenomenon tends to follow a cycle, beginning when the person is faced with a need to perform. The person experiences doubt, worry, anxiety, and fear. Bad dreams or nightmares may occur at this point. The next phase of the cycle may take two forms. The first involves procrastination and then a period of panic in which the Imposter may work day and night to prepare for or complete a task.



The other form involves overwork and overpreparation in which the Imposter may begin a task much sooner than necessary in order to do an adequate job. Imposters are unable to distinguish between projects that require the most intellectual output and excellence and those that require minimal effort and quality. The next phase of the cycle begins when the task is complete and successful. Imposters may receive praise, an excellent evaluation, or a good grade for their completed work. When this happens, the Imposters are temporarily relieved of symptoms. This relief rarely lasts long, usually just until the next time they are expected to perform a task, at which time the cycle begins again (Clance, 1985a, 1985b). After each achievement, Imposters may raise their standards of success, driving them even harder to succeed the next time they are required to perform some task (Matthews & Clance, 1985). This cycle is self-reinforcing, as Imposters believe that the worry, anxiety, doubt, fear, and preparation are crucial for success (Clance, 1985a, 1985b).

Though persons experiencing the Imposter Phenomenon are highly motivated to achieve and have received verifiable and objective evidence that they are capable, competent, and successful in what they do, they are masters at being able to deny that they are indeed intelligent and/or successful (Clance, 1985a, 1985b; Harvey, 1984; Imes & Clance, 1984; Matthews & Clance, 1985). Many Imposters are unable to believe the compliments of others, though they desperately want to know that they are competent, well-liked, and respected in their fields. Imposters may actually have a superstitious belief that if they accept praise, something bad will happen or they will be

expected to continue to perform at the same level in the future (Matthews & Clance, 1984; Clance, 1985a, 1985b). The Imposters are rarely able to experience the joy, satisfaction, and sense of accomplishment that accompanies the success that occurs (Clance, 1985a, 1985b).

Imposters' thoughts are influenced through considerable self-doubt and excessive worry. The difficult times are recalled more than the successful ones and weaknesses are emphasized more than strengths. They constantly worry about being unable to live up to the expectations of others and tend to overrate the intelligence and achievements of others. When Imposters compare themselves to these other successful people, they see themselves as less capable and less intelligent (Clance, 1985a, 1985b). Those experiencing Imposter feelings believe that what comes easy to them is not important or, paradoxically, that what they cannot do is important. Some even may believe that real intelligence is what comes naturally, but feel they do not fit into this category either (Clance, 1985a, 1985b; Harvey & Katz, 1984; Matthews & Clance, 1984, 1985). Though the person may be successful, reduced risk-taking, lowered goals and career aspirations, and decreased productivity usually reduce the attainment of one's full potential (Clance, 1985a, 1985b; Hirschfeld, 1982a, 1982b).

Imposters may experience an acute fear of failure, which may be known to the Imposter (Clance, 1985a, 1985b; Harvey & Katz, 1984). Imposters define failure as "any mistake or flaw that reveals them to be less than perfect" (Harvey & Katz, 1984, p. 13). The fear of failure is so strong in those exhibiting the Imposter Phenomenon that

extreme measures to avoid errors or appear foolish are taken (Clance, 1985a, 1985b). The conscious fear of failure may be hiding an unconscious fear of success in many Imposters, especially in women (Harvey, 1984). Success may be feared due to the accompanying stress and anxiety (Clance, 1985a, 1985b). Some women fear success because they feel they will be seen as less feminine or that other negative consequences will result (Clance, 1983).

If Imposters see success as being atypical of their family, race, sex, or local region, feelings of guilt may arise. Feelings of self-doubt, dread, and stress may be involved. This stress may manifest itself in nightmares, insomnia, depression, and physical symptoms such as headaches (Clance, 1985a, 1985b). Other feelings that accompany the Imposter Phenomenon may include generalized anxiety, depression, frustration, and disappointment in oneself (Clance, 1985a, 1985b; Clance & Imes, 1978; Lawler, 1985).

