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## COLLEGE ADJUSTMENT AND THE SHY STUDENT

A Thesis Submitted to the Graduate School In Partial Fulfillment of the Requirements for the degree of Master of Science

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Pittsburg, Kansas

December, 2008

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#### COLLEGE ADJUSTMENT AND THE SHY STUDENT

An Abstract of the Thesis by Jessie Abudu

The study was conducted to examine the correlation between shyness and college adjustment. To make the determination, the Revised Cheek and Buss Shyness Scale (RCBS) (1981) was used to identify shyness, while the Student Adaptation to College Questionnaire (SACQ) (Baker and Sirvk, 1989) was utilized in assessing college adjustment. While the shyness scale assessed shyness as a single construct, the college adaptation scale assessed college adjustment in terms of academic adjustment, social adjustment, personal-emotional adjustment, and college attachment. The data of 90 students in a general psychology class in a Mid-Western college with a total student population of approximately 6,800 was used for the study. Results indicated significant correlations between shyness and academic adjustment, as well as between shyness and personal-emotional attachment, and highly significant correlations between shyness and social attachment, as well as between shyness and attachment to college. This indicates a high probability that shyness is strongly related to the investigated areas; academic, social, personal-emotional adjustment, and attachment to college. It is hoped that the findings of this study will encourage colleges to examine and implement services that will facilitate the college adjustment process for all students, and specifically for shy students who may be at increased risk of adjustment difficulties but who may be unlikely to seek assistance.

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## CHAPTER I

#### INTRODUCTION

#### Purpose of the Study

Shyness, like most psychological constructs, not only affects behavior, thinking, feelings, and reactions, but it also has the ability to create a keen sensitivity to signs of rejection, which prevents a person from engaging in interactive behaviors such as speaking up for one's rights and offering one's opinion (Lund. 2008). It is a personality trait that has been researched by many and examined from all angles because of the perception of its effect on the shy person's life. For instance, Fordham and Stevenson-Hinde (1999) examined shyness with a hypotheses that it correlations with friendship quality and adjustment during middle childhood. Their findings indicated that as children got older, childhood shyness not only correlated strongly with friendship quality but also correlated with trait anxiety and low global self-worth. Shyness is believed to affect not only one's social relations but also the quality of school work (Oakley, 2007). While a large body of research has investigated the phenomenon of shyness in various situations, and others have examined experiences of college students in terms of adjusting to college, not much has been found in the area of shyness and adjustment to college examined together. Although many areas of college adjustment exist, they are supported by a large body of research and can equally be addressed, this study narrows its focus

only to the possible association between shyness and the college adjustment process in terms of the academic, social, personal-emotional, and attachment to college. Hopefully the findings of this study will add to the depth of research that already exists in the areas of shyness and in college adjustment.

#### CHAPTER II

## **REVIEW OF THE LITERATURE**

### College Adjustment

According to the National Center for Education Statistics (2008), college enrollment in 2007 reached a record high of 18 million and is expected to increase by 14% between 2007 and 2016. Enrollment increased by 16% between 1985 and 1995 from the previous decade, and by 23% (14.3 million to 17.5 million) between 1995 and 2005. Between 1990 and 2005, enrollment among 18- to 24-year-old students increased by 33%, with enrollment of those over age 25 increasing by 18%. It is projected that while enrollment among those under 25 will increase by 15% between 2005 and 2016, those over age 25 will realize an enrollment increase of 21%. However, although college enrollment seems to increase each year, the application process of getting into a college of one's choice has not become easier. College admission trends indicate that if two applicants appeared academically equivalent on paper and both were interviewing at a top tier college, the self-confident candidate would most likely be perceived more favorably than a timid and self-conscious student (Hanley, 2005). However, there is growing indication that admission committees at some colleges are questioning the wisdom of favoring some students on appearance only rather than seeking to balance diversity in personalities in the student body of their schools (Hanley, 2005).

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In spite of the increasing enrollment, college retention is an issue that continues to challenge most higher educational institutions (Braxton, Bray, and Berger, 2000; Kern, Fagley and Miller, 1998). Past research (e.g. Tinto, 1987) indicates that of the 40% of college entrants who leave without a degree, 70% of them leave within the first two years of college, with about 56% of each entering class not necessarily resulting in graduations (Gerdes and Mallenckrodt, 1994). Recent studies indicate that a reluctance to attend or complete college may be financially costly not only to the individuals who begin but do not complete their education, for families who sometimes endure college costs with no degree or adequate training for their children, but also to universities that bear the financial cost of lost fees (Martin, Swartz-Kulstad, and Madson, 1999; DeBerard, Spielmans, and Julka, 2004).

Proposed reasons for the retention challenges have been varied. For instance, Coll and Stewart, (2008) used Pascarella and Terenzini's (1983) academic and social integration scales to explore the utility of retention assessments in a professional college in the areas of academic integration, social integration, and career decidedness. They differentiated between at-risk students and those not-at-risk, describing at-risk students as "students who did not persist, who had been placed on academic probation, and/or who had been suspended from school" (p 46). Their study revealed that in the area of Social Integration/Informal Interactions with Faculty, students who were not-at-risk experienced positive influences from out-of-class interaction with faculty, compared to at-risk students.

With regards to Academic Integration/Intellectual Development, not-at-risk students reported satisfaction with their intellectual development, reporting higher faculty

interest in them, and rating teaching ability of faculty more highly. Lower career decidedness was reported by at-risk students compared to not-at-risk students. As a result of their findings, Pacarella and Terenzini recommended higher in-class and out-of-class interaction between faculty and all students, along with a strong recommendation for collaboration between counseling staff and faculty members.

