THE EFFICACY OF A STRENGTHS-BASED APPROACH
IN A UNIVERSITY 101 COURSE WITH UNDECIDED STUDENTS

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ABSTRACT

Universities have historically approached college student success by measuring persistence and retention (Astin, 1977, 1984, 1993, 1999; Tinto, 1975, 1987, 1993). College student persistence from the first year to the second year is of primary importance to higher education administrators because higher education is subject to increasing accountability standards by stakeholders. As a result, a traditional practice employed by colleges and universities to help with the transition to college and enrollment for a second year is the first-year seminar or university 101 courses. To what extent can university 101 courses be modified to enhance the college student success and ultimately the persistence and retention of these students? The purpose of this study was to understand how a university 101 course with a strengths-based approach (Schreiner & Anderson, 2005) impacted undecided students during their first semester. The objectives of this study were: (a) to compare students’ self-reported perceptions before and after participation in the university 101 course, and (b) to allow students to share their own experiences of the changes that occurred as a result of the university 101 course.

The research methodology employed by this study was a quasi-experimental design with a sequential mixed-method approach. The context of the study was an eight-week university 101 course taught for undecided students at the University of Illinois. For the intervention, the treatment cohort of students’ syllabi included a strengths-based approach while the comparison group received the traditional course as outline by the university. Using a pre- and post-test model, students were surveyed electronically to better understand the impact on students after the eight-week course. At the conclusion of the eight-week courses, fourteen students were individually interviewed to provide a better understanding of the changes occurring in students.
Using a multivariate model controlling for race, gender, and ACT Math, there was one statistically significant difference for the change in the frequency students have thought about their weaknesses (p<.01) between the students with the strengths-based approach and without the strengths-based approach. The effect size (Cohen’s d) for the change in the frequency students have thought about their weaknesses was medium, suggesting the result to be educationally significant (d=0.417). The results of the multivariate analysis were quite profound considering the treatment was a limited intervention of a reading, a lecture, and an inventory (Clifton StrengthsFinder) and the inventory is currently priced at approximately $15.00.

In addition, the results suggested that race and gender appeared to matter to the degree and direction and in which the strengths-based approach was integrated into the students’ personal and academic lives. Further, students from the strengths-based cohort incorporated strengths into the academic and personal lives.

There are three recommendations for educational policy as a result of this study: (1) increase and expand current strengths-based offerings in advising contexts, (2) increase and expand strengths-based approaches to additional campus environments, and (3) modify current campus opportunities to include strengths-based principles. I have five recommendations for further research: (1) further analysis of collected data in this study (2) continued data collection for longitudinal efficacy of the strengths-based approach (3) expansion and further development of strengths-based offerings (4) the study into the stages of strengths development (5) the integration of the strengths-based approach into the large advising environments.
For my family and friends
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CHAPTER I

INTRODUCTION

Enhancing the success and retention of college students is an ongoing issue in higher education. Although more high school graduates are matriculating to universities, the percentage of students completing a bachelors degree within five years of enrollment has declined by more than twenty-five percent between 1970 and 1999 (Turner, 2004). Further, research indicates that the time to degree attainment has been rising as well (Turner, 2004).

There is a vast amount of research describing first-year student attrition and the numerous challenges for first time students (Astin, 1999; Pascerella & Terenzini, 2005; Braxton, 2000; Tinto, 1993). From 1972 to 2000, approximately eighty-eight percent of new students in the United States persisted from their first to second year of study (Adelman, 2004). Approximately 216,000 students did not persist to their second year (National Center for Educational Statistics, 2005). In addition, ten percent of students completing their second year did not obtain a bachelors degree within 8.5 years (Adelman, 2004). Therefore, a significant number of students are not receiving the full benefit of a higher education.

Why should administrators dedicate considerable time and effort into understanding the persistence of college students and efforts to increase their success? First, in terms of human capital theory, the attainment of a degree brings with it increased economic benefits (Miller, Janz, & Chen, 2007). An extensive list of studies estimates the private gains due to educational attainment (Kane, 1999; McPherson & Schapiro, 2000). Second, citizens are stakeholders in higher education through state and federal income and property taxes (Miller et al., 2007). Although public funding of higher education has been on the decline as a percentage of total cost, in 1995-1996, thirty-five percent of college revenue were from state dollars (McGuinness,
Beginning in the 1980’s, states began to ask universities to demonstrate student outcomes (McGuinness, 2005). Third, the United States has continued to lag behind internationally, in terms of educational attainment as a percentage of the population (Callen, 2008). If current educational practices continue, the global competitiveness of the United States may decline further (Miller et al., 2007). Fourth, the reputation of any university depends in part on its graduation rate (Miller et al., 2007). These are four basic reasons why administrators should invest time and energy into studying persistence and the programs that support college student retention.

Since persistence is vital for economic success in America, scholars must explore why students are not persisting in college. Your First Year College Survey of 2007 (FYCS) provides insight into college student persistence (Liu, Sharkness, & Prior, 2008). Students indicated that colleges and universities did not meet their expectations after their first year. The most common difficulties described by entering students were time management, study skills, and adjusting to the rigors of college. However, most students reported the transition to college to be at least “somewhat easy.” On a positive note, students did indicate an increase in the broad categories of general knowledge, their knowledge of a particular field or discipline, and critical thinking skills. In addition to self-reported information collected by the FYCS, higher education scholars have been examining the issue of persistence for many years, often under the terms “student success” or “first-year experience.” Individual scholars have approached student success through a variety of lenses. Two commonly accepted measures of student success are completion of college courses with a satisfactory grade point average and enrollment in a second year of study (Upcraft, Gardner, & Barefoot, 2005). Some additional dimensions of student success are also applicable, but not inclusive of all scholarly perspectives, including academic and intellectual
competence, the development and maintenance of interpersonal relationships, identity development, career exploration, issues of health and wellness, an examination of spiritual beliefs, multicultural competence, and civic responsibility on student success and student development (Upcraft et al., 2005). These components are built upon decades of research by the work of higher education scholars including Chickering’s Seven Vectors of Student Development (Chickering, 1969; Chickering & Reisser, 1993), Astin’s Theory of Student Involvement (Astin, 1977, 1984, 1993, 1999), and Tinto’s Model of Student Integration (Tinto, 1975, 1987, 1993).

This chapter identifies the problem grounded within academic advising and the utilization of first-year seminars, by focusing on undecided students. Next, I articulate the purpose of the study, definition of key terms, the theoretical framework, and the research questions. Finally, I conclude with the limitations and delimitations and the significance of the study

**Statement of the Problem**

College student persistence from the first year to the second year is of primary importance to higher education administrators. A traditional practice employed by colleges and universities to help with the transition to college and enrollment for a second year is the first-year seminar or university 101 course. Overall, research on the first-year seminar indicates that it is an effective practice (Barefoot, 2000). However, there is some inconsistency in the research as to the educational outcomes affected by the first-year seminars due to the vast offerings and definitions of first-year seminars (Miller et al., 2007). More research on ways to modify these introductory courses with undecided students is necessary in order to enhance the success of these courses and ultimately the students.
One approach being adapted to higher education is a strengths-based approach and, specifically, strength-based advising. Donald Clifton originally suggested that a new approach of strength development be used with college students and delineated four stages in strength development as identifying, affirming, envisioning, and planning (Schreiner and Anderson, 2005). As a former college administrator, Clifton believed universities needed to engage in assets-based thinking or excellence in education rather than deficit-based thinking. However, there is limited research concerning the use of what I will simply call “strengths” with college students and no current research on the use of strengths in an introductory course with undecided students. Only three peer-reviewed articles concerning a strengths-based approach with college students have been published (Schreiner and Anderson, 2005; Lopez, 2006; Lopez and Louis, 2009).

**Purpose of the Study**

The first-year seminar may be an appropriate mechanism for increasing college student retention. A recent study found that college students who participated in first-year seminars were more likely to return for their sophomore year than non-participants (Miller et al., 2007). This study examined advising practices during a first-year seminar also known as a university 101 course. The purpose of this mixed method study was to understand how a university 101 course with a strengths-based approach impacted undecided students during their first semester. The first-year seminar course has several goals including easing the transition to college for new students, increasing student interaction with faculty and other students, addressing insufficiencies in student preparedness, and increasing academic expectations and engagement (Barefoot, 2000). The first objective of this study was to compare students’ self-reported perceptions before and
after participation in the university 101 course using a web-based survey. The second objective allowed respondents to share their own experiences through individual interviews to provide an enhanced understanding of the changes that may have occurred as a result of the university 101 experience.

**Research Questions**

Thus, the research questions were: how does a university 101 course using a strengths-based advising approach:

1. impact undecided students’ reported abilities to identify and explore personal strengths?
2. influence how undecided students critically think about personal and academic choices related to careers and majors?

**Definition of Key Terms**

*Persistence* is the continued enrollment of new students at the same institution for subsequent years.

*First-year seminar or university 101 course* is a college level course designed to help students transition to the university by exposing them to the resources, regulations, and opportunities the university has to offer (Gordon, 1995).

*Strengths-based approach* is grounded in the field of positive psychology developed by Edward “Chip” Anderson, Donald Clifton, and others through research conducted by the Gallup organization. Specifically, the strengths approach uses the Clifton StrengthsFinder instrument to help one explore strengths.

*Strengths-based education* is “a process of assessing, teaching, and designing experiential learning activities to help students identify their greatest talents, and to then develop and apply
strengths based on those talents in the process of learning, intellectual development, and academic achievement to levels of personal excellence” (Anderson, 2004, p.1).

*Strengths-based advising* is a pedagogical approach to help students navigate the college environment and develop a sense of direction and purpose during academic advising. The foundation of this approach is strengths-based education and a strengths-based approach (Schreiner and Anderson, 2006).

*Undecided students* are students who enter the college or university without a specific intended major or who have been not been accepted into their preferred major and have been redirected to an undecided designation. Undecided student may also refer to undeclared or exploring students. One definition of the undecided student is “unwilling, unable, or unprepared to make educational or vocational choices” (Lewallen, 1995, p. 22).

**Theoretical Framework**

This study explored an emerging theoretical framework of strengths-based advising as defined by Schreiner and Anderson (2005). Since this was a new approach in higher education, it was important to identify that it as grounded in accepted higher education literature, including Astin’s (1978) Theory of Student Involvement and Tinto’s (1993) Theory of Student Departure.