The Imposter Phenomenon involves actions and behaviors as well. Many Imposters become workaholics and spend much time acting to hide their weaknesses. Imposters have attained some measure of success and often have been the top performer or at least among the very best during their childhood and adolescent years (Clance, 1985a, 1985b; Harvey & Katz, 1984). They idealize congruency but act in incongruent ways. The discrepancies are resolved by attributing the incongruent behaviors to a "false" self or an imposter identity (Harvey, 1980). Imposters tend to be introverted people, though on the surface they often appear to be extroverted. They usually make excellent first impressions (Clance, 1985a, 1985b). The fact that Imposters may

actually be phony part of the time, by telling people what they want to hear or refraining from stating their own opinions, tends to perpetuate the Imposter Phenomenon. The use of charm and perceptiveness to win the approval of one's superiors also maintains Imposter feelings and behaviors (Clance & Imes, 1978).

As with most phenomena, the Imposter Phenomenon cannot be attributed to a single cause. Imposter Phenomenon symptoms have been attributed to family dynamics (Clance, 1985a, 1985b; Harvey & Katz, 1984), unrealistic labels, overly critical parents, over-praising the child, being overly helpful and overprotective of the child (Harvey & Katz, 1984), and the interplay of interpersonal assets. Repeated behaviors, the failure to internalize the role of achiever, and ambiguous achievement situations which allow the discounting of ability as the reason for success may also contribute to Imposter feelings (Harvey, Kidder, & Sutherland, 1981). Unexpected or unanticipated successes as well as overcomplimenting or indiscriminate praise for what is considered to be a normative performance of the job requirements may also contribute to Imposter feelings (Matthews & Clance, 1984). The fear of success that is associated with the Imposter Phenomenon may be due to a fear of separation from family and friends, guilt feelings about success, fear of failure, the idea that one's own success may mean someone else's failure, and even unresolved Oedipal conflicts (Harvey & Katz, 1984).

Some careers, by their nature, tend to promote Imposter feelings. These careers include those that demand constant creativity and new tasks, such as careers in writing, directing movies, or architecture

(Harvey & Katz, 1984). Therapists often experience Imposter feelings due to the ambiguity about their performance and the lack of immediate feedback (Gibbs, 1984; Gibbs, Alter-Reid, & DeVries, 1984).

Treatment of the Imposter Phenomenon may be difficult, as evidence of the Imposter Phenomenon typically does not emerge in therapy immediately. It is rarely stated as the presenting problem since the Imposter feelings are a well-kept secret (Clance & Imes, 1978). Often the client presents a variety of complaints, which may include generalized anxiety, obsessive-compulsive symptoms, panic attacks, procrastination, insomnia, or bulimia (Harvey, 1984). The client may feel overwhelmed, tense, depressed, or dissatisfied and rarely has a conscious awareness of exactly what is the problem (Imes & Clance, 1984). Treatment of the Imposter Phenomenon has been described by many authors and includes a variety of techniques (Clance, 1985a, 1985b; Clance & Imes, 1978; Gibbs et al. 1984; Harvey, 1980; Harvey & Katz, 1984; Hirschfeld, 1982a; Imes & Clance, 1984; Matthews & Clance, 1984, 1985).

The first studies concerning the Imposter Phenomenon applied the term to women only. Imes (1979) defined the term to mean an "internal experience of intellectual phoniness previously observed in high achieving women" (p. 5868B). Hirschfeld (1982a, 1982b) also perceived the Imposter Phenomenon as being exclusively a female problem due to a high need for achievement and desire to maintain success, and uncertainty as to how to do this because they attribute their success to forces outside themselves (Hirschfeld, 1982b). Clance and Imes (1978) found that "women are more likely either to project the cause

of success outward to an external cause (luck) or to a temporary internal quality (effort) that they do not equate with inherent ability" (p. 242). Harvey (1980) supported this finding.

Topping (1983) revised the definition to include both male and female high achievers using the Harvey IP Scale and a sample of university faculty. This was supported by the research of Harvey and Katz (1984).

Imes (1979) studied 80 female and 64 male faculty members from a large urban university in the southeastern part of the United States and determined that high achievers rated ability and effort about equally as the major causes of their success. She did not find any sex differences in their attributions to success. The high achievers who lacked a strong sense of possessing either positively masculine or feminine traits were the most likely to experience a lack of self-confidence and anxiety related to their achievement as found in the Imposter Phenomenon. Her findings did suggest a closer relationship between femininity than masculinity and Imposter-related attributions.