Citing Wolfe and Johnson (1995), and Anastasi (1988), DeBerard, Spielmans and Julka, (2004) indicated that high school Grade Point Average (GPA) accounted for 19% of the variance in college GPA, while Scholastic Achievement Test (SAT) scores accounted for 18% of college GPA variance. Together, the two have been found to contribute to 25% of variance in college GPA (Wolfe and Johnson, 1995, as cited by DeBerard et. al. 2004). In their study of predictors of academic achievement and retention among college freshmen, DeBerard et. al. "predicted that higher high school GPA and SAT scores would be positively correlated with freshman GPA and inversely correlated to attrition" (pg 68). Of the ten variables observed (gender, SAT scores, Short-Form Health Survey-36 (SF-36) physical composite, SF-36 mental health composite, acceptance-focused coping, escape-avoidance coping, smoking drinking, and total social support) for correlations with college retention, DeBerard et. al. found that high school GPA was the only variable that showed a statistically significant correlation with college retention. Other than the mental health composite variable, all the other variables showed significant correlations with GPA as well. DeBerard et. al. also cited a number of studies that found that social support (particularly parental support) was important and positively correlated to college achievement. Other research has found that academic factors that have a positive relationship with college retention in descending order include high

school GPA, socioeconomic status (SES), and ACT scores, in addition to non-academic factors such as academic-related skills, academic self-confidence, academic goals, institutional commitment, social support, institutional selectivity, and financial support (Lotkowski, Robbins, and Noeth, 2004).

College is a critical move for many adolescents (Paul and Brier, 2001). Beginning in high school, all students (at-risk and not-at-risk) are likely to deal with issues of adjusting to the college once they make the move to college. Some of the issues college students will likely deal with will include academic, emotional, social, and attachment to college issues (Gerdes and Millenckrodt, 1994, Baker and Siryk, 1989). College not only exposes a student to a new environment but specifically challenges the student's ability to keep up with coursework, manage a new and evolving social atmosphere that likely requires a different set of skills to maneuver, and the emotional balance needed to juggle them all.

## Academic Adjustment

Academic adjustment is viewed as a measure of various educational demand characteristics related to college adjustment (Baker and Siryk, 1989). Studies indicate that on average, 29% of students graduate within four years upon entering college, with an additional 35% graduating within five years, and about 12% completing their studies in six years (Gerdes and Mallinckrodt, 1994). While there may be other reasons for these findings, one possible reason may be due to different coping styles, which tends to impact adjustment to college (Leong and Bonz, 1997). In their investigation of coping strategies, Leong and Bonz (1997) found that academic and personal/emotional adjustment were related to coping strategies of students; that students who actively sought solutions to

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problems experienced academic success compared to those who did not seek active solutions to their problems. They indicated that mere scholarly potential was no guarantee for success because unsolved problems compounded emotional difficulty. Mooney, Sherman and Presto (1991) investigated how academic locus of control, selfesteem, and perceived distance from home affected college adjustment in general. There was indication that students with an internal academic locus of control adjusted better than those with an external locus of control, that students who had high self-esteem adjusted better than those who did not, and that while actual geographical distance had no effect on college adjustment, perceived distance had an effect, with those perceiving shorter distances between college and home adjusting better than those perceiving longer distances.

#### Social Adjustment

Social adjustment is a measure of interpersonal societal adjustment issues that affect individuals (Baker and Siryk, 1989). As important as interpersonal relationships are, their importance can be even more profound in college. Research suggests that creating meaningful connections and relationships play an important role in the college adjustment process such that students who are able to form new friendships adjust better than those unable to do so (Enochs and Roland, 2006). Because family is usually left at home while in college, friendships become important in college. Friendsickness is a term that was used by Paul and Brier (2001) to describe a student's preoccupation with and concern for the loss of, or change in pre-college friendships. In their study to examine the relationship of friendsickness to college adjustment, Paul and Brier (2001) found that friendsickness was significantly positively associated with college social loneliness, that

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social acceptance, self-esteem, and the numbers of pre-college friends in one's social circle were all important. They found that friendsickness was negatively related to college friendships, self-esteem, and self-esteem in social acceptance. Hertel (2002) compared college adjustment difficulties between first-generation college students (FGCSs) and second-generation college students (SGCSs) and found that SGCSs had significantly greater social adjustment (ease of adjustment) than FGCSs. He also found that students who believe they had supportive friends in college-regardless of whether the friends attend the same college- were more likely to adjust better to college than those who did not have friends in college. Along gender lines, college men and women react differently to the effects of connectedness, social appraisal and perceived stress. College men and women reacted differently to the issue of connectedness whereby women who reported negative direct effects of social connectedness tend to partially report negative appraisal of the campus environment and its contribution (along with other stressors) to college stress (Lee, Keough, and Sexton 2002). Men are more likely to attribute social connectedness to stress and to a more negative appraisal of the college campus (Lee et. al. 2002).

## Personal-Emotional Adjustment

Personal-emotional adjustment examines a student's physical and psychological experiences (Baker and Siryk, (1989). One of the biggest barriers to college adjustment, according to Poyrazli and Grahame (2007), may be stress. While stress is mostly a result of one's environment as in the case of most international students who deal with stressors such as language barriers, cultural barriers, financial, and immigration barriers, (Poyrazli and Grahame (2007), some other stressors are of an internal nature with interpersonal and intrapersonal origins. Ross, Niebling and Heckert (2007) studied the sources of intrapersonal stressors for college students and discovered that most stressors are caused by daily hassles that students deal with. The investigators described daily hassles to include issues such as change in sleeping habits, vacations/breaks, change in eating habits in addition to others stressors such as new responsibilities and increased class workload.