Strengths-based advising is defined as a process of engaging students’ natural talents to build confidence in order to be successful in college (Schreiner & Anderson, 2005). There are four stages in the strengths-based advising process: identifying, recognizing, affirming, and planning. In the first stage, students are encouraged to become aware of their talents and the fundamental principles of strength development. In the second stage, students use their newfound understanding to recognize areas of strengths in their daily and academic lives. Then, the student
can begin to affirm these areas of possible strength. Finally, the advisor and the student can begin
to develop an action plan for future strength development.

Strength-based advising is a supportive practice for students during the college career.
The practice of helping students by providing supportive environments results from over three
decades of research on college student persistence and retention. As previously discussed, there
are three common theoretical approaches in the persistence literature: Tinto’s Theory of Student
Departure, Astin’s Theory of Student Involvement, and Bean’s Theory of Student Departure.

Alexander Astin’s (1978) Theory of College Student Involvement uses the I-E-O (Input-
Environment-Output) model to understand how student precollege characteristics interact with
the collegiate environment to affect student outcomes. Vincent Tinto’s (1993) research
demonstrates that students have a variety of reasons for leaving a university that can be gauged
by how highly integrated into the fabric of the university the student becomes. John Bean (1980)
built upon Astin and Tinto’s research and incorporated work place turnover theory into

Overall, the persistence literature has two major themes. First, precollege characteristics
affect college student success; however, institutions can adjust their admission profiles to affect
this variable. Second, the student’s integration with the college environment is a significant
factor in their success, which includes both in and out of the classroom activities. Programs that
facilitate students’ integration will affect the retention of college students.

**Limitations and Delimitations**

The study was limited by several factors. One, the first-year seminar course was an eight-
week intervention activity started during the first week of the fall 2010 semester for new
students. The short intervention included a reading, a fifty-minute lecture, and the Clifton StrengthsFinder instrument. Given the short intervention period, students may not have enough exposure to the strengths approach and the enrolled students may not understand the full impact of the course during the observation period or the impact initially observed may be less than the ultimate impact on the student. Two, the first-year seminar course was in its second iteration. The formative stage of this course’s development may have impacted the effectiveness of the course and the strengths approach. Third, fourteen sections of the course offered in the fall 2010 were taught by thirteen different academic professionals. Although the study captured data on section variation, it could not fully capture the variety of experiences occurring in each of the classrooms. Fourth, since the participation in the study was voluntary, the responses received may not have been representative of the entire population of students enrolled in the seminar course. Fifth, the study relied on students’ self-reported perceptions of their experience during the first eight weeks of their first term. That, at the very least, was a function of the students’ ability to think critically, be self-aware, and articulate their experience to others. Not all students were at the same level of these skills or abilities. Sixth, there were many reasons for students to not feel engaged or satisfied with the university which were not assessed in this study; these included their varied course participation and housing, as two examples. These were six limitations of the study which affected the overall efficacy and usefulness of the data and conclusion drawn.

Since the main concern of this study was the impact of a strengths-based approach on first-year students, participation in the study was limited to first-time freshman students to the university thereby excluding transfer students. Further, students must have completed the eight-week introductory course. In addition, this was not a study on the overall effectiveness of a first-
year experience, although the study acknowledged the course as the context or location of the study. This study specially targeted the use of a strengths-based approach and its impact on students, which may or may not have related to the effectiveness of the first-year seminar course. Further, this study is an exploration of strengths development or integration by the student; therefore, the findings will be limited to the students’ individual agency or integration of the strengths-based approach and not to the structural or systemic issues that may influence college student persistence, success, etc. Finally, the study was conducted at a large research extensive institution and was not intended to be generalized to other institutions regardless of similarities to the institution studied.

**Significance of the Study**

There are several important implications for this study to the field of academic advising and, in a larger context, undergraduate students, including learning outcomes of first-year seminars or university 101 courses, the integration of a strengths-based approach into advising, and the practice of advising. Specifically, the research questions help to evaluate the use and integration of positive psychology theory, specifically a strengths-based approach, in an advising context of the university 101 course. This research meets at least five of the ten critical areas identified by the National Academic Advising Association’s research committee including the integrating other viewpoints or disciplines into academic advising, meeting the learning mission of higher education, understanding the factors involved in effective advising, understanding students’ perceptions of advising, and building on current advising theories.

First-year seminar courses may be staples within higher education, according to a 2006 survey by the National Resource Center for The First-Year Experience and Students in
Transition (Tobolowsky, 2008). However, the research on their effectiveness is mixed. A recent study by Miller, Janz, and Chen (2007) found that students who participated in the first-year seminar were significantly more likely to return to campus than non-participating students were. The results published were consistent with 15 of 19 studies explored by these researchers. This finding leaves room for continued investigation into the first-year experience to understand further this complex phenomenon. This study looks into the design and impact of a strengths-based university 101 course, which will help to inform the greater body of knowledge.

Anecdotally, academic advisors at the University of Illinois have noticed a positive change in individual advising appointments including the preparedness of the student, advanced questioning of career and major exploration by students, and increased knowledge of university resources and regulations since the implementation of a required university 101 course based on strengths (GS 101 Retreat, personal communication, February 8, 2010). However, questions remain about how and to what extent the course impacts students. In these tough economic times, any programs that require additional student fees or costs are being evaluated. Use of this approach in advising must be continually justified as a program contributing to student success. Therefore, empirical research is necessary to meet these demands and this study positions itself to defend advising programs and university 101 courses based on strengths exploration.

Positive psychology and a strengths-based approach is a relatively new endeavor, especially as it relates to college students. In a conversation with Dr. Larry Breskcamp of the Gallup Organization, research related to the effectiveness of the Clifton StrengthsFinder and the strengths approach will be valuable (personal communication, n.d.). A conversation with Shane Lopez, current Director of Research for Gallup and the Clifton StrengthsFinder documented a
need for practical use of the instrument with college students and preferred experimental or quasi-experimental research designs (personal communication, n.d.).

Additionally, this research will help build upon the current understanding of college student development. As previously mentioned, Pascarella and Terenzini (2005) have documented numerous changes in students as the results of college. For example, Chickering and Reisser (1993) describe Seven Vectors of Educational Identity, of which at least two appear to be relevant to a strengths-based approach. First, as students learn to identify the skills and knowledge needed to be successful, their level of competence should increase. Second, as students learn about their vocation, what excites them, and what they love to do, they will develop purpose.

Overview of the Study

I have arranged this dissertation in six chapters. This first chapter provided an overview of the study including the purpose, significance, limitation and delimitation. Chapter II includes a summary of the relevant literature including college student persistence, strengths-based education and the strengths approach, and the location of this study which was advising in a university 101 course. Chapter III describes the theoretical foundation and practices utilized in this quasi-experimental mixed method study Chapter IV discusses the findings and interpretations of the pre- and post-surveys. Chapter V provides case-style summaries of the fourteen individual interviews conducted and a thematic analysis of the interviews. Chapter VI includes a summary of the previous three chapter followed by a discussion of the results with relevant literature and concludes with recommendations for policy, plan of future research, and my personal insight and reflections.
CHAPTER II
LITERATURE REVIEW

A strengths-based approach to advising shows promise for aiding undecided students through a smoother transition from high school to college, by connecting students to the institution, and more fully engaging students in their undergraduate education. Recent publications such as *Strengths-based advising* (Schreiner & Anderson, 2005) and *StrengthsQuest: Discover and develop your strengths in academics, career, and beyond* (Clifton, Anderson, & Schreiner, 2006) lay the groundwork for empirical studies on the efficacy of strengths-based advising and the utilization of a strengths-based approach with college students. Limited empirical research is publically available regarding a strengths-based approach (Hodges & Harter, 2005). Initial research indicates a statistically significant positive difference in GPA for students in a strengths-based cohort (3.105) compared to the control group (2.671) (Williamson, 2002). Understanding how a strengths-based approach impacts students during the initial year of college and how a strengths-based approach impacts career and major exploration can aid advisors and administrators in all academic disciplines.

This review will begin by examining college student persistence theories as a basis for research and practice with college students because the aim of this study was to explore the influence of a university 101 course on students during their first term. Next, the framework of the study utilized strengths-based education as it theoretical foundation and the central tenants of the strengths-based approach including its roots in positive psychology to understand strengths-based intervention conducted with students. Then, the review will discuss the current research/scholarly literature on strengths-based education and the directions for future research, including the embedding of a strengths-based approach in a university 101 course. Given this
study takes place in a university 101 course which, in this case, has been developed to support academic advising for undecided students, I conclude this chapter with a review of history and current literature on academic advising, undecided students, strengths-based advising and the university 1010 course.

**College Student Persistence Theories**

In order to better understand and establish a framework of practice, scholars over the past four decades have tried to conceptualize a theory to explain college student persistence and success. There are generally three theories or models of persistence utilized in the literature: Tinto’s Theory of Student Departure (1975, 1987, 1993), Astin’s Theory of Student Involvement (1977, 1984, 1993, 1999) Bean’s Theory of Student Departures (1980, 1990; Bean & Eaton, 2000).

Tinto (1975, 1987, 1993) developed a theory of student departure that focuses on student integration into the formal and informal aspects of the academic and social communities of the university. The academic community concerns itself with the traditional activities of faculty that occurs in the classrooms and laboratories. The out-of-classroom activities that take place in the residence halls and other meetings spaces where students enjoy their personal lives make up the social community. The amount of integration by the student into these communities will affect the likelihood of departure or its antecedent persistence to the next year. However, Tinto’s research shows that the level of integration is dependent on numerous pre-college characteristics. Pre-college characteristics affecting college persistence are well documented and relevant to the student’s ability to gain competent membership in the institution’s community such as family background, skills and abilities, and previous schooling (Tinto, 1993). Therefore, colleges and
universities must enable practices that reach out and care for students. This reciprocal relationship fosters the sense of commitment to each other, thus decreasing the likelihood of departure.

Research describing the effects of higher education on students during the early 1970’s was lacking in design and scope, which prompted Alexander Astin to design a more rigorous investigation. In *Four Critical Years*, Astin (1977) used data collected from the Cooperative Institutional Research Program (CIRP) to articulate the impact of college on students. The American Council on Education (ACE) first piloted the CIRP survey in 1966 with the goal to provide multi-institutional and longitudinal data on college students. The data collected covers a broad range of topics such as attitudes, behaviors, achievement, career development, etc. In general, students reported an improved self-image from the development of competence in interpersonal and intellectual skills. In addition, students tended to be less studious than in high school and have increasing liberal political views. The changes in students may be the result of both attending college and maturation effects. Overall, the changes in student appear to be related student characteristics such as race, sex, ability, and age.