Harvey et al. (1981) studied 30 subjects in three different urban career settings: education, government service programs, and crisis counseling centers. None of the subjects were full-time students. The researchers used the Harvey IP Scale to measure levels of the Imposter Phenomenon. No gender or race differences were found, and no interaction effect was present. Other results indicated that those with self-perceived atypical careers for their sex had higher Imposter Phenomenon scores ( $p < .05$ ). Those with an atypical level of education

as compared to their families also had higher Imposter Phenomenon scores ( $p < .05$ ).

In Harvey's (1982) doctoral dissertation no significant differences on the IP Scale were found for race or sex and no interaction existed between these factors. Those subjects scoring above the median (28.5) perceived their careers as significantly less typical for their sex. Persons in this group reported to have attained an atypical academic level for their family. Harvey also reported that the Imposter Phenomenon was more likely to occur in people who were in gender-inconsistent careers or who have surpassed their families in educational attainment. Harvey postulated that it may be one's perception of oneself as atypical that mediates Imposter feelings, not one's sex or race.

Matthews and Clance (1984) conducted research with 41 male and female subjects. They reported no significant gender differences.

Harvey and Katz (1984) found no gender differences in regard to the Imposter Phenomenon, though significantly higher Harvey IP scores were obtained if the subjects had an atypical role for their gender.

Matthews and Clance (1985) found no significant differences in the number of males and females reporting some experience of the Imposter Phenomenon. They reported that unexpected or unanticipated successes were associated with the Imposter Phenomenon.

In a study conducted by Lawler (1985), 130 graduate students and honors undergraduate students were asked to complete the Harvey IP Scale, the Myers-Briggs Type Indicator, the Personal Data Questionnaire, and the Concentric Circles Method. Lawler's major

finding was that introverted persons were more vulnerable to the Imposter Phenomenon than extroverted persons. There were no statistically significant differences in regard to atypicality within the family of origin in terms of certain personality traits or level of education attained.

Grays (1985) studied 232 undergraduate females in two private women's colleges in a city in the southeastern part of the United States. These subjects ranged in age from 17 to 21 years old. The researcher used several measurement instruments, including the Demographic Data Sheet, Imposter Phenomenon Scale, Self-Esteem Scale, Attribution for Success Measures, Open-Ended Questions, and Measures of Self-Perceived Atypicality. The concept of atypicality was not shown to influence the vulnerability toward the Imposter Phenomenon. The results indicated no support for the notion that the concept of atypicality could account for a race, educational, socioeconomic, or career relation to the Imposter Phenomenon in a group of college women. Women who planned a higher level of education than one or both parents were not more vulnerable to the Imposter Phenomenon, nor were women pursuing atypical careers for their gender.

Flewelling (1985) conducted research (using the Harvey IP Scale) with 98 females and males in professional fields. Atypicality of career in regard to gender had an extremely weak correlation with the Imposter Phenomenon score.

Gibbs et al. (1984) collected data from 84 of the 200 licensed psychotherapists they contacted. Their subjects included 57 males, 26 females, and one subject who did not specify gender. The ages of the



subjects ranged from 34 to 70 years old, and all subjects had between 7 and 42 years of experience. No significant difference in scores between the genders was reported. Females did not report being bothered by their Imposter feelings more than males. It was discovered that those therapists who were considered by their families to be maladjusted were more likely to experience Imposter feelings ( $p < .15$ ).

Stahl, Turner, Wheeler, and Elbert (1980) conducted a three-year longitudinal study to assess the personal characteristics of science majors, the social forces that affect them, and the internalized social forces and self concepts which influence persistence and achievement by females. Their subjects were 41 black senior science majors from twelve high schools in the Atlanta area. All subjects were between the ages of 16 and 18. A questionnaire, which was constructed by the authors, consisting of 56 questions was administered to collect data. It was found that the mean grade point average was 3.0. Sixty-seven percent planned a career in the medical sciences, 14% in engineering, 12% in computer sciences, and 7% in psychology. Fifty-five percent did not attribute their achievements to intelligence when given the open-ended questions, though 60% said that intelligence ranked first when given a question with alternative answers. Stahl and her colleagues found that 72% thought their success was due to abilities between 75 and 100 percent of the time, and 28% thought their achievements were due to luck 50 to 75 percent of the time. Results also indicated that 79% of the students stated that their teachers overestimated their intellectual abilities and 16%

of these said this was done often or almost always. It was also discovered that 68% of the students said that their parents overestimated their intellectual abilities and 32% of these said this was done often or almost always. Twenty-four percent said they put more time and effort into their studies than other majors with the same grade point average. These findings suggest that Imposter feelings are present even at the high school age. In a pilot study with college students, 93% showed indications of the Imposter Phenomenon (Stahl et al., 1980).