Stress can also become an issue when a student is unable to differentiate the self from the family of origin (Skowron, Wester, and Azen 2004). Stress has been found to play a big role in self-perception among college students (Goldman and Wong, (1997), which may then impact their adjustment to the college environment. In spite of the importance of college, some students may drop out after beginning college due to such stressors.

#### College Attachment

College attachment is the goal commitment and/or institutional attachment aspect of a college student's life, which examines the general feelings about college and feelings about the specific college attended (Baker and Siryk, 1989). Studies show that poor adjustment to the college environment in general and specifically to the currently attended college likely play a role in the college dropout rate (Martin, Swartz-Kulstad and Madson 1999). They discovered that measures of academic self-confidence and a student's positive attitude toward the university attended were the main predictors of good college adjustment, indicating that academic success alone is not enough for college adjustment success. Although graduating from a college other than the one first enrolled in may imply that a more suitable college was found by the student, transfer may still be viewed as a college attachment problem.

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#### Shyness

Survey shows that about 48% of individuals consider themselves to be shy, with 58% of shy individuals reporting problems with introductions, and about 40% indicating problems in social situations (Carducci, 2000). Shyness is defined by Cheek and Buss (1981) as the discomfort and inhibition that a person experiences in the presence of others. They describe the discomfort as tension, concern, feelings of awkwardness which is usually accompanied by gaze aversion in social situations where most people will likely be comfortable. Developmental, personality, and social psychologists have for decades, had considerable interest in shyness (Xu, Farver, Chang, Zengxiu and Jiangsu, 2007). From a social work perspective, shyness is considered to be a mild form of social phobia, with social phobia described in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) as, "a marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others" Walsh, (2002). Cognitive, affective, and behavioral psychologists have had an interest in shyness as well, (Henderson, Zimbardo and Carducci, 2001) with findings in the cognitive realm pertaining to the fact that shyness is associated with self-consciousness, cognitive interference, and a general underestimation of social competence (Cozier, 2001).

Shyness has not only been associated with a disorder such as social anxiety and compared to a personality trait such as sociability, but has often been used somewhat interchangeably with the concept of introversion. Introversion, which is also a personality trait, is defined by Opt and Loffredo (2003) as the constant focus on the inner world of ideas and concepts. It is viewed by Henjum (2001) as a state in which a person moves from the "object" to thoughts and feelings that he or she experiences as a result of an encounter. He described it as consisting of two types; type A introvert and type B introvert. People who are considered type A introverts would include self-sufficient, confident, hard-working, successful people who have firm goals, are self-actualizing and are able to interact very well with people when they must or when they choose to (Henjum, 2001). Those considered type B introverts are seen as timid, lacking in communication skills, are very withdrawn, and with a low self concept.

Some research has attempted to predict shyness, indicating that it is predicted by perceived interpersonal skill deficits and a fear of rejection as a result of the perceived deficits (Jackson, Fritch, Nagasaka and Gunderson (2005), Jackson, Towson & Narduzzi (1997). For the same reasons that shyness may be related to the fear of rejection, Cowden (2005) examined the relationship that shyness may have with worry. He found that shyness is indeed positively related to worry, with worry closely associated with certain aspects of shyness; fear of negative evaluation, and social avoidance and distress. Shyness is quite often considered a social as well as an occupational shortcoming (Romney and Bynner, 1997). Shy individuals have a tendency to have fewer dates, attend fewer social activities, and have fewer opportunities to interact with others (Mounts, Valentiner, Anderson and Boswell, 2006).

The view of shyness may differ widely based on cultural beliefs. For instance, Xu et. al. (2007) believe the view of shyness as a mild social anxiety and some of the descriptors that are commonly associated with it are to a large extent, a Western/North-American view. In their study of Chinese children, Xu et al. broke shyness down into two areas. They not only examined what they referred to as "anxious shyness" (similar to the

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Western definition), but also examined "regulated shyness". They described anxious shyness as anxiety in social situations whereby a child acts restrained or fearful and avoids social contact, and described "regulated shyness" as self-controlled social restraint that is characterized by nonassertive and unassuming behavior. They stipulate that while regulated shyness can be turned on and off, anxious shyness cannot. They do not view both forms negatively.

There may be a difference in the way younger and older children are affected by shyness. Younger children's shyness may be manifested in nervousness and fear when encountering new people and new situations (Coplan and Arbeau, 2008)—as in anxious shyness, whereas older children are more likely to manifest shyness in embarrassment and self-consciousness during situations of feeling as the "center of attention" (Crozier, 2001; Coplan and Arbeau, 2008). The question of who may be considered shy however, will usually depend on who is answering the question. That is because while others such as parents and teachers may describe a child as un-shy due to their perception of observed behavior of the child, the child may actually consider him or herself as shy due to the feelings and expectations he or she has of him or herself (Spooner, Evans and Santos, 2005).

Shyness is not only observable in the behavior a person exhibits, it can also be measured in brain activity. Schmidt (1999) examined the pattern of resting frontal electroencephalographic (EEG) activity in subjects who self-reported as high-shy, lowshy, high-sociable and low-sociable. Results indicated that shyness was associated with resting right frontal lobe EEG activity rather than left frontal lobe EEG activity. Beaton, Schmidt, Ashbaugh, Santesso, Antony, McCabe, (2008) also found similar results in their study of adults who self-reported as high and low socially anxious after controlling for concurrent depressive mood. Shyness is indicated in children as young as two to three years old, with some studies showing that 15% of children who are slow to explore their environment are likely to continue to be inhibited at older ages, while the same percentage who are uninhibited and explore their environment at early ages are likely to continue to be uninhibited as adults (Kagan, Reznick and Snidman's, 1988).