Branching from two existing paradigms of research, the I-E-O (Input-Environment-Output) model was developed to describe the changes occurring in students during college. This model has been developed into a theory, more commonly known as Astin’s Theory of Student Involvement (Astin, 1977, 1984, 1993, 1999). The model posits that students enter college with a set of characteristics that affects their potential success in college. Several studies have shown that precollege characteristics such as family background, socio-economic status, and reason for attending college, etc impacts college student retention and persistence. A summary of the research on pre-college characteristics affecting college students can be found in the edited
column College student retention: Formula for student success (Seidman, 2005). Inputs (I) refer to the precollege characteristics of students and their peer group. While in college, students are exposed to the Environment (E) that encompasses the student experiences in college from the classroom to the residence halls. Examples of environmental measures are peer group characteristics, faculty characteristics, and student involvement. Finally, the effect of college or the Outcomes (O) pertain to the effect of the environment on the student related to the inputs. The outcomes explored are separated into two major categories of student development: cognitive and non-cognitive.

From the initial research, “longitudinal analyses show clearly that students undergo a variety of changes in attitude, values, and self-concept after they enter college” (Astin, 1978, p. 67). Students with high involvement attend class, spend most of their time on campus, are involved in student organizations, and interact with faculty and other students. While students of low involvement generally live off campus and only come to campus for class, devote a minimum amount of time to studies, and have more outside activities than on-campus. Unfortunately, in 1978, Astin concluded that “results suggest that American higher education is now being shaped more by economic considerations than by concerns for enhancing student progress” (p. x). Economic decisions, often, focus on the bottom line or the prestige of the university instead of focusing on the development of student talents (Astin, 1993). Today, the most notable decline in the analysis of the data includes a decline in college student well-being (Astin, 1993).

Bean (1980) expanded on the previous student departure theories of Astin and Tinto to incorporate workplace turnover theory by Price in 1977. Bean developed this method in order to conduct a path analysis on student departure that was not possible under previous models. This
model explores the relationship between three variable categories: background (socioeconomic status, previous academic performance, etc), organizational (grade point average, institutional quality, advisor relationship, etc.), and intervening (satisfaction and institutional commitment).

Overall, Bean’s original model predicted twenty-one percent of dropouts for women and twelve percent for men. One important finding of the research is that students’ perceived quality of the education was a significant factor in retention.

Current theoretical and empirical studies on attrition can condensed the results into one model (Bean, 1990). The model began with student background variable that impact the interaction with the institution resulting in outcomes such as grade point average. These outcomes influenced the student’s decision of whether to persist or leave the institution. As a result of this analysis, Bean (1990) recommended the following:

1. admit students who match the institution from the beginning
2. support student academically and socially
3. develop institutional loyalty
4. ensure that services provided meet intended outcomes and leave students with positive images of themselves and the institution.

Combining multiple psychological theories of student departure, an updated model of student departure was conceptualized (Bean & Eaton, 2000). This updated model synthesized attitude-behavior theory, coping behavior theory, self-efficacy theory, and attribution theory and grafted this knowledge into the prevailing theories of student departure. Figure 1.1 display the proposed theory. Bean and Eaton (2000) suggested that the logical next step would be to develop measures to test the model and confirm the posited relationship between variable and the relationships described.
Overall, the persistence literature has two major themes. First, the characteristics with which students enter college matter to the overall success of the student. The only way for administrators to alter the pre-college characteristics is to adjust their admission profiles by admitting students with different characteristics. Second, the student’s integration with the college environment is a significant factor in their success. This integration includes both in and out of the classroom activities with faculty, staff, and other students. Programs that can help facilitate students’ integration will affect the retention of college students. The theories suggest the need for administrators to examine their campus to understand the various facets at their university that may enhance or inhibit college student success.
An Introduction to Strengths-based Education

Strengths-based education is the process of helping students identify, develop, and apply their areas of talent (Anderson, 2004). A strengths-based approach presents an alternative to commonly utilized practices with students, such as remedial education and bridge programs. This approach was derived from the discipline of positive psychology whose central tenet is to nurture the best in people by the exploration of human strengths (Seligman & Csikszentmihalyi, 2000).

Beginning with the exploration of human strengths, the Gallup Organization began to research top achievers to understand what made them strong and ultimately successful (Clifton & Nelson, 1992). This research led to the development of the Clifton StrengthsFinder instrument that can be used to help people identify areas of talent and develop these talent areas into strengths.

Through his work, Donald Clifton realized that a strengths-based approach and the Clifton StrengthsFinder could be used with college students (Clifton et al., 2006). Academic advising is a logical area where a strengths-based approach could be integrated successfully to help students. An academic advisor could utilize strengths-based advising principles to guide students during their undergraduate education. A specific set of students that could particularly benefit from strengths-based advising are undecided students. Undecided students are considered a subpopulation of students that require advisors to modify practices to meet their specific academic and developmental needs. One specific practice modified to help undecided students and students in their first year of college is a university 101 course or freshman seminar course.

A strengths-based approach to advising shows promise for aiding undecided students by easing the transition from high school to college, connecting students to the institution, and more fully engaging students in their undergraduate education. Recent publications such as Strengths-
based advising (Schreiner & Anderson, 2005) and StrengthsQuest: Discover and develop your strengths in academics, career, and beyond (Clifton, et al., 2006) lay the groundwork for empirical studies of the efficacy of strengths-based advising. Publically available research on the efficacy and practice of strengths-based advising is extremely limited as evidenced by results from commonly used search engines such as ERIC and Academic Search Premier.

Donald Clifton, a former college administrator, had a vision for the future that may enhance the college student experience and become an additional tool to aid in college student success. For many years, he utilized research studies on college student persistence and followed the national trends of creating programs to increase retention. Over time, Dr. Clifton realized that he was employing a deficit remediation model to address retention concerns because research data showed that students who were underprepared were less likely to persist (Clifton et al., 2006). Later in his career, he realized that his original assertions and practices were incorrect. “More students leave college because of disillusionment, discouragement, or reduced motivation than because of a lack of ability or dismissal by school administration”(Clifton et al., 2006, pXIV). Therefore, deficit remediation programs commonly employed by universities were not targeting students appropriately. In fact, these deficit remediation practices in higher education programs may actually have potential unintended negative effects including:

1. Demoralizing students.
2. Reducing student motivation.
3. Reminding a student of past failures and frustrations.
4. Setting up negative expectancies in the minds of students.
5. Stigmatizing students.
6. Increasing stereotyping / “stereotype threat.”
7. Destroying student confidence.
8. Lowering the expectations of faculty and staff towards the students.
9. Lowering the students’ aspirations to achieve and excel.

Instead of continuing with traditional retention efforts, alternative methods are thought to engage students more appropriately. One possible course of action is a strengths-based approach. A strengths perspective could drive a transformational change within the current system of American higher education by building upon the foundational pillars of education and psychology (Lopez, 2006). A strengths-based approach to higher education posits that students who develop their strengths would begin to understand more about themselves, would become more confident, and would take charge of their future (Clifton et al., 2006). A strengths-based program could begin to combat the negative thoughts and patterns of students who are less likely to persist and enhance the experience of all students. To start, what is a strengths-based approach to education, commonly known as strengths-based education? Strengths-based education is:

- a process of assessing, teaching, and designing experiential learning activities to help students identify their greatest talents, and to then develop and apply strengths based on those talents in the process of learning, intellectual development, and academic achievement to levels of personal excellence. (Anderson, 2004, p.1)

By enacting a strengths-based approach in higher education, educators will allow students to employ their strengths in learning, problem solving, and communication (Anderson, 2004). Overall, the goal would be to mimic the activities and practices of top achieving students observed by educators.

Essentially, top achievers build their academic and personal lives- and later their careers- on their talents. They use those talents as the foundation of strengths development, and they
apply those strengths to produce excellence. They also manage any weaknesses – lesser talents, skills, or knowledge that can detract them from their performance or that of others (Clifton et al., 2006, p. XVI). A study of excellence and top achievers was commissioned by the Gallup Organization. Top achievers, in this case, have been identified by the research as the best in their field--that could be the best lawyers, the best chief executive officers, or the best teachers. From over two decades of research based on the study of excellence or top achievers, scholars at Gallup developed a strengths approach. This research forms the basis for strengths-based education and the practices advocated by Donald Clifton. The original conception of strengths evolved from understandings developed from positive psychology.

**Positive Psychology**

In a 1998 presidential address, then president of the American Psychological Association (APA), Martin E. P. Seligman set forth a future direction for its psychology practitioners (Seligman & Csikszentmihalyi, 2000). “Psychology is not just the study of weakness and damage; it is also the study of strength and virtue. Treatment is not fixing what is broken; it is nurturing what is best within ourselves” (Seligman, 1999, p. 4). This address was a call to turn the mission of psychologists from a focus on the treatment of disease and illness to include an exploration of the characters and virtues that make people strong (Snyder & Lopez, 2007).

After World War II, people of the world suffered from the long and hard fought war. In the United States, the National Institute of Health and the Veteran Administration, known today as Veterans Affairs, dedicated funding to help support the readjustment of soldiers and the treatment of mental illness. The awarded grants led to an influx of psychologists and researchers, which led to a better understanding of the pathology of mental illness (Seligman & Csikszentmihalyi, 2000). The allocation of funds for research allowed for the treatment of
millions of individuals and the identification of approximately fourteen mental disorders not understood by psychologists in the previous fifty years (Seligman & Csikszentmihalyi, 2000). The focus on psychopathology made sense because people were in distress (Selgiman, Parks, & Steen, 2004). However, prior to World War II, the field of psychology had three core foci: “curing of mental illness, making the lives of all people more productive and fulfilling, and identifying and nurturing of high talent” (Seligman & Csikszentmihalyi, 2000, p. 6). Dr. Seligman’s goal was to encourage a practice that emphasized the building and understanding of positive qualities of individuals, a science that could nurture human strengths and prevent the negative effects of mental illness. Positive psychology “holds the potential to create, as a direct effect, an understanding and a scientifically informed practice of the pursuit of the best things in life” (Seligman & Csikszentmihalyi, 2000, p. 562). Fifty years of a pathological focus has allowed for the effective treatment of illness. Today, the field of positive psychology is committed to help the seventy percent of people in the United States who have not suffered from a severe mental disorder (Seligman, Parks, & Steen, 2004).