To summarize the gender differences which were found in these instances of research, Harvey (1982), Harvey and Katz (1984), Harvey et al. (1981), Imes (1979), and Matthews and Clance (1984, 1985) reported studies in which no significant gender differences occurred regarding the Imposter Phenomenon, though in Matthews and Clance (1984, 1985) and Gibbs et al. (1984) females had insignificantly higher instances of reporting Imposter feelings. Topping (1983) reported that males had significantly higher Harvey IP Scale scores than females.

Stahl et al. (1980) found the Imposter Phenomenon present in their study of 41 black female high school students. These students were all pursuing careers in science. Studies concerning high school students is lacking, especially concerning the Imposter Phenomenon among male students and non-black students. Much of the research focuses on successful persons or persons with atypical educational levels for their families (Grays, 1985; Harvey, 1982; Harvey et al., 1981; Lawler, 1985). Questions remain as to whether the decision

concerning college attendance affects the level of the Imposter Phenomenon. No research has been conducted on the incidence of Imposter feelings in students not planning to attend college. These areas should be explored in order to further understand this phenomenon.

#### Statement of the Problem

Is there a significant difference in levels of the Imposter Phenomenon between male and female 18 year old high school seniors at Clear Creek Secondary School (CCSS) in regard to plans to attend college?

#### Statement of Significance

Information describing the level of Imposter feelings among students allows identification of particular groups which may be at risk of developing problems due to the Imposter Phenomenon. The identification of high risk groups and certain factors which contribute to Imposter feelings allows the development of educational, preventative, or treatment programs aimed at serving the individuals within these groups. It would be possible to tailor programs which address specific problems associated with the Imposter Phenomenon, such as the fear of success, fear of failure, and guilt feelings. These specialized programs could concentrate efforts at educating, preventing, or treating those students in high risk groups. Cost effectiveness of such programs would be expected to be much higher than for a general program aimed at the entire high school population, for only students in high risk groups would be served. This may be a deciding factor in designating funds from a budget utilizing tax dollars in the public schools.

### Limitations of the Study

The phase of the study involving the collection of the data encompassed a period of about one week. Data were collected at least one week before mid-term examinations were scheduled to control for any extreme stress from mid-term testing, though not all of the variance which may have been caused due to mid-term stress could be controlled.

The subjects were selected from the high school senior population enrolled at Clear Creek Secondary School in Idaho Springs, Colorado. All subjects were 18 years of age. This limited the external validity of the results but allowed for a more homogeneous sample than subjects which represented students of all ages.

## CHAPTER 2

### METHOD

#### Subjects

To determine if a significant difference in level of Imposter Phenomenon feelings existed between males and females or between those who were college-bound (those planning to attend a college or university during the fall semester following graduation from high school) and those who were not college-bound, this descriptive study employed a randomly chosen sample from each category in the research design. Volunteers were high school seniors from Clear Creek Secondary School. The subjects consisted of 40 of the 79 eighteen year old seniors, 20 males and 20 females, from a predominantly white, middle class background. Age was determined through the use of the informed consent form (see Appendix A). Clear Creek Secondary School is a class A-sized high school located in a rural mountain setting. The subjects were selected from sections of Senior English classes at CCSS during the spring semester of 1988. All students who agreed to participate in the study on a given day were tested and categorized into one of the four cells in the research design. Ten subjects from each cell were randomly chosen to be included in the study through the use of a computer-generated random numbers list.

#### Instruments

Two measurement instruments were used for collection of data. A demographic questionnaire developed by the researcher was utilized to determine student classification, gender, age, and whether the student planned to attend college full-time after graduation (see Appendix

B). The Harvey IP Scale (see Appendix C) determined the level of Imposter Phenomenon feelings, and generated a score which was used in the statistical analysis of the data.