In support of a nurture argument on shyness, Fazio, Effrein and Falender (1981) posited that a person's behavior in social situations will largely depend on the person's perception of other people's expectations. If shyness is perceived, there is the likelihood the person will appear shy, and if sociability is perceived to be expected, sociability will be exhibited. In their study of two groups of individuals, participants in one group were interacted with in a way that was meant to produce introverted behavior while a different form of interaction was meant to elicit extroverted behavior from the other group. They not only found that participants who were previously not considered introverted (or extroverted) began to act in the expected way immediately after the interaction but also internalized the perception the interaction created and continued to exhibit those qualities long after the experiment. This seems to support the idea that shyness can possibly be nurtured in situations where interactions appear to the targeted individual to have expectations of shyness or sociable behavior. Shyness can also be predicted by certain behaviors. For instance, shyness may be predicted in behavior of introversion, neuroticism, and internet usage (Ebeling-Witte, Frank and Lester, 2007). Shyness in the early years will likely not be problematic but shyness that lasts into adolescence may be

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indicative of adjustment difficulties such as low self-esteem, loneliness, and anxiety (Fordham and Stevenson-Hinde, 1999).

#### Impact of Shyness

4. **2**. 19 Numerous studies have investigated shyness in social situations to determine interactive behaviors of shy individuals. Shyness has a tendency to result in loneliness due to the reduced interpersonal competence of shy individuals, heightening expectations of rejection, which then contribute to reductions in social support from others (Jackson, Fritch, Nagasaka and Gunderson's 2002). Cheek and Buss (1981) examined the interactive patterns of four groups; shy-sociable, shy-unsociable, unshy-sociable and unshy-unsociable and discovered that individuals high in both shyness and sociability (shy-sociable) were most tense and inhibited and tended to talk less, avert their eyes, and engage in self-manipulation behaviors whereas those high on shyness and low on sociability (shy-unsociable) did not engage in those behaviors.

Cheek and Buss (1981) believe that the observed behavior of the shy-sociable individuals likely stems from the conflict such individuals experience in their need for affiliation and the inability to adequately respond socially, which then results in more tension for them, compared to the shy-unsociable individuals who may be shy but are unlikely to endure the tension due to their lack of affiliation need. Contrary to Cheek and Buss's (1981) assertion of loneliness that is a result of shyness, Arkin and Grove (1990) examined patterns of affiliation by shy and sociable individuals at lunch time in college. In that study, shy individuals tended to sit with a lunch partner they have known for a longer time, and their lunch partner tended to be someone of the opposite sex, while sociable individuals did not tend to follow a similar pattern. In exploring shyness in romantic relationships, Myers, Dilks and Marceaux (2007) hypothesized that men and women will have positive correlations between shyness and partner dependency. They found that women who scored above the third quartile for shyness on the shyness scale had a significantly higher overall dependency on romantic partners compared to women who scored below the third quartile. On the other hand, men with scores above the third quartile on the shyness scale did not differ on overall dependency on romantic partners from men who scored below the third quartile. Studies indicate that shy individuals appraise vignettes that involve ambiguous and negative situations to be more threatening and are likely to endorse more emotionalfocused coping strategies (Jackson and Ebnet, 2006). The non-shy on the other hand, are believed to endorse social support systems and utilize active coping more strongly in the scenarios presented in the vignettes.

Shyness also impacts the lives of young people almost as much as it impacts the lives of older people. In studying rapport building between children and adults, Rotenberg, Eisenberg, Cumming, Smith, Singh and Terlicher (2003) found children responded differently to adults under different circumstances. For instance under conditions of "smiling while looking away" and conditions of "gazing" at the child, shy 5-year-old participants in the study considered the adult testers who gazed at a higher frequency to be untrustworthy compared to the non-shy participants who considered gazing adults to be friendly and trustworthy. Crozier and Hostettler (2003) found in their study of shyness under different test conditions among 5-year-old children that, different test conditions have an effect on the results of individuals. Compared to non-shy participants in face to face and group vocabulary tests, shy students had a clear

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preference for group testing condition than for face to face testing conditions whereas their unshy classmates did not exhibit difficulties in face to face testing. This was evidenced by shy subjects achieving better scores under the group conditions than under the face to face conditions. In spite of the difficulties shyness may create in relationships, it is not an entirely undesirable trait (Henjum, 1982).

Shyness may also have an effect on the physical activity of shy persons. While most studies have focused on emotions and relationships concerning shyness, Page and Zarco's (2001) study about the relationship of shyness and physical activity indicated that high school students who report being shy are also likely to report low involvement in physical activity/sports participation, which in turn has a tendency to minimize the student's social circle. Fordham and Stevenson-Hinde (1999) found that positive friendship experiences can generate overall self-worth, perceptions of enhanced classmate support, and lower trait anxiety among shy individuals.