Once elected president of the APA, Seligman knew that his mission was the prevention of mental illness, but still had not established a framework from which to promote his cause. This shift in focus occurred one day when Seligman came to a significant realization while working with his daughter. Weeding the garden with his daughter, he realized:

My purpose in raising her was to nurture this precious strength she had displayed- I call it seeing into the soul, but the jargon in social intelligence- and help her to mold her life around it. Such a strength, fully grown, would be a buffer against her weaknesses and against the storms of life that would inevitably come her way. Raising children, I knew now, was more than just fixing what was wrong with them. It was about identifying and amplifying their strengths and virtues, and helping them find the niche where they can live these positive traits to the fullest. (Seligman, 2002, p. 28)
A field was born with this compelling story. Over several years, positive psychology became “the study of the conditions and processes that contribute to the flourishing or optimal functioning of people groups, and institutions” (Gable & Haidt, 2005, p. 104). It is a catch all term for the research and application of positive character traits, positive emotions, and enabling institutions (Seligman, Steen, Park, & Peterson, 2005). Emerging scholarship provides researchers and practitioners with a common language or collective identity (Jorgensen & Nafstad, 2004). Psychologists previously lacked an integrative framework towards a common purpose of understanding and developing optimal human functioning (Csikszentmihalyi, 2006; Diener, 2008). Positive psychology allowed the social and behavioral sciences to communicate what it means to live the good life (Seligman & Csikszentmihalyi, 2000).

There are six tenets of applied positive psychology: (a) facilitation, (b) optimal function, (c) values the good life, (d) applicable on an individual, group, and societal levels, (e) full range of function, and (f) to foster a collective identity (Linley & Joseph, 2004). It is a facilitative process because the approach works with individuals to achieve personal objectives. The goal is to raise people to optimal functioning—linked to the terms subjective well-being and happiness on an individual and collective level. The field’s central tenant is valued laden and focused on defining and redefining the “good life.” The goal is to apply the research and practice on an individual, group, and societal levels with the understanding that human beings operate in various cultural and social contexts. The practice engages in the full range of functioning from helping to alleviate those in distress to increasing optional functioning. Finally, the field is not a new specialty of psychology, but an integrative approach in the practice of understanding the human condition and the promotion of a good life.
Positive psychology recognizes the contribution from several traditions including humanists and Buddhist psychologists (Selgiman & Csikszentmihalyi, 2001). The lineage of positive psychology can be attributed to Aristotle’s Treatises of Eudaimonia, Aquinas’s writing on virtue, and the research on human potential by humanistic psychologists (Linley & Joseph, 2004). Several humanist psychologists are leaders in the field of positive psychology: Clifton studied human strengths, Csikszentmihalyi studied flow and creativity, and Ed Diener studied well-being (Diener, 2008). Much of today’s research is based on renowned humanists including Maslow and his contributions on self-actualization and Rogers and his contribution to fully functioning people (Linley & Joseph, 2004). A specific example is derived from scholarship on optimal human functioning that is rooted in Gestalt psychology and the work of Heinz Werner. Whereas Gestalt believed that humans continually strive to improve and be stretched, Werner articulated a developmental process of continued differential and articulation that leads to more perfect action (Jorgensen & Nafstad, 2004).

Positive psychology does have its critics (Diener, 2008). From the beginning, there was backlash against a new emerging field. Criticisms included the focus on the individual and not society, while in fact, the field pays carefully attention to three levels: individuals, groups, and society. Second, there is exclusivity to who can research and practice positive psychology, while in reality, leading scholars and practitioners in the field are encouraged by new scholars and researchers adding to the field of positive psychology from multiple content areas. These new scholars’ approaches and beliefs have been integrated into the field such as subjective well-being, happiness, human strengths, etc. Third, positive psychology practitioners have rushed into an implementation stage while scholars “do not seek to understand human strengths only through rational thought, but also through systematic scientific research” (Diener, 2008, p. 9). Fourth,
current work ignores the vast knowledge in past psychological research. In fact, the foundation of the work is rooted in well-recognized traditions and philosophies such as humanistic psychology, self-actualization, Aristotle, Buddhism, etc. Fifth, the study of positive psychology ignores the negative life and has a rose-colored or “Pollyanna” approach, while in fact, the majority of psychological research in academia is neither negative nor positive and the aim is to understand the full range of the human condition (Gable & Haidt, 2004).

Three instruments have been developed to explore and measure the character strengths and virtues of positive psychology: Search Institute’s Profiles of Student Life: Attitudes and Behaviors, Values in Action Classification of Strengths, and the Clifton StrengthsFinder (Snyder & Lopez, 2007). The Search Institutes instrument measures forty factors that help young people thrive. The instrument has been used in Canada and the United States. The Values in Action instrument, created by Peterson and Seligman, was designed to provide a measurement instrument and common language of strengths in working with youths. The third instrument, the Clifton StrengthsFinder, was developed by the Gallup Organization and measures thirty-four signature themes and creates a profile in order to help people identify talents for strength development.

Towards the development of sound practice, positive psychologists have begun to illustrate the virtues and character strengths, similar to the Diagnostic and Statistical Manual (DSM-IV), called the Values in Action Classification of Strengths (VIA) (Seligman, 1998). The Diagnostic and Statistical Manual (American Psychiatric Association, 1994) is used by psychologies to determine if a client has a disorder and to what level while the VIA catalogs virtues and character strengths. A virtue is “a core characteristic value by moral philosophers and
religious thinkers” (Peterson, 2006, p. 30), while character strengths are a sub-category of a virtue by describing the process or mechanism that define the virtue.

The “unDSM” (Peterson, 2006) or the VIA contains six virtues and twenty-four strengths (Peterson & Seligman, 2004) which scholars adapted from the religious and philosophical teachings and traditions of Confucius, Aristotle, Aquinas, the Bushido samurai code, Bhagavad-Gita, etc. (Seligman, 2002). For example, Aristotelian thinking centers on the virtuous individual including the motives and traits that allow the individual to be considered virtuous (Jorgensen and Nafstad, 2004). The six virtues are wisdom and knowledge, courage, temperance, justice, humanity, and transcendence (Seligman, 2002). Research has shown support around the world for the twenty-four character strengths, correlations range in the 0.80s across religion, cultural, and ethic differences (Seligman et al., 2005). Table 2.1, below, contains a brief summary of each of the virtues.

Table 2.1

*Positive Psychology Virtues*

<table>
<thead>
<tr>
<th>Virtue</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisdom and Knowledge</td>
<td>concerns the development of understanding and truth and its use</td>
</tr>
<tr>
<td>Courage</td>
<td>describes the ability to achieve objectives and aspirations</td>
</tr>
<tr>
<td>Humanity</td>
<td>depicts the interpersonal strength of attending to others</td>
</tr>
<tr>
<td>Justice</td>
<td>describes the relationship to the community and civic responsibility of its people</td>
</tr>
<tr>
<td>Temperance</td>
<td>concerns the ability to be moderate in one’s life</td>
</tr>
<tr>
<td>Transcendence</td>
<td>describes first noticing and then, appreciating all aspects of life</td>
</tr>
</tbody>
</table>

Why focus on peoples’ strengths? An assumption of Positive Psychology is the pursuit of the good life where people have a strong sense of well-being. The good life is found by
identifying qualities and amplifying them to make each individual strong. This strength is believed to act as a buffer to negative harms that occur throughout life such as death and dying (Seligman & Csikszentmihalyi, 2000). Since positive events are normative for the human experience occurring over three times more often than negative events, it is reasonable to assume that one could use the positive events to shield or lessen the impact of negative harms (Gable & Haidt, 2005).

**Strengths-based Approach**

As previously discussed, the Gallup Organization started with research and scholarship in positive psychology to understand excellence. From the over two millions interviews, the strengths-based approach was developed in order to assist people in strengths development. The Clifton StrengthsFinder is a tool used in a variety of settings to help people become more familiar with their individual talents with the goal of creating strengths in our everyday lives. The exploration of strengths or strengths develop begins with the basic principles of the strengths-based approach and completing the Clifton StrengthsFinder.

To being with the strengths approach, a strength is defined as a “consistent, near perfect performance on an activity” (Buckingham & Clifton, 2001, p. 25). There are two key concepts worth further examination from this definition. First, a consistent, near perfect performance is one that is predictable and the person receives intrinsic satisfaction from the activity. Second, one has a limited number of strengths. It is not reasonable to expect that individuals will be excellent in a multitude of talent areas. In order to engage in strengths development, it is necessary to further breakdown a strength into its three elements: talents, skills and knowledge.

“Every role, performed at excellence, requires talent, because every role, performed at excellence, requires certain recurring patterns of thought, feeling, or behavior” (Buckingham &
Hoffman, 1999, p. 71). Therefore, the definition of a talent is “naturally recurring patterns of thought, feeling, or behavior” (Buckingham & Clifton, 2001, p. 29). As we develop during childhood, our bodies create millions of synapses until approximately age sixteen. As we go about life, our brains learn to adapt to the stimuli we are surrounded by that, in turn, affects our synapses growth. The more interactions with a particular stimulus, the more advanced our synaptic pathways become. As pathways become greater, they mature into “superhighways” that become the essence or personality of each person (Buckingham, 2007). This is the foundation of the strengths approach, the talents or superhighways within each of us.

“Skills are the basic steps of an activity” (Buckingham & Clifton, 2001, p. 29). For example, one can learn the basic steps or techniques to paint. The basic step to painting will enable one to create a piece of art, however skills alone will not enable one to create a masterpiece. Knowing the relevant skills does not lead to greatness, but does afford one the opportunity to participate.

Knowledge “consists of facts and lessons learned” (Buckingham & Clifton, 2001, p. 29). There are two types of knowledge: factual and experiential. Factual knowledge is the content or subject matter expertise. An example of factual knowledge is information contained in a reference guide or manual. The second type of knowledge is experiential. Experiential knowledge is gained by performing tasks or the application of factual knowledge. This type of knowledge is conceptual and includes one’s values and self-awareness (Buckingham & Clifton, 2001).

As I have discussed, a strength consists of three components. To better conceptualize these components, it is helpful to illustrate the components in an equation. The first strengths equation looks like this.
Strength = Talent + Skill + Knowledge (Buckingham & Clifton, 2001)

However, this initial equation may not be helpful when discussing strengths development. An alternative way to represent the strengths equation is separate the natural or innate talents with the amount of effort or energy in developing a talent into a strength.

Strength = Talent X Investment or Strength = Talent X (Skills + Knowledge) (Rath, 2007, p. 20)

The second strengths equation represents the amount of energy necessary to develop strengths, the investment. The investment is the time committed to developing skills and knowledge pertaining to strengths development. This equation provides an excellent description of how skills and knowledge magnify the talents within each person.