Imposter feelings, by definition, are usually kept secret. Therefore, persons in a nonclinical population are not likely to reveal these feelings to a researcher unless guaranteed anonymity. The Harvey IP Scale was designed to measure the Imposter Phenomenon in anonymous group conditions, making the data more accurate (Harvey, 1982). Though open-ended questions have been found to be more sensitive to the Imposter Phenomenon than multiple-choice type questions (Stahl et al., 1980), the Harvey IP Scale has many advantages over either of these types of questions. The scale is suitable for anonymous self administration and a substantial degree of generalizability has been indicated through cross-validation (Harvey, 1982). Topping (1983) states that "the IP Scale, with refinement, may be a useful way to measure the Imposter Phenomenon with relatively little investment of time" (p. 1949-B). Due to these advantages, the Harvey IP Scale was selected as the instrument of measurement for this study.

The Harvey IP Scale's items were generated on the basis of previous theoretical observations (Clance & Imes, 1980; Harvey, 1980; Stahl et al., 1980). The internal consistency reliability of the final IP Scale was determined to be between .73 and .85. The scale was built on the basis of items that clustered together empirically as well as two statistical criteria: the ability to discriminate among the subjects and the capacity to aid in maximizing the internal

consistency of the scale (Harvey, 1982). No data were available concerning the test-retest reliability.

The scale consists of 14, 7 point Likert-type items on which subjects rank themselves from "not at all true" to "very true" (Harvey, 1982). Approximately five minutes are needed to complete the scale (Lawler, 1984/1985). To control for positive response biases, eight of the items were worded so the response toward the high end of the scale would indicate a low Imposter Phenomenon score (Harvey, 1982). The final score obtained from the scale may range from 0 (low Imposter feelings) to 84 (high Imposter feelings) (Harvey, 1984). Harvey (1982) found a sample median of 28.5, as well as a mean of 34.56 for honor's students and 29.33 for typical students. Harvey (1984) reported mean scores for male and female "typical" students were 28.00 and 29.78, and mean scores for male and female non-students were 25.53 and 26.54.

### Procedure

A survey design was chosen as the most efficient means of collecting data. Using anonymous questionnaires returned immediately after completion was determined to be more likely to result in subjects responding honestly and spontaneously, as well as insuring a high response rate. Data were collected during regular Senior English class time, which allowed students to respond without being distracted by other obligations. Because all data were gathered in classrooms with which the students were familiar, distractions were at a minimum and the testing environment was relatively controlled as a variable. The use of the anonymous data collection was expected to reduce the

amount of conscious distortion of data which may occur in subjects who do not wish to be identified when reporting their feelings.

Each data collection packet included a release form, a demographic questionnaire, and the Harvey IP Scale. The students were given a maximum of 20 minutes to complete the Harvey IP Scale to insure spontaneity, though most completed the scale in much less time. Before the students began responding to the Harvey IP Scale, they were instructed on how to complete the demographic information and the instructions for completing the Harvey IP Scale were read to them. Students were then allowed to ask questions to clarify these directions.

The instructions to the students were as follows:

Today you will be given the opportunity to participate in research regarding how people feel about themselves and their abilities. Your participation will be voluntary, therefore, if you choose not to participate in the research, please remain quietly seated. In your packet each of you has an "informed consent form" which must be signed by each person participating in the research. After I read the form aloud, please sign the form if you wish to participate in the study. This is the only form which will have your name on it and it will be kept separate from the other forms you will be filling out... The next form is a "demographic questionnaire" which asks you for some information about yourself. Please do not put your name on this form. This information will remain anonymous. Please answer all questions on this and the following form. If you do not answer all



questions, your data will not qualify to be used in the research... The next form is called the Harvey IP Scale, which measures how you feel about yourself and your abilities. Please read the instructions along with me. For each item below, place an X in the space that best indicates how true of you the statement is. Your first thoughts and impressions are most important here, so answer as quickly and honestly as possible. Are there any questions? Please begin.

It was hypothesized that a difference exists between scores on the Harvey IP Scale in high school seniors according to gender. Previous definitions of the Imposter Phenomenon defined the phenomenon as being restricted, then the definition was modified to include males. Subsequent research failed to conclusively define the phenomenon as occurring in both genders. It was also hypothesized that a difference in scores exists in regard to plans to attend college. The Imposter Phenomenon is defined as occurring in those persons described as "high achievers". The question of whether the phenomenon also occurs in those who do not aspire toward higher education remains to be studied. The null hypothesis was that no significant difference exists in Imposter Phenomenon levels between males and females, or between those who are college-bound or not college-bound.