## Hypotheses

Although college enrollment has been increasing over the years, research suggests that staying in college longer than the average four years, or leaving college without a degree has become a problem. From the large body of research, there is indication that adaptation to the college environment in the areas of academic, social, college attachment, and emotional wellbeing will be helpful in the college adjustment process. Studies indicate that the personality trait of shyness does affect adjustment in most areas of life. The aim of this study was to investigate any existing relationship between shyness and college adjustment in the areas of social adjustment, attachment to college, personal-emotional adjustment, and academic adjustment. This study hypothesized that there were

likely to be significant negative correlations between shyness and some aspects of college adjustment. Specifically, it was predicted that:

- There will be a statistically significant negative correlation between scores on the Revised Cheek and Buss Shyness scale (RCBS) (Cheek and Buss,1981) and the social adjustment subscale of the Student Adaptation to College Questionnaire (SACQ) (Baker and Siryk, 1989), indicating that higher levels of shyness are associated with lower levels of social adjustment.
- 2. There will be a statistically significant negative correlation between scores on the RCBS scale and the attachment to college subscale of the SACQ, indicating that higher levels of shyness are associated with lower levels of attachment to college.
- 3. There will be a statistically significant negative correlation between scores on the RCBS scale and the personal-emotional subscale of the SACQ, indicating that higher levels of shyness are associated with lower levels of personal-emotional adjustment to college.
- 4. There will be a statistically significant negative correlation between scores on the RCBS scale and the academic adjustment subscale of the SACQ, indicating that higher levels of shyness are associated with lower levels of attachment to college.

## CHAPTER III

#### METHODOLOGY

## Participants

Participants for this study were recruited from general psychology classes in a Mid-Western, mid-sized university with a population of approximately 6,800 students. Participation fulfilled a partial credit requirement for the final grade in a general psychology class. Other options to fulfill the grade requirement were made available to students who chose not to participate in this study. A total of 100 participants completed the two questionnaire used in the study. Of the 100 participants, only 90 participant data was utilized. The unutilized participant protocols resulted from missing and incomplete required information. The 90 participants included 63 women (70%), and 27 men (30%). Ages ranged from 18 to 52 years with 61% of students in the 18- to 19-year-old range, 12% in the 20- to 24-year-old range and 12% in the over 30-yer-old range. Data from approximately 15% of participants that was missing age information was still utilized because age was not required information for this study. Racial composition of participants consisted of 69 (83.1%) Caucasian, 7 (8.4%) Asian, 3 (3.6%) Hispanic, 3 (3.6%) Native-American, and 1 (1.2%) African-American. Seven participants did not provide racial information but were still included in the study because race was one of the optional demographic information pieces. College standing of participants comprised of

65 (72.2%) freshman, 14 (15.6%) sophomore, 7 (7.8%) junior and 4 (4.4%) senior standing.

#### Materials

Materials used included two sets of questionnaires: the Revised Cheek and Buss Shyness scale (RCBS) (Cheek and Buss, 1981) and the Student Adaptation to College Questionnaire (SACQ) (Baker and Siryk, 1989). The RCBS assessed shyness while the SACQ assessed college adjustment.

The Revised Cheek and Buss Shyness scale (1981) was used to assess the level of shyness in participants. The RCBS is a 13-item self-report measure scale that has an alpha coefficient of .90, a 45-day test-retest reliability of .88, a correlation with aggregated ratings of shyness by friends and family of .68 and a correlation with the original 9-item version of .96. Hopko, Stowell, Jones, Armento, and Cheek (2005) examined the normative data, test-retest reliability, factor structure, internal consistency, and convergent/discriminant validity of the RCBS. Their study found an internal consistency of .86, a two-week test-retest reliability of .88. The RCBS was strongly supported in its reliability, stability of normative data over time, association with existing measures of shyness, social anxiety and related constructs.

College adjustment was assessed with use of the Student Adaptation to College Questionnaire (SACQ) (Baker and Siryk, 1981). The SACQ is a 67-item self- report measure that is used to assess student adjustment to college and takes about 20 minutes to complete (Baker and Siryk, 1989). The SACQ is divided into four subscales that measure academic adjustment (24 items), social adjustment (20 items), personal-emotional adjustment (15 items) and goal commitment and/or institutional attachment to the college subscale (15 items).

To assess a student's academic adjustment, four areas of the student's academic life are reviewed: motivation, which refers to the student's attitude towards "academic goals and the academic work required" to accomplish those goals; application, which refers to how well motivation is translated into actual academic work; performance, referring to the success experienced from applying academic effort; and academic environment, satisfaction with the academic environment. Social adjustment is assessed by the general extent and success of social activities and functioning, relationships with other people on campus, homesickness, and satisfaction with the social environment on campus. Personal-Emotional adjustment assesses for the psychological well-being of the student, as well as the physical well-being. Attachment items in the questionnaire are meant to measure the student's general feeling about being in college, and his or her feelings about the college he or she currently attends.

Items on the SACQ scale are statements that are rated on a 9-point continuum scale that ranges from "applies very closely to me" to, "doesn't apply to me at all". The range of 1 to 9 indicates less adaptive to more adaptive adjustment on the scale. The questionnaire is made up of 33 positively keyed and 34 negatively keyed items, with the positively keyed items ranging from 9 to 1 ("doesn't apply to me"), and the negatively keyed items ranging from 1 to 9 ("applies very closely to me").