In addition to the two strengths equations, Buckingham (2007) describes the SIGNs of strengths in your daily life: Success, Instinct, Growth, and Need. Success is the positive rewards from or ability to complete a task well. Instinct is the natural tendency to complete an activity. Growth demonstrates the ability to improve or gain in the activity quickly. Need is the personal desire to engage in the activity in life.

In order to engage in strengths development, one should accept three basic tenants that, for most, will be counter-cultural. One, “as you grow, you become more of who you already are” (Buckingham, 2007, p. 43). Often times as a society, we tell each other that you will develop into an adult or you will grow into something more. The strengths approach asserts that as you engage in strengths development, you will learn more about who you already are. This belief is based on neuroscience and as previously discussed your synaptic pathways that have already been reinforced or weakened. Two, “you will grow the most in your areas of greatest strength” (Buckingham, 2007, p. 54). Throughout our lives, people are told by mentors and teachers to
work on your weaknesses or develop multiple skills to become well rounded. The strengths approach holds that people will grow the most in areas of strengths. This concept partly comes from the idea of flow by Csikszentmihalyi (1991). Flow occurs when one enters in an activity that feels effortless or natural. Three, “each person’s strengths are created-developed from some very specific raw material. You can acquire some materials, your knowledge and skills, with practice and learning; others, your talents, you simply have to hone” (Buckingham & Clifton, 2001, p. 40). Overall,

You have development needs-areas where you need to grow, areas where you need to get better—but for you, as for all of us, you will learn the most, grow the most, and develop the most in your areas of greatest strength. Your strengths are your multiplier. Your strengths magnify you (Buckingham, 2007, p. 55).

**Clifton StrengthsFinder Instrument**

To begin to develop you strengths, Gallup offers the Clifton StrengthsFinder. Clifton StrengthsFinder researchers used a semi-structure interview to identify developable talents that one could increase resulting in positive outcomes in educational and business settings. Initially, researchers identified 5,000 items and reduced the results down to 180-item pairs. In completing the instrument, participants have twenty seconds to select the best one item from the pairs. Through proprietary formulation, the assessment scores and ranks the participants in thirty-four themes. The original assessment contained 35 themes after researchers collected several months of data and reanalyzed the results. Participants receive signature themes report that includes their top five signature themes in rank order.

Researchers used a sample of 706 Gallup employers to perform the original psychometric analysis (Lopez, Harter, and Hodges, 2005). The analysis included a study of reliability (measured by internal consistency and stability), validity (measure by item-total correlations, correlation among themes, convergent and discriminant, cultural and demographic variables. For
reliability, twenty-three of the themes meet or exceed commonly accepted (AERA, APA, NCME) of coefficient alphas with themes ranging from 0.55 to 0.81. Further, almost all themes have a test-retest between 0.60 and 0.80 for three weeks, six months, and seventeen months. Overall, the analysis indicated the instrument was reliable as determined by internally consistency and stability analysis. The validity measures published are far more complex, but general results are discussed. The item and theme correlation suggest the 34 themes are unique and related to each other in a positive direction. In terms of cultural and demographic variable, the standard deviations ranged from 0.00 to 0.09 for country of origin, language, age and gender for both item and theme correlations.

Further psychometric analysis was conducted in 2004-2005 with the participation on fourteen community colleges and universities nationally to better understand the reliability and validly for college students (Schreiner, 2006). Over four hundred and seventy-five participants were included in the sample. The test-rest across the thirty-four themes was 0.70 that is generally accepted in statistical analysis. The mean alpha was 0.61 and the median alpha was 0.63 indicating acceptable internal validity. The construct validity was compared to the California Psychological Inventory and the Cattel 16PF. Ninety-three percent of the predicted relationships strongly correlated. Finally, the pairwise hierarchical cluster analysis was ninety-percent; a general adequate value for this measure is seventy percent.

**Embedding a Strengths-based Approach in a University 101 Course**

What would happen if higher education adopted strengths-based principles to the practice of working with students? Are strengths-based practices consistent with the basic principles of undergraduate education? Can strengths-based practices be added to enhance current practices?
College student success and the retention of students have been identified as two concerns for educational administrators. Research into these concerns has fostered discussions on how to modify the educational environment to enhance success and increase college student retention. As discussed, integrating a strengths-based approach appears to be a viable option for modifying current educational practices. Advising within a university 101 course is one activity where a strengths-based approach can be easily adapted into work with undecided students during this first-year. An important question before proceeding is to understand the current research available on the utilization of a strengths-based approach, the processes of academic advising including strengths-based advising, and current research on undecided students.

Current Strengths-based Research

The existing research on strengths and college students is limited. A search on Google Scholar, ProQuest Dissertation Abstracts, ERIC, and Academic Search Premier using the terms Clifton StrengthsFinder and StrengthsQuest results in approximately fourteen dissertations, one grant through the Fund for the Improvement of Postsecondary Education, and five peer reviewed scholarly articles. Two of the published peer reviewed studies have been discussed previously; the others are not relevant to the current study. The dissertation studies can be divided into three categories: educational administrator research, middle and high school student research, and college student research.

First, one research study on educational administrators using the Clifton StrengthsFinder failed to demonstrate a positive or negative effect when applying the strengths approach to educational leadership (Waters, 2009). The goal of this study was to understand if there was a common pattern of strengths and the application of strengths to leadership by the educational administrators in a school district. The study failed to reject the null hypothesis. A second study
was conducted on higher education administrators and described the ways in which administrators gained a better understanding of themselves and felt empowered to be themselves and could see strengths benefiting team and working relationships (Xaver, 2008).

Two studies were conducted concerning high school students (Tyler, 2006; Austin, 2005). Overall, the goal of both studies was to understand the use of the young adult version of the Clifton StrengthsFinder with high school students. Both studies showed a positive impact on students when Clifton StrengthsFinder and a strengths-based approach was used with students. One study demonstrated increased levels of engagement with school (Tyler, 2006) and the other study showed increases in student self-efficacy, motivation and behaviors (Austin, 2005) because of the use of a strengths-based approach with students.

Research on strength and college students can be divided into three types of research: theory development, leadership and facilitation, first-year experience, and graduate students. To begin to understand the strengths-based theory in practice, a phenomenological study with sixteen elite athletes explored how a softball team utilized a strengths-based approach (Robles, 2009). The study found that the athletes used the approach as a basis for their athletic activities with each individual capitalizing on their unique strengths to build confidence and increase teamwork and cohesion. Similar results were observed in a grounded theory study exploring how eight students capitalized on strengths which were shaped by success, support and reinforcement (Janowski, 2006). In addition to the individual journey, student experienced a learning epiphany when exposed to the strengths approach (Pritchard, 2008). Students exposed to a strengths-based approach were able to integrate the theory into their daily lives and interactions with others that allowed them to have experience of success and social support resulting in the reinforcement of the strengths approach.
The use of strengths with leadership development and facilitation showed mixed results. First, strengths development and the application of strengths did not predict leadership effectiveness of college students (Wisner, 2008). Second, the facilitation of strengths development by peer leaders in a first-year seminar course showed greater increase in strengths awareness for female students in the course (Brodersen, 2008). Further, students reported greater self-awareness when their peer leaders had greater confidence in their preparation of the first-year seminar. However, when the peer leader had a great self-confidence in strengths, students did not perform as well in strengths development indicated that personal strengths development may inhibit student performance. One highlight to the research on strengths and leadership is a student on the Kouzes and Posner’s model of exemplary leadership which should increase in leadership practices for students exposed to strengths (Lehnert, 2009).

Most relevant to this study is the research on strengths and the first-year experience. A pilot study on first time college students occurred in an introductory writing course (Williamson, 2002). Students enrolled in the strengths-based section showed statistically significant higher grade point averages than those in non-strengths-based sections of the writing course. However, a later study showed no significant difference in grade point average in a first year seminar with at risk students (Gomez, 2009). Concurring with this study, when students were enrolled in a strengths-based introduction to public speaking course, students reported a greater satisfaction with their collegiate experience and earned greater execution scores on their speech performances (Cantwell, 2005). Contrary to these primarily academic courses, a study in a first-year seminar course that utilized the Clifton StrengthsFinder for strengths development found no increase in student academic motivation (Cave, 2003). The authors, however, identify a significant limitation to this study design, students were enrolled in large lecture strengths-based
seminars (approximately 100 students) and were compared to students in small faculty lead seminar courses (approximately 20 students). The author suggests that future research be focused on student’s choices such as career and major exploration. When looking at student choices, students exposed to a strengths-based curriculum reported higher levels of academic control. (Louis, 2008).

A study involving students whose advisors used a strengths-based approach compared to prescriptive and development advising, showed significantly higher persistence rates in subsequent semesters than their counterparts (Swanson, 2006). This study explored first-year students at small, private liberal arts college in the mid-west. Overall, the goal was to understand if current practices could be enhanced by strengths-based approach to increase retention controlling for demographics of students. Another study investigated if a strengths-based approach could increase persistence through increases in study skills, hope, and optimism; however, no significant difference occurred (Milligan, 2007).

The largest study on college students and strengths was funded by a grant through the Fund to Improve Postsecondary Education (FIPSE) entitled Affirming Students' Strengths: A Campus-Wide Approach to Student Success and Retention (Greenville College, n.d.). Unique to this grant was a large concentrated effort by a whole college to integrate a strengths approach into the fabric of the university from residential housing to academic classrooms. After two years of study at Greenville College, students reported an increase in advising satisfaction, career advising and an improved campus climate. Further, Greenville College observed an increase in retention of students from the first to second year that cannot be directly linked to the campus-wide strengths approach because the study was not a controlled experiment. Looking at the
similar outcomes of student satisfaction, Hohn (2009) found that first year masters of business administration students say strengths as a positive factor for academic and career success.

Finally, one dissertation studied the possible interactions of the Myer-Briggs Type Indicator and the Strong Interest Inventory with the CSF by studying graduate students (Schenck, 2009). The study found there was not random and multiple interactions were observed between the Myer-Briggs Type Indicator and CSF. Also, no clear interactions were discerned across the vocation environments as defined by the Strong Interest Inventory and the CFS.

**Future Directions for Strengths-Based Research**

Overall, prior research on strengths indicates great potential for helping college students. Evidence gathered, thus far, indicates that a strengths-based approach in working with college students may be beneficial. Specially, the approach shows promise in affecting the following variable: students’ persistence, grade point averages, self-confidence or awareness, and positive interactions with other students. However, there are gaps and deficiencies in research.