## CHAPTER 3

### RESULTS

Data analysis to determine if a difference in Imposter Phenomenon scores between students of the two genders or students with different plans after high school was performed through the use of computation of means and standard deviations for each of the four cells (college-bound females, non-college-bound females, college-bound males, and non-college-bound males). An analysis of variance (ANOVA) technique was then used to determine if significant differences in scores on the Harvey IP Scale were present.

This study incorporated two independent variables. The first was the gender of the subject, with two levels: female or male. The second independent variable was future plans with two levels: the presence or absence of plans to attend college full-time the semester following high school graduation. The dependent variable was the subject's score on the Harvey IP Scale.

Means and standard deviations for the subjects are shown in Table 1.

Table 1

Mean Harvey IP Scale Scores of Students by Gender and Post-High-School Plans

Plans	Gender		Combined Scores
	Males	Females	
College-bound			
<u>M</u>	29.20	33.10	31.15
<u>SD</u>	10.04	8.68	9.35
Non-college-bound			
<u>M</u>	31.40	27.90	29.65
<u>SD</u>	7.73	6.79	7.31
Combined Scores			
<u>M</u>	30.30	30.50	30.40
<u>SD</u>	8.80	8.04	8.32

Note. The higher the score, the greater the Imposter feelings.

Between-subjects analysis of variance (ANOVA) was used to analyze the data. Results indicated no significant differences between males and females ( $p > .05$ ), or between college-bound and non-college-bound students ( $p > .05$ ). No significant interaction effect was noted ( $p > .05$ ). The ANOVA Summary Table is shown as Table 2.

Table 2

Anova Summary Table of Harvey IP Scores by Gender and College Plans

Source	df	SS	MS	F
College (A)	1	22.5	22.5	0.31892
Gender (B)	1	0.4	0.4	0.00057
A x B	1	136.9	136.9	1.92771
Error	36	2539.8	70.55	
Total	39	2699.6		

## CHAPTER 4

### DISCUSSION

The present study attempted to examine the relationship between male and female high school seniors who were college-bound or non-college-bound in regard to the level of Imposter feelings as measured by the Harvey IP Scale. The research supported the findings of Harvey (1981/1982), Harvey and Katz (1984), Harvey et al. (1981), Imes (1979), and Matthews and Clance (1984, 1985) in that no significant differences occurred in the scores of males and females. The findings disagreed with those of Topping (1983), as Topping found that males had higher IP scores than females.

The mean score for all students was higher than mean scores obtained in groups of students and non-students by Harvey (1982, 1984). Mean scores in this study were lower than mean scores for honor's students obtained by Harvey (1982). The mean score for college-bound students exceeded all of Harvey's (1982, 1984) mean scores except the mean score for honor's students. The mean score for non-college-bound females in this study fell between Harvey's mean scores for female "typical" students and female non-students. The mean score for non-college-bound males in this study exceeded Harvey's mean scores for male "typical" students and male non-students. No firm conclusions can be made from these comparisons, as scores in the present study reflect high school senior scores and the scores of Harvey (1982, 1984) reflect those of college students. It can be said that the scores in the present study indicate that the Imposter

Phenomenon is present among high school seniors. This is a younger age group than was studied in all previous research except that of Stahl et al. (1980) who used 16 to 18 year olds in their study. Stahl et al. (1980) also discovered the Imposter Phenomenon among high school students. If 16 to 18 year olds show symptoms of the Imposter Phenomenon, then the possibility exists that even younger students may also exhibit Imposter symptoms. Future research should be conducted with younger subjects to determine the age at which Imposter feelings develop. This would aid in developing prevention and treatment programs as well as expand our knowledge of the origins of the phenomenon.

The present study suggests that males are showing Imposter symptoms even at the young age of 18 and to the same extent as females of the same age. This population has been virtually ignored by previous researchers, who have focused only on females, college students, or professional adults. High schools and counselors should be aware that not only are females at risk for IP feelings, but males are at risk to the same extent. Because male high school students had not been tested for the Imposter Phenomenon previously, a basis for future research was established by the present study.