The academic adjustment scale has an alpha coefficient range of .78 to .90, an internal consistency coefficient range (first semester) of .71 to .74 and an intercorrelation range with the full scale score of .68 to .88. Social adjustment has an alpha coefficient

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range of .73 to .91, an internal consistency coefficient range (first semester) of .60 to .84 and an intercorrelation range with the full scale score of .65 to .87. Properties of the personal-emotional adjustment scale include an alpha coefficient range of .73 to .89, an internal consistency coefficient range (first semester) of .64 to .79 and an intercorrelation range with the full scale score of .68 to .85. The goal commitment and/or attachment to college scale has an alpha coefficient range of .73 to .91 and an intercorrelation range with the full scale score of .67 to .91 and an intercorrelation range with the full scale score of .68 to .85. The goal commitment range with the full scale score of .68 to .94. *Procedure* 

Potential participants were recruited by professors of general psychology classes verbally informing students about the study. Volunteers were directed to sign-up sheets at the Psychology and Counseling Department, located on the campus of the university where the study took place. Three different time periods were available for sign up to participate, with two of the time periods occurring on the same day. Data were collected over a two-week period using a group format. Once participants appeared at the assigned location on the given date and time to participate, each participant was given a consent form and an information card to complete and return to the graduate students supervising the data collection process. The information card was to serve as proof of participation. Once the consent form and information card were returned, each participant was given the two questionnaires (RCBS and SACQ) to be completed and returned. Each participant was then given a slip of paper for his or her records as evidence of participation, along with a Debriefing Statement that summarized the purpose of the study with contact information if questions arose later. The entire data collection process lasted about 25 to 30 minutes.

## Method of Analysis

The Pearson product-moment correlation (r) was utilized to statistically analyze the collected data. Data from the RCBS were processed with data on the SACQ to find out if there were any correlations. The RCBS data were separately analyzed with data from each of the subscales of the SACQ (academic, social, personal-emotional, and attachment), as well as with the full scale data of the SACQ. Analysis was also carried out to uncover possible correlations among the four variables. Descriptive data were generated for gender, academic standing, race/ethnicity, and age of participants.

## CHAPTER IV

#### RESULTS

Pearson product-moment correlations were used to address the relationship between shyness and SACQ scores. Pearson correlation between the shyness variable; (M= 30.27, SD = 10.769) and each of the college adjustment variables: Academic Adjustment (M = 152.16, SD = 24.907); Social Adjustment (M = 123.96, SD = 23.168); Personal-Emotional Adjustment (M = 91.16, SD = 24.048); Attachment (M = 103.22, SD= 15.558); and the Full Scale college adjustment (M = 428.37, SD = 61.645) were obtained. The means and standard deviations for shyness and SACQ are presented in table 1.

Results of the study indicate statistically significant to highly statistically significant correlations between shyness and each of the four variables of college adjustment examined. Results also indicate statistically significant inter-correlations between the variables. The strongest correlation with shyness was found in social adjustment, and attachment to college. The Pearson correlation between shyness and social adjustment was found to be statistically significant,  $\underline{r}(89) = -.437$ , p < 0.01, indicating that the two are strongly inversely related. Results also indicate that the Pearson correlation between shyness and attachment to college is highly statistically significant,  $\underline{r}(89) = -.328$ , p < .01, and also indicates a strong inverse relationship between

shyness and college attachment. The Pearson correlation between the shyness variable and the Full Scale adjustment variable was found to be highly statistically significant as well,  $\underline{r}(89) = -.403$ , p < 0.01, indicating that shyness is strongly inversely related to college adjustment overall when the four variables are involved.

The Pearson correlation between shyness and academic adjustment was found to be statistically significant,  $\underline{r}(89) = -.220$ , p < 0.05, indicating that shyness and academic adjustment are inversely related. Likewise, the Pearson correlation between shyness and personal-emotional adjustment was found to be statistically significant,  $\underline{r}(89) = -.226$ , p < 0.05, also indicating that these two variables are inversely related.

In analyzing the correlation between the four college adjustment areas, the Pearson product-moment correlation was used to address the relationship between the SACQ scores. While these relationships were positive, their strengths were notably varied. The Pearson correlation between academic and social adjustment was found to be highly statistically significant  $\underline{r}(89) = .299$ , p < 0.01, indicating that these two variables are positively related. The relationship between academic and personal-emotional adjustment  $\underline{r}(89) = .532$ , p < 0.01, and academic and attachment adjustment  $\underline{r}(89) = .494$ , p < .01 show high statistical significance as well. Analysis indicate that social adjustment is significantly correlated to personal-emotional adjustment,  $\underline{r}(89) = .220$ , p < 0.05, and highly significantly correlated to academic adjustment,  $\underline{r}(89) = .299$ , p < 0.01, and to attachment to college,  $\underline{r}(89) = .742$ , p < 0.01. Correlations between RCBS and SACQ scores along with inter-correlations between SACQ subscale scores are presented in table 2.

# TABLE 1

Descriptive Statistics of Means and Standard Deviations

Variable	Minimum	Maximum	М	SD	
Full Scale	234	558	428.37	61.645	
Academic	102	208	154.16	24.907	
Social	74	175	123.96	23,168	
Personal-Emotional	41	178	91.16	24.048	
Attachment	62	131	103.22	15.558	
Shyness	13	55	30.27	10.769	

N = 90

# TABLE 2

Correlations of Shyness and Variables; Intercorrelations of Variables.

Variable	Social	Attachment	Personal-	Academic	Shyness
			Emotional		
Social	- AL - AL - A		ų – – – – – – – – – – – – – – – – – – –		
Attachment	.742**				
Personal-Emotional	.220*	.440**			
Academic	.299**	.494**	.532**		
Shyness	437**	328**	226*	220*	
Full Scale	.675**	.802**	.656**	.746**	403**

\*p<.05. \*\*p<.01. N=90

## CHAPTER V

#### DISCUSSION

## Interpretation of Scores

The study was conducted to examine hypothesized correlations between shyness and college adjustment specifically in the areas of academic, social, personal-emotional, and attachment to college. Some of these areas of college adjustment have been the focus of many other studies (Gerdes and Mallinckrodt, 1994). There has been considerable research in these areas of adjustment to college but very little research has been done in the area of associating shyness to social, attachment to college, personal-emotional and academic adjustment. For the current study, it was hypothesized that high levels of shyness will be associated with low levels of adjustment in the areas of social, attachment to college, personal-emotional, and academic adjustment. Data analysis found support for all of these predictions.