First, the majority of the strengths-based practices studied have occurred at smaller religiously affiliated institutions. These studies are not reflective of the larger higher education landscape leading to questions of generalizability and application at most institutions in the United States. Since there is a myriad of institutional types, research with students from different institution can help administrators understand the possible similarities and differences in outcomes. Second, most of the studies were pilot studies and conducted on a small population of students. Strengths-based theory has been sufficiently developed and accepted into the academic community, so that administrators are ready for a study to explore the impact on larger cohort of students in order to take into account the great variability of today’s college student population. Third, the studies on college students have looked at introductory courses such as public
speaking and writing or broader college initiatives. None of the studies are narrowed to undecided students and the advising of undecided students.

The present study will look at a strengths-based approach with a unique subset of the overall population of students--undecided students and examine how an introductory course with a strengths-based approach affects these students. This population of students is not fully understood by higher education scholars and further research is necessary (Gordon, 1995). A logical setting for research to begin is with undecided students and academic advising.

Further, the use of typological theories with college students is well established in the literature. For example, as previously discussed in this chapter, Chickering’s Theory of Identity Development is a typology. A typology “serves as a framework within which psychosocial and cognitive structural development occurs” (Evans, Forney, Guido-DiBrito, 1998, p.203). Three of the most utilized typological theories are: Kolb’s Theory of Learning Styles, Holland’s Theory of Vocational Interest, and Jung’s Theories of personality Type (Evans, Forney, Guido-DiBrito, 1998).

When considering the possible efficacy and utilization of a strengths-based approach with college students, Holland’s Theory of Vocation Interest with the Self-Directed Search can be compared to the strengths-based approach with the Clifton StrengthsFinder. Holland Theory of Vocational Interest has been extensively used on career counseling (Brown and Lent, 2005) and has practical application in counseling, orientation, advising, residence life, and student involvement (Evans, Forney, Guido-DiBrito, 1998). Recently, Holland’s theory has been applied to academic disciplines by Smart, Feldman, and Ethington (2000) for use by higher education institutions to understand faculty and students within majors.
Holland’s Theory posits that people personalities that match or have congruence with their work environments will more productive and happy. His original theory was developed in 1959 and has been refined for over five decades. He last worked is chronicled in Making vocational choices: A theory of vocations personalities and work environments (Holland, 1997). It should be noted that Holland theory does not focus on career development or the process of career selection, however helps to describe and inform the process of selecting a career. Holland theorized career selection begins with self-awareness of personal interests, skills, abilities and the subsequent matching of perceived understanding of the needs and environment of the career opportunities. In his work Holland described the need to engage in critically self-reflection to ensure an adequate understanding of one’s own abilities.

Holland’s codes and other typological theories are typically used in educational settings and are considered accepted practices for working with and developing students. With the emergence of strength-based practices including the Clifton StrengthsFinder, how might this typology influence students and future educational practices? The application of the strengths-based approach in an advising setting appears to be a logical nexus.

**Academic Advising**

When the American higher education system began, faculty members and tutors were responsible for all aspects of a student’s life (Rudolph, 1970). As colleges and universities began to grow, the responsibilities of the faculty shifted away from students to research and service (Kuhn, 2008). New roles, such as the academic advisor, were created to account for the shifting responsibilities of the faculty. Prior to 1870, the position of academic advisors was ill defined and the practices of advising were unexplored; this time period has been coined, the first era of advising (Frost, 2000).
As academic advising positions grew over time, so did the practice and understanding of the emerging field. Colleges and universities were growing in size and scope and education of undergraduates including the adoption of the current major structure (Rudolph, 1970). Advisors were available to help students traverse their chosen paths with the main responsibilities of helping with course scheduling and registration (Kuhn, 2008). As the practice of advising became defined, little attention was given to the scholarship of advising as a discipline which remained an unexamined activity; this time period has been coined, the second era of advising (Frost, 2000).

Starting in the 1930s and 1940s, universities began to develop more extensive support systems for students (Rudolph, 1970). As exemplified by the The Student Personnel Point of View, educational institutions began to consider students as whole persons, exploring the intellectual, physical, emotional, social, etc. facets of college students (American Council on Education, 1949). This laid the groundwork for further research into understanding college students and the creation of enhanced practices to meet these newly identified needs. Academic advising became “defined and examined”; this time period has been coined, the third era of advising (Frost, 2000, p. 10). Academic advising became holistic, itself, with theories that shaped educational practice and its development is shown in table 2.2.

Table 2.2

The Three Eras of Advising as a Field

<table>
<thead>
<tr>
<th></th>
<th>1st Era</th>
<th>2nd Era</th>
<th>3rd Era</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undefined Activity</td>
<td>Defined Activity</td>
<td>Defined Activity</td>
<td></td>
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<tr>
<td>Unexamined Activity</td>
<td>Unexamined Activity</td>
<td>Examined Activity</td>
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</tbody>
</table>

Today, academic advising can be described as “situations in which an institutional representative gives insight or direction to a college student about academic, social, personal matters” (Kuhn, 2008, p. 3). In order to give insight and direction, advisors must engage in a
process to understand student’s abilities, motivation, values, etc. (Grites & Gordon, 2009). Pedagogically, an academic advisor stimulates “the independent thinking necessary for the student to successfully engage the environment in which we live” (Borgard, 1981). Academic advisors must remember that the purpose of advising is student learning and development which occurs in the context of an educational environment (Creamer, 2000). Generally, academic advisors engage in the advising process by focusing on:

1. exploration of life goals
2. exploration of vocational goals,
3. program choices
4. course choices

In order to fulfill their responsibilities to students, each advisor must dedicate time and energy to understand current research and theories including theories from multiple disciplines such as career development, decision-making, student development, etc (Creamer, 2000). Higher education has devoted considerable effort to understanding students and these efforts directly apply to academic advising. For example, student development theories such as psychosocial-identity theories by Erickson and Chickering and Reisser, cognitive-development theories by Kohlberg and Perry, and personal preference theories by Jung and Kolb can help to inform the practice of academic advising (Hagan & Jordan, 2008).

**Strengths-based Advising**

An emergent theory of academic advising is strengths-based advising. Beginning with positive psychology, a strengths approach was developed and, later, applied to an educational setting known as strengths-based education. The practices of strengths-based education have
been modified to address the needs of students during academic advising appointments and programs.

In 2005, strengths-based advising was first featured in the NACADA Journal (Schreiner & Anderson). This strengths-based approach focused on student motivation instead of needs such as registration or course selection. Advising sessions moved from traditional problem solving to discussing possibilities for the future. Conversations were not based on past failure or poor performance, but gravitated to the past successes of each student. Overall, the process helped students feel more understood during their education journey.

Strengths-based advising approach is a four-stage process designed to facilitate the development of strengths in a college setting. The four stages are identifying, affirming, envisioning, and planning (Schreiner and Anderson, 2005). Practically, initial academic advising conversations with students begin with an exploration of the past successes that leads to the identification of possible areas of strengths (Schreiner & Anderson, 2005; Schreiner, 2007). As time passes, students will develop an increased awareness of their success and possible areas of strengths and will begin to appreciate their strengths (Schreiner & Anderson, 2005). Academic and co-curricular performance will reinforce these initial successes and affirm the student’s strengths development (Schreiner, 2007). Advisors and students can then engage in a process of envisioning the future and developing each of these areas of strengths (Schreiner, 2007) and setting aspirations for the future performance (Schreiner & Anderson, 2005). Together, both student and advisor will create an action plan that will benefit the student from the beginning to the end of their undergraduate education (Schreiner & Anderson, 2005; Schreiner, 2007). This emerging approach may be integrated in the academic advising process with students who are
undecided about their majors and engaging in career and major exploration. Students who are undecided about their major are commonly referred to as undecided students.

**Undecided Students**

College student populations can be separated into subgroups in order to better target practices specifically designed to serve these subpopulations. Academic advisors have recognized the need to better understand some of these subpopulations, such as underprepared, multicultural, adult, and undecided students in order to increase the effectiveness of academic advising. The academic advising community has identified a need to better understand and increase the effectiveness of advising undecided students (McGillin, 2000).

Researchers do not have an adequate understanding of the undecided student (Gordon, 1995). One possible reason may be the variety of definitions used to characterize undecided students during research, most likely resulting from the myriad of college and university policies related to admissions and major selection (Gordon, 2003). One definition of the undecided student is “unwilling, unable, or unprepared to make educational or vocational choices” (Lewallen, 1995, p. 22).

Gordon (1995) provided an excellent summary of studies on undecided students. Most studies have focused on several factors such as self-efficacy, career choice, anxiety, etc. There were three research foci for understanding undecided students: looking at difference in demographics, characterizing levels of indecision, and intervention programs. Focusing on intervention research, career choice seminars or courses and individual career counseling or advising were the dominant research areas. With each, the overall goal was to aid students in making informed decision regarding occupational and educational choices.
However, even with a significant amount of research, scholars have to develop a unifying theory concerning undecided students (Gordon, 1995). However, one survey of undecided students over the past twenty years showed slight differences in their characteristics and attitudes or changes in institutional practices while working with undecided students. A major difference between then and now was that undecided students were more preoccupied with career orientation than two decades ago. Undecided students have not changed much over the past twenty-five years in the following categories: reason for attending college, levels of anxiety and indecision, career interests (Gordon, 2005).

Although most institutions believe that undecided students are unlikely to persist, a multi-institutional study showed evidence to the contrary (Lewallen, 1995). Undecided students were more likely to persist than decided students were and undecided students earned higher grade point averages. However, decided students were more likely to be involved in student activities during college. There are several inconsistencies in the literature concerning undecided students and persistence mostly ranging from different definition of terms between undecided, persistence, etc (Lewallen, 1992, 1993). Data from the Cooperative Institutional Research Program indicated that decided and undecided students are not significantly different from each other.

Since there is limited knowledge regarding undecided students besides measures of college achievement, research concerning individual practices with undecided students may help scholars better understand this cohort of students (Lewallen, 1995). College and universities must take time to understand their students specific needs and desires of undecided students (Gordon, 1995) because undecided students likely make up eighteen to twenty percent of first-time freshman (Gordon, 2005). Students may be undecided for a variety of reasons including
immaturity, being high achieving or honors students, athletes, underprepared students, etc (Gordon, 1995). There is support for colleges and universities to take a developmental approach to advising students (Gordon, 1995) that will likely include more support for decision making including occupationally related activities such as career counseling (Gordon, 2005). Another possible practice would be placing students at the center of the process or decision-making, creating the university as a support structure instead of requiring rigid conformity into majors (Schein & Laff, 1997). Overall, research into effective practices with undecided students is necessary because there has been a notable decline in research since 1990 pertaining to undecided students and few of the interventions with undecided students have been empirically tested (Gordon, 2007). One approach to advising undecided students that benefit from future research is the university 101 course.