Regarding plans to attend college, no statistically significant differences were found between those students planning to attend college and those who were not planning to attend college. This suggests that the student planning a career as auto mechanic, mother, factory worker, or secretary may be at as much risk as the student planning to be a doctor, lawyer, or engineer. College-bound students'

scores had a standard deviation which was two points more than non-college-bound students even though the means were not significantly different. The greater variability in the college-bound group could indicate a developmental transition by some but not all students or a differential realization that college is in the future. High school faculty should be aware that even if a student receives no post-high school education, the student may have to deal with Imposter feelings throughout adult life.

Previous research has focused on college-educated individuals. The present study indicates that the Imposter Phenomenon is present in many students before high school graduation. This leads to the necessity of some intervention during high school. Interventions may include awareness training in the classroom or counseling of students scoring high on a measure of the Imposter Phenomenon such as the Harvey IP Scale. Without such early intervention during high school, non-college-bound students with Imposter feelings may never be identified and offered treatment. High school counselors and teachers should be made aware that the Imposter Phenomenon may be present in some of their students and that both males and females are at risk, whether college-bound or not. Many important life decisions are made when a student is a senior in high school, and these decisions could be greatly influenced by the Imposter Phenomenon and its characteristic fear of failure, fear of success, and self-doubt. Early intervention for all students with Imposter feelings could prevent much future suffering and lack of fulfillment of potential.

This research was intended to investigate relationships between

the variables of gender and intent to attend college on Imposter feelings and should be subjected to further experimental study before firm conclusions are drawn. The present study was conducted in the setting of a small rural mountain community and cannot be said to reflect the possible findings in a large metropolitan high school. Various settings and larger samples should be employed to determine the extent and scope of Imposter feelings among high school seniors. This study may expand the base of knowledge in the fields of the Imposter Phenomenon, psychology, counseling, career development, and student behavior research.



## REFERENCES

## REFERENCES

- Clance, P. (1983, March). The dynamics and treatment of the imposter phenomenon in high-achieving persons. Southeastern Psychological Association Presidential Address, Atlanta.
- Clance, P. R. (1985a). The imposter phenomenon: Overcoming the fear that haunts your success. Atlanta: Peachtree Publishers.
- Clance, P. R. (1985b). The imposter phenomenon: When success makes you feel like a fake. New York: Bantam Books.
- Clance, P. R., & Imes, S. (1978). The imposter phenomenon in high-achieving women: Dynamics and therapeutic intervention. Psychotherapy: Theory, Research and Practice, 15, 241-247.
- Flewelling, A. (1985). The imposter phenomenon in individuals succeeding in self-perceived atypical professions: The effects of mentoring. Unpublished master's thesis, Georgia State University, Atlanta.
- Gibbs, M. S. (1984). The therapist as imposter. In C. Brody (Ed.), Women therapists working with women (pp. 22-33). New York: Springer.
- Gibbs, M. S., Alter-Reid, K., & DeVries, S. (1984, August). Instrumentality and the imposter phenomenon. Paper presented at the meeting of the American Psychological Association, Toronto.
- Grays, L. (1985). The relation between the imposter phenomenon and atypicality of race, educational attainment, socio-economic status and career in college women. Unpublished master's thesis, Georgia State University, Atlanta.

- Harvey, J. C. (1980). Imposter phenomenon among high achievers: The experience of true and false selves. Unpublished manuscript, Temple University, Dept. of Psychology.
- Harvey, J. C. (1982). The imposter phenomenon and achievement: A failure to internalize success (Doctoral dissertation, Temple University, 1981). Dissertation Abstracts International, 42, 4969B-4970B.
- Harvey, J. C. (1984). The imposter phenomenon: A useful concept in clinical practice. Paper presented at the Annual Convention of the American Psychological Association.
- Harvey, J. C., & Katz, C. (1984). If I'm so successful, why do I feel like a fake?: The imposter phenomenon. New York: St. Martin's Press.
- Harvey, J. C., Kidder, L. H., & Sutherland, L. (1981, August). The imposter phenomenon and achievement: Issues of sex, race, and self-perceived atypicality. Paper presented at the meeting of the American Psychological Association, Los Angeles.
- Hirschfeld, M. (1982a, August). The imposter phenomenon in successful career women. Paper presented at the meeting of the American Psychological Association, Washington, D.C.
- Hirschfeld, M. M. (1982b). The imposter phenomenon in successful career women (Doctoral dissertation, Fordham University, 1982). Dissertation Abstracts International, 43, 1722A.
- Imes, S. A. (1979). The imposter phenomenon as a function of attribution patterns and internalized femininity/masculinity in high-achieving women and men. Dissertation Abstracts International 40, 5868B-5869B.