Results show significantly strong negative correlation between shyness and social adjustment to college, indicating that higher levels of shyness are associated with lower levels of social adjustment. Results also show statistically a significant inverse correlation between shyness and attachment to college, indicating an association of higher levels of shyness and lower levels of attachment to college. The relationships between shyness and personal-emotional adjustment, as well as shyness and academic adjustment were also found to be statistically significant. The variables of personal-emotional adjustment and academic adjustment also had inverse relationships to shyness. This indicates that high shyness is likely going to be associated with low adjustment in personal-emotional and academic adjustment.

Scores of this study found strong positive intercorrelations between social adjustment, attachment to college, personal-emotional adjustment, and academic adjustment in college. There is strong indication that if students experience difficulty in one of the areas of college adjustment being examined in the study, there is an increased probability that they will also experience difficulty in all the other areas in varying proportions. The strongest correlation was found to exist between social adjustment and attachment to college, an indication that a student has a very high probability to experience adjustment difficulties in those two areas at the same time. A statistically significant relationship was also found between personal-emotional and academic adjustment, indicating that personal-emotional difficulties are likely to be experienced with academic difficulties. Attachment to college was strongly correlated with academic as well as personal-emotional difficulties, as was social adjustment and academic adjustment. Although fairly significant, the least correlation among the adjustment variables was the relationship between personal-emotional and social adjustment. Limitations of the Study

Given that the study was conducted in a small Mid-Western college, it is possible that the results will not be generalizable to bigger universities with larger student populations. The gender disparity of participants, with females more highly represented than males, also creates a limitation. It may be difficult generalizing results of the study to a population that consists of only males or a larger male population than female population. Likewise, the racial/ethnic representation of this study may not reflect the racial/ethnic make-up of other universities and may therefore not allow for generalization to colleges that have different racial/ethnic make-up than the one used for the study.

Like most self-report instruments, RCBS scale and the SACQ questionnaire may possibly be affected by problems such as limited awareness, random responding, and fixed responding. As such, use of the SACQ raises the possibility that scores may not be an accurate indicator of actual level of adjustment. However, in spite of the limitations of self-report instruments, numerous studies point to the validity of the SACQ (Baker and Siryk, 1989) and the RCBS (Hopko et. al., 2005). Finally, because the study is correlational in nature, a causational effect cannot be implied.

## Implications of Finding

Given the strong relationship found between shyness and college adjustment, this study can potentially have practical application to increasing adjustment to college and associated retention rates. Perhaps, colleges may need different interventions for the varied adjustment needs of students. Informal contact with faculty, availability of high quality courses, and early experience in confidence-building may be needed to retain high-achieving students (Gerdes and Mallinckrodt, 1994).

The topic of college adjustment/adaptation is an important one for not just parents, students, and colleges, but also for society as a whole. That is because as studies have shown (Gerdes and Mallinckrodt, 1994), poor adaptation has resulted in students dropping out of college or taking longer than necessary amounts of time to complete coursework. Staying in college for too long for whatever reason creates the danger of more college expenditures than necessary, and a late start in earning potential. It also creates the danger of dropping out of college without ever earning a degree, which may also result in lower self-esteem and lower earning opportunities.

Measures to assist shy students can start as early as in kindergarten where studies show that shy children as young as five and six years old experience less close and also less conflictual relationships with their teachers, as well as somewhat less social initiation with peers than children who are not shy (Rydell, Bohlin and Thorell, 2005). A tendency to have less close relationships with teachers can continue into adolescence and eventually affect academic performance in college, specifically when the shy student has difficulty asking professors for help, or has difficulty contributing to group activities in class.

Henjum, (2001) suggests that elementary schools seek out students with difficulty interacting socially and help them understand their feelings to enhance their social interaction skills, as well as strengthen their self concepts. He recommends that schools give such children the opportunity to work in groups with other children, go on field trips, join the school choir, engage in one-one-one conferences with their teachers, and become involved in sports. Henjum also suggested that shy pupils be given opportunities to become involved in activity classes such as theater and debate, and possibly be encouraged to enroll in psychology, human relation, speech, and communication classes.

At the university level, Martin et. al. (1999) recommends that college counselors take the lead in assisting students to adjust successfully to the college environment. They may do so by developing and implementing important academic and social programs to help enhance skills in students to assist them in navigating the college environment more

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easily. Students struggling academically will benefit from counseling programs that address career planning, time management, anxiety management, study skills, and appropriate course loads that will help build confidence and academic success (Gerde and Mallinkrodt's, 1994). Other services may be made available to incoming students through psychoeducational seminars in residence halls and through on-campus organizations (Martin et. al. 1999). Topics to address may include all elements of a successful educational experience, social activities, and peer support groups that are led by upper class students. College counseling services may also take the initiative to educate faculty and other staff that has direct contact with students about the developing needs of students (particularly shy students), so they will be able to work better with students to ensure that problems in class are addressed immediately. These proactive services will be most useful to shy students who are least likely to seek services that will be helpful to their adjustment needs.