**University 101 and the First-year Seminar**

One mechanism created to support students during their first-year is the university 101 course or the first-year seminar. The historical roots of first-year seminars can be traced to the late 1800’s (Keup & Barefoot, 2005). Virginia Gordon (1989) provided an excellent summary of the history and purpose of the first-year seminar and the following are pertinent highlights. Boston University, Oberlin, and Reed College were the first three institutions to offer freshman orientation courses. The purposes of these courses were to help ease the transition to college and to help students develop academically, socially, and intellectually. These orientation or seminar courses evolved from the counseling movement in higher education. Gordon (1989) noted that the seminar courses of the 1980’s are similar to early orientation courses.

The birthplace of the modern University 101 course, more generally known today as the first-year seminar, was at the University of South Carolina (USC) in 1972. The seminar course at
USC emerged as a mechanism for administrator to respond to civil unrest by students on campus due to the United States invading Cambodia. The course was seen as a logical step to bring back order to the campus. In addition, USC wished to gain a national reputation as a research institution to compete with other universities in California and across the nation for students and research dollars. This course was designed to facilitate the needs of a large research institution to engage in student development.

A recent study by Miller, Janz, and Chen (2007) found that students who participated in the first-year seminar were significantly more likely to return to campus than non-participants. The results in the initial study were consistent with 15 of 19 subsequent studies conducted by these researchers. Further, the study found that the seminar course showed a benefit to students regardless of ability level prior to college. Today, there are six common objectives of the first-year seminar:

1. Increasing student-to-student interaction
2. Increasing faculty-to-student interaction (especially out of class)
3. Increasing student involvement and time on campus
4. Linking the curriculum and the co-curriculum
5. Increasing academic expectations and levels of academic engagement
6. Assisting students who have insufficient academic preparation for college (Barefoot, 2000).

In 2002, the Policy Center on the First-year of College (PCFYC) surveyed colleges and universities on the use of first-year seminars. At that time, 94.1 percent of colleges offered some type of first-year seminar. Research extensive institutions were likely to offer a few courses while baccalaureate and master institutions generally had required seminar courses. In a follow-up survey in 2006, the PCFYC surveyed almost 1,000 schools and found that only eighty-five
percent of schools offered some type of university 101 course, down from the 2002 survey. The top three objectives of the first-year seminar course identified were to develop academic skills, orient students to campus resources, and engage in personal development or self-exploration.

**Conclusion**

I began this review by examining college student persistence theories and found the traditional approaches to college student success have shown that the pre-college characteristics of students and how well a student integrates into the campus environment matters. This review suggests that administrators should continue to explore and to examine the multitude of factors that inhibit or enhance college student success.

I described the theoretical foundation of the strengths-based approach beginning with its roots in positive psychology with the aim to understand how a strengths-based approach could be integrated into higher education as mechanism to increase college student success. A review the current research/scholarly literature on embedding a strengths-based approach in a university 101 course suggests that additional research is necessary due to the limited scholarly research available; however, the early results indicate the strengths-based approach may be an effective tool in higher education.

Given this study will explore the impact of the strengths-based approach on undecided students in a university 101 course, I explore the literature on academic advising and undecided students. This research demonstrates the growing commitment to understand better academic advising and its use with college students. Undecided students have been identified as a subpopulation of students that needs increased consideration when planning and implementing advising programs.
The context in which I will explore the efficacy of a strengths-based approach is a university 101 course. From the literature review, the university 101 course has a long-standing tradition of aiding college student transition to the university. A meta-analysis of the efficacy of the university 101 course demonstrated mixed, but positive results. Overall, the university 101 course may be an effective mechanism or advising tool that gives needed attention to undecided students. In the next chapter, I discuss the methodology used to understand the influence of a strengths-based approach in a university 101 course with undecided students.
CHAPTER III

METHODOLOGY

The primary goal of this study was to better understand how a university 101 course, using the strengths-based approach, impacts undecided students during their first semester. The research questions were: how does a university 101 course using a strengths-based advising approach:

1. impact undecided students’ reported abilities to identify and explore personal strengths?

2. influence how undecided students critically think about personal and academic choices related to careers and majors?

To address these questions, this study utilized a quasi-experimental design with sequential mixed methods approach.

Research Approach

A search using Google Scholar, ProQuest Dissertation Abstracts, ERIC, and Academic Search Premier finds only 13 dissertations on file with the keyword Clifton StrengthsFinder, the primary instrument used in the strengths-based approach and during strengths-based advising. None of these studies takes place, solely, in an advising setting and none of the studies were conducted on undecided college students. Since limited empirical research is available, this research adds to the growing body of knowledge, however is built upon well-established research in higher education.

Higher education has been struggling to understand how to help students be more successful in school. There have been numerous programs and studies focusing on aspects of success (Pascarella & Terenzini, 1995, 2001; Astin 1974, 1983, 1993, 1974; Barefoot, Gardner, Cutright, Morris, Schroeder, Schwartz, Siegel, & Swing, 2005); however, there is not one
agreed-upon outcome or unifying theme to aid in student success. This is due in part to the complexity of the student experience in college that cannot be reduced into a few simple variables such as one factor in a study. However, it is impossible to study the entire educational system and what impacts student success on a whole. Therefore, researchers must sufficiently narrow their projects, but take into account the complex, interactive nature of education and life.

To understand the student experience in an introductory course more holistically and account for the complexities of the student experience, this research utilized a sequential mixed method approach (Creswell, 2000). A mixed method study provided a better understanding of highly complex environments. Specifically, a mixed method approach seeks better, more comprehensive understanding of educational phenomena, understanding that is woven from strands of particularity and generality, contextual complexity and patterned regularity, inside and outside perspectives, the whole and its constituent parts, change and stability, equity and excellence and so forth. (Greene, 2005, p. 208)

In this sequential mixed method study, the quantitative data collection occurred prior to the qualitative data collection. The intent was for the qualitative data to inform or explain the quantitative data results. This approach would be especially useful in explaining the results as this study was the first to investigate strengths-based approaches in a university 101 course with undecided students (Creswell, 2003).

**Context**

The setting of this research was a university 101 course with the aim of helping undecided students navigate the academic landscape of the university through gaining insight towards the opportunities available to them during their undergraduate education. Given that an undergraduate education prepares students for the intricacy of modern life, which includes activities inside and outside of the class (Chickering & Gamson, 1987), it is therefore important
to acknowledge the “embedded-ness of educational phenomena in social life, which results in the myriad interactions that complicate our science” (Berliner, 2002).

Finally, this study occurred within an academic advising context. Standards of research and evaluation in academic advising would consider three programmatic elements: the student experience, the individual advisor abilities, and the overall advising program effectiveness (Lynch, 2000). This study did not measure the overall effectiveness of advising programs, but concentrated on one aspect of the holistic program with student experiences of the university 101 course as the primary focus.

Method

This study combined individual interviews with survey data that were supplemented by existing official student record data. First, I used a quantitative approach, defined by Campbell and Stanley (1966), to understand the changes in that occurred in students over time related to students’ abilities to identify and explore personal strengths as they relate to academic and career choices. Second, I used individual interviews, to understand better the changes occurring through individual student stories and to provide greater meaning to the quantitative data. Now, I will further describe each approach beginning with the quantitative portion followed by the qualitative portion.

The quantitative portion on this study utilized a quasi-experimental design. The quasi-experimental design lacks the full control of the true or natural experiment. The design for this research did not incorporate a random assignment due to the nature of the educational program being studied. In this study, students accepted admission to the university and curriculum to which they have applied and received an offer. Once on campus, advisors guided students through course selection, which was a self-selection process or organic process. As a result, the
effects of uncontrolled variables were considered carefully during data collection and analysis (Campbell & Stanley, 1966).

This part of the research utilized a pre-/post-test design of non-equivalent groups. There were two cohorts of students due to the nature of course offerings at the university. Students were enrolled in the university 101 during the summer registration period and based on this selection were categorized into a cohort. There were approximately 1200 students enrolled in the introductory course for the fall 2010 academic term. There was variation in the percentage of students in each cohort because departmental selection of instructor, course offerings including section size, and the instructor’s choice to include strengths in their syllabi could not be controlled. Although requested, permission was not granted by the Division of General Studies to control for additional variables such as instructor, course syllabi, and section sizes.

Data were collected from the students at two points during the fall term through survey responses and one time for individual interviews. Table 3.1 displays a research design map to illustrate the data collection timeframe. The “X” marks when the intervention activity, the introductory course, took place during data collection. The “O” indicates when data collection occurred for surveys (S) and interviews (I).

<table>
<thead>
<tr>
<th>Table 3.1</th>
<th>Research Design</th>
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<td>Cohort</td>
<td>Start of Term</td>
</tr>
<tr>
<td>WO1</td>
<td>Os</td>
</tr>
<tr>
<td>WS1</td>
<td>Os</td>
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</table>

Two threats to internal validity for quasi-experimental studies accounted for were history and maturation because the intervention activity occurred over the course of a semester as described above (Campbell & Stanley, 1966). History or the characteristics of the group
members prior to the study were surveyed in the pre-test that aided in controlling for internal validity. Since this study was conducted with college students, it was important to note that some precollege characteristics may affect college student success such as persistence such as gender, age, race/ethnicity, residency, international, first generation, entrance exam scores and placement test, and current living location (Pascarella & Terenzini, 2005; Astin, 1993).

Maturation, or the effect over time of participants, was an additional concern. In many ways, maturation was what was being studied in this research. Students were expected to grow and develop over the eight weeks of their first semester. Undergraduate students were exposed to a variety of stimuli during their first semester that may directly affect student success and development such as the death of a family member, illness, sexual assault, unhappiness with university, or financial crisis. In order to increase internal validity of this study and help control for maturation effects, the survey instruments and interview protocols confined or qualified the students experience in terms of strengths exploration, the university 101 and academic advising.

In this study, the research time period was approximately eight-weeks long. With a limited intervention and time period of study, the impact or influence of any intervention on students may not been observed or the time to would not allow for enough time for changes to occur in students. Eight weeks is a relatively short time period to study the maturation effects.