- Imes, S., & Clance, P. R. (1984). Treatment of the imposter phenomenon in high achieving women. In C. Brody (Ed.), Women therapists working with women (pp. 69-85). New York: Springer.
- Lawler, N. K. (1985). The imposter phenomenon in high-achieving persons and Jungian personality variables (Doctoral dissertation, Georgia State University, 1984). Dissertation Abstracts International, 45, 2693B-2694B.
- Matthews, G., & Clance, P. (1984). Treatment of the imposter phenomenon in psychotherapy clients. Paper presented at the Midwinter Convention of Divisions 29 and 42 of the American Psychological Association, San Diego.
- Matthews, G., & Clance, P. R. (1985). Treatment of the imposter phenomenon in psychotherapy clients. Psychotherapy in Private Practice, 3, 71-81.
- Stahl, J. M., Turner, H. M., Wheeler, A. E., & Elbert, P. (1980). The "imposter phenomenon" in high school and college science majors. Paper presented at the meeting of the American Psychological Association, Montreal.
- Topping, M. E. H. (1983). The imposter phenomenon: A study of its construct and incidence in university faculty members. Dissertation Abstracts International, 44, 1948B-1949B.

**APPENDIX A**

**Informed Consent Form**

## INFORMED CONSENT FORM

I affirm that I am eighteen (18) years of age and that I am participating in this research study voluntarily. If I desire to seek information regarding the results of this research, I have been instructed to submit my request in writing to Research, Box 1263, Idaho Springs, Colorado. I understand that my participation in this research is anonymous and that the only form containing my name is this informed consent form, which will be kept separate from all data instruments. I also understand that I may withdraw from the project at any time without recrimination.

---

Participant's Signature

**APPENDIX B**

**Demographic Questionnaire**

DEMOGRAPHIC QUESTIONNAIRE

Place an X in the appropriate blank.

What is your gender?

Female \_\_\_\_\_

Male \_\_\_\_\_

Are you currently planning to attend a college or university as a student next fall?

YES \_\_\_\_\_

NO \_\_\_\_\_



APPENDIX C

Harvey IP Scale

### HARVEY IP SCALE

For each item below, place an X in the space that best indicates how true of you the statement is. Your first thoughts and impressions are most important here, so answer as quickly and honestly as possible.

1. In general, people tend to believe I am more competent than I really am.  
NOT AT ALL TRUE    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    VERY TRUE
2. I am certain my present level of achievement results from true ability.  
NOT AT ALL TRUE    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    VERY TRUE
3. Sometimes I am afraid I will be discovered for who I really am.  
NOT AT ALL TRUE    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    VERY TRUE
4. I find it easy to accept compliments about my competence.  
NOT AT ALL TRUE    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    VERY TRUE
5. I feel I deserve whatever honors, recognition, or praise I receive.  
NOT AT ALL TRUE    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    VERY TRUE
6. At times, I have felt I am in my present position or academic program through some kind of mistake.  
NOT AT ALL TRUE    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    VERY TRUE
7. I feel confident that I will succeed in the future.  
NOT AT ALL TRUE    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    VERY TRUE
8. I tend to feel like a phony.  
NOT AT ALL TRUE    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    \_\_\_    VERY TRUE

9. My personality or charm often makes a strong impression on people in authority.

NOT AT ALL TRUE \_\_\_\_\_ VERY TRUE

10. I consider my accomplishments adequate for this stage in my life.

NOT AT ALL TRUE \_\_\_\_\_ VERY TRUE

11. In discussions, if I disagree with my boss, a professor, or the person in charge, I speak out.

NOT AT ALL TRUE \_\_\_\_\_ VERY TRUE

12. I often achieve success on a project, report, or test when I have anticipated I would fail.

NOT AT ALL TRUE \_\_\_\_\_ VERY TRUE

13. I often feel I am concealing secrets about myself from others.

NOT AT ALL TRUE \_\_\_\_\_ VERY TRUE

14. My public and private self are the same person.

NOT AT ALL TRUE \_\_\_\_\_ VERY TRUE