#### Future Directions for Research

The study contributes to the literature of college adjustment and shyness, and gives information to colleges that seek to improve retention at their institutions. A great deal of research has explored emotional difficulties that affect the college experience but not many have considered the relationship between shyness and college adjustment. The results of this study can be used by colleges to design programs that will help identify and assist shy students through career counseling, emotional counseling, and other counseling services. It is hoped that such services will help colleges in serving all their students, especially those least likely to seek assistance mainly due to shyness. As significant as the results of this study are, it will be scientifically useful for this study to be replicated with a broader sample. Because a broader sample is likely to produce more generalizable results, such results will produce evidence to the fact that shy students and for that matter, shyness, relates to adjustment issues in college. While the SACQ is only used in college situations, the RCBS can be used in any situation. It is therefore hoped that the shyness scale will be combined with questionnaires that apply to the workplace or other areas of life in order to gather information that can further the understanding of the relationship of shyness and other areas of life. The importance of such investigations is that ways may be sought to either minimize the effect of shyness or to help shy individuals cope with their emotions to minimize the impact of shyness in their lives.

Previous studies have shown the effectiveness of proactive services impacting college adjustment in general, but it will be useful for future research to address the impact of proactive services specifically on shyness.

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APPENDIX

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#### APPENDIX A

#### PARTICIPANT CONSENT FORM

TITLE OF PROJECT: College Adjustment and the Shy Student. PRINCIPAL INVESTIGATOR: Janet Smith, Ph.D., Department of Psychology Counseling, Pittsburg State University, 1701 S. Broadway, Pittsburg, KS 66762, 620 235 4523.

You are invited to participate in a project evaluating the effects of personality characteristics in the college adjustment process. You are recruited for this project because you are 18 years or older, attend a four-year college, and are enrolled in a General Psychology 155 class. We are attempting to recruit 100 participants for this project.

Your participation in this project is entirely voluntary and you may withdraw your consent at any time.

These are the alternatives available to you:

- 1. You could choose to participate in the project.
- 2. You could choose not to participate in this project but instead, complete one of the alternative assignments available to you in partial completion of your general psychology course, specifically your General Psychology 155 class requirement of participating in one experiment, completing one reaction paper, or completing one internet assignment as described in your course syllabus.

#### PROCEDURES

If you agree to participate, you will be asked to complete two sets of questionnaires about adaptation to college and shyness. It is estimated that answering both questionnaires will take approximately 30 to 35 minutes.

#### BENEFITS AND RISKS FOR PARTICIPATION

- 1. The information you provide may have benefits for science because this study will give us information about student adaptation to college as far as academic, social, emotional and attachment to college are concerned. Also, by completing these two questionnaires, you will fulfill your General Psychology 155 class requirement of participating in one experiment, completing one reaction paper, or completing one internet assignment as described in your course syllabus.
- 2. The psychological risks of participation in this study are minimal. A potential risk is that you may experience some discomfort while responding to items on the questionnaires. If you have concerns regarding your adjustment to college experience, you may contact the University Counseling at 620 235 4044 (225 Whitsitt Hall, Pittsburg State University, Pittsburg, KS 66762).

3. There are no known or expected physical risks associated with participating in this study.

### **COMPENSATION**

There is no other compensation for your participation in this investigation, other than the opportunity to partially fulfill the final grade requirement in your General Psychology 155 class.

#### FREEDOM TO WITHDRAW WITHOUT PREJUDICE

If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time. Your desire to withdraw from this investigation will not negatively impact your ability to still fulfill the grade requirement in your General Psychology 155 class, as the options of completing one reaction paper or completing one internet assignment will still be available to you.

## CONFIDENTIALITY STATEMENT

- 1. All the data you provide will be kept confidential. You will be identified by a code number only on all forms you complete. The data will be stored in locked file cabinets in offices that have limited access so that they are available only to appropriate professional staff on the project.
- 2. Any data that may be published in scientific journals will not reveal the identity of participants.

## INVITATION OF QUESTION

- 1. If you have any questions, we expect you to ask us. If you have any additional questions later, Janet Smith, Ph.D., will be happy to answer them. Please contact her at 620 235 4523.
- 2. If you are not satisfied with the manner in which this study is being conducted or if you have any questions concerning your rights as a study participant, please contact Mary Jo Litten, Ph.D., Chairperson, Committee for the Protection of Human Participants, Department of Psychology and Counseling, Pittsburg State University, 620 235 4492.

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTAND THE ABOVE IMFORMATION, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, AND THAT A COPY OF THIS FORM HAS BEEN GIVEN TO YOU.

Printed Name of the Participant

Signature of Participant

Date

# APPENDIX B

# DEMOGRAPHIC INFORMATION

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18 to 19 years:	61%
20 to 24 years:	12%
Over 30 years:	12%
No Age Provided:	15%
Gender	
Male:	30%
Female:	70%
Race	
Asian:	7.8%
African-American:	1.1%
Hispanic:	3.3%
Native American:	3.3%
Caucasian:	76.7%
Other:	0
Year of School	
Freshman:	72.2%
Sophomore:	15.6%
Junior:	7.8%
Senior:	4.4%

Major in School

## APPENDIX C

## **Debriefing Statement**

Thank you for participating in this study.

The study will examine the relationship between shyness and adjustment to college, specifically the relationship between shyness and academic, emotional and social adjustment. Individual results will not be available but if you are interested in the overall results of the study, you may contact Dr. Janet Smith, Department of Psychology and Counseling, Pittsburg State University, 1701 S. Broadway, Pittsburg, KS 66762 (620 235 4523).

If you have any concerns about your own adjustment to college, resources are available through University Counseling Services at 620 235 4044 (225 Whitsitt Hall, Pittsburg State University, Pittsburg, KS 66762).