For the qualitative portion of this study, a purposive sample was used in the selection of respondents for the interview process (Krathwohl, 1998). The interviews lasted from forty-five to sixty minutes and were semi-structured containing a variety of open-ended questions to start conversations in areas of interest and allowed the research to ask follow up (probing) or new questions based on the participant’s responses (Krathwohl, 1998). To help standardize the interview process, the researcher conducted each interview with the following behavior scheme
First, the study was presented in a similar manner so that participants have the same understanding of the purpose. Second, the interview protocol was repeated with each interview. To assist with creating a standard interview process, an interview guide was created including relevant topics, but still allowed for free flowing conversations to ensure that participants could express their own idea and thoughts (Patton, 1990).

**Intervention**

General Studies 101 (GS 101) is the university 101 course taught by the DGS. This course was first taught in three years ago and the course requirements have evolved each year. The Associate Director for the DGS was responsible for course. Instructors were sent a short document describing the requirements for the fall 2010 academic term each course in the spring 2009 for syllabi planning during the spring and summer term. In the fall 2010, there were for six required topics for the course: course registration, major and career exploration, etc (personal communication, 2009).

Some instructors of the GS 101, course elected to incorporate StrengthsQuest.com into their syllabi, which is the web-based version of the *StrengthsQuest: Discover and develop your strengths in academics, career, and beyond* (Clifton, Anderson, & Schreiner, 2006). The use of this website with the Clifton StrengthsFinder instrument and the strengths-based approach was the assessment used during intervention. The intervention, at a minimum, required student to complete the online Clifton StrengthsFinder Assessment, read a strengths-based article or chapters from the StrengthsQuest Online Book, and included a lecture on the strengths-based approach. Instructors, using the strengths-based approach, had previously attended an instructor development opportunity, taught by the researcher in the summer of 2009. For the fall 2010 research period, instructors were given the option for the primary researcher to present the
strengths-based lecture in class; should they not feel comfortable with the material or would prefer the researcher to present the information as a subject matter expert. The researcher taught three of six large lectures during the study. The decision by the researcher to give the strengths lecture in some sections may have introduced a basis during the individual interview portion of this study for students with the strengths-based approach. I determined that the potential bias during interviews could be managed through the interview protocol utilized and therefore felt that a consistent, strong strengths-based presentations to approximately 300 students were more valuable to the research study because this reduced intervention variability.

**Personal Standpoint**

As the primary researcher, my background and experiences affected the manner in which information was requested, collected, and analyzed. Having worked with college students for the past decade, I have a unique understanding of students in their first-year of higher education. I have worked with students in residential housing and in academic advising settings. Currently, I am an academic advisor in the Division of General Studies where this study was conducted. I have a vested interest in understanding how educational practices affect the success of college students. I believe that successful completion of college is a transformative experience that will shape each student’s future.

I am an avid believer in the strengths-based approach and its integration into everyday life. I began my strengths journey over six years ago. I have used the Clifton StrengthsFinder instrument with my paraprofessional staff members and have encouraged its use during leadership development. In addition, I believe that I have observed its positive effects on students.
My educational background is diverse from studying leadership, rape myth acceptance, higher education, and strengths-based approaches. Outstanding scholars in the field of evaluation have shaped my research practice and philosophies of research. I have dedicated a significant amount of time and energy to understanding the efficacies of various educational programs for the betterment of myself and the institutions where I have worked.

As a researcher with a positive bias towards the application of the strengths-based approach with college students, I worked hard to temper my bias during the data collection and analysis by adhering to principles from the strengths-based approach, asking open ended and non-directive question, seeking clarification from participants, and search for the negative case. In keeping with the tenants of positive psychology and the strengths-based approach, I have a responsibility to seek out excellence and focus on the positive events. This does not mean that I excluded negative impacts and potential harms in the application of strengths.

**Data Collection**

There were four sources of data that collected based on the research design: course syllabi, student record data, survey responses, and interview responses. Course syllabi were collected in order to assess whether or not the course was strengths-based. Student record data were used in the statistical analysis to identify trends or patterns in the student responses. Also, student record data informed the interview selection process to ensure broad and varied perspectives of participants selected for individual interview. Survey responses were used primarily to answer the first research question and to inform the selection of interview participants. Interview responses were used primarily to answer the second research question.
Document Review of Syllabi

The first data source was course syllabi from each section of the course. These documents were reviewed to assess whether or not the course was strengths-based. There were four criteria to determine whether a section was strengths-based. One, did the course section require the purchase of the StrengthsQuest book? Two, did the course section require students to complete the Clifton StrengthsFinder instrument? Three, did the course section require students to read a strengths-based article or chapters from the StrengthsQuest book? Four, did the course syllabus include a lecture on the strengths-based approach. In order to be designated a strengths-based course; each section must meet all four requirements. Table 3.2, on the next page displays the results of the document analysis.

Table 3.2

Document Review Analysis of Course Sections

<table>
<thead>
<tr>
<th>Instructor</th>
<th>StrengthsQuest Book</th>
<th>Clifton StrengthsFinder</th>
<th>Strengths-based Reading</th>
<th>Strengths-based Lecture</th>
<th>Strengths-based Designation</th>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Student Record Data

As identified earlier, history and maturation are two threats to internal validity for the study of maturation. In order to account for these threats, I collected reliable precollege
characteristics or demographic data from survey participant from student record data. This data allowed me to control for and investigate the possible influence of demographics on the change in abilities of students. Demographic information was retrieved from the students’ official university record. Students who elected to participate in the survey phase of this research gave permission to the researcher to release access to the information contained in their student record. The student information requested is commonly used during the first semester of academic advising, specifically, during the initial registration of courses for a student’s first term and during evaluating the academic progress of the student. Further, several of these variables have been identified to affect students’ persistence (Pascarella & Terenzini, 2005). The following variables were collected: gender, age, race/ethnicity, residency, international, first generation, maximum ACT exam scores (composite, English, reading, math, and science), grade point average, credit hours completed, university program affiliation, admission status, and current living location. Appendix C contains the variable, variable type, and description details of student record information collected from the student record. Finally, GS 101 course section information was retrieved from the student’s record to match with survey data.

**Surveys**

The third data source was the survey instruments, which were electronic and self-administered. There were two surveys administered, a pre- and post-survey. To increase participation in the study, an entry into a prize drawing was offered to students, who successfully complete the pre- and post-surveys. The purpose of the survey instrument was to gather information in the following areas: participant’s attitude towards the university, DGS, and the introductory course, participant’s abilities and strength development, and changes in the participant related to career and major exploration. Procedures used in the collection of internet
data were designed to increase survey response (Nulty, 2008). Also, current research on
collection methods and college students suggests that paper and web-based survey yields similar
results (Carini, Hayek, Kuh, Kennedy, & Ouimet, 2003).

**Individual Interviews**

The fourth source of data was the individual interviews. The goal of the individual
interview was to bring to life and provide deeper understanding of the students’ responses to the
survey instruments. For example the question, “at this time, have you made changes to your
career or major plans as a result of GS 101?” has a simple yes or no response in a survey,
however in an interview the researcher can explore the specific details of the changes the student
plans and understand how these changes are linked to participation in the GS 101 course.
Detailed description of the semi-structured interview protocol is discussed in the instrumentation
section.

**Participants**

The DGS accepts students into an undecided major and is the third largest college on
campus after the College of Liberal Arts and Sciences (LAS) and the College of Engineering
(COE). DGS admitted the second largest freshman class (approximately 25%) behind the
College of Liberal Arts and Sciences (approximately 29%) (University of Illinois, 2009). In the
fall 2010, the DGS admitted approximately 1600 undecided students and enrolled approximately
1200 students in a DGS university 101 course known as General Studies 101 (GS 101). Students
wishing to pursue engineering, natural resources and some teaching students may have been
directed to enroll in an approved alternative introductory university 101 course taught by their
respective programs.
There were thirteen sections of the GS 101 course taught in the fall 2010 academic term with approximately twelve instructors. These classes were either small lecture/discussions with approximately forty students per section or large lecture classes with approximately 100-150 students per section. Table 3.3 on the next page display summary information for the course offering for the fall 2010 and is separated for treatment and control sections. Sections of the class were taught in either the first or the second eight-week of the sixteen-week semester. This study focused on students who were enrolled in the first eight-week sections of the GS 101 course.

Table 3.3

*GS 101 Course Offering and Enrollment*

<table>
<thead>
<tr>
<th>Section Information</th>
<th>Number of Sections</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>With Strengths</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Lecture</td>
<td>6</td>
<td>403</td>
</tr>
<tr>
<td>Lecture/Discussion</td>
<td>3</td>
<td>95</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9</td>
<td>498</td>
</tr>
<tr>
<td><strong>Without Strengths</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Lecture</td>
<td>2</td>
<td>151</td>
</tr>
<tr>
<td>Lecture/Discussion</td>
<td>3</td>
<td>107</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5</td>
<td>158</td>
</tr>
</tbody>
</table>

**Survey Recruitment**

Survey recruitment began on August 19th, 2010 from all eligible students who were enrolled in any GS 101 course. Approximately 1100 students were identified as first-time freshmen, newly admitted to the university and in their first semester in the fall term of 2010. The participants were traditional-aged college students (18-24 years old), consistent with standard practices in higher education (Adelman, 2005). Transfer students were excluded from this study and students over 24 years of age. Approximately 1092 students received an initial
email invitation to participate in the pre-survey on August 19th, 2010, five days prior to the beginning of the course and Fall 2010 Academic term. Due to schedule changes, a second initial email invitation was sent to thirty-five students who added the course on Aug 20th, 2010. One additional invitation email was sent to 887 students on Aug 22nd, 2010. The additional invitation emails excluded all students who had previously completed the pre-survey and any newly enrolled students. There were 1135 students emailed an invitation to participate, of those 15 emails were returned as non-deliverable, therefore there were 1120 student in invited to participate. Students who complete the pre-test survey were entered into a drawing for gift cards as incentives.

On October 17th, 2010, after the eight-week course was completed, the DGS provided an updated GS 101 roster to verify course enrollment with pre-survey participants. An invitation to participate was emailed to 292 pre-test survey participants. Of the 292, nine-nine students were sent an invitation to the students without the strengths-based approach post-survey and 193 were sent invitation to the students with the strengths-based approach post-survey. Students who complete the post-survey were entered into a drawing for gift cards as incentives.

**Survey Response Rates**

The pre-survey occurred one-week prior to the start of the fall 2010 academic term, August 19-26, 2010. During the first week of the fall 2010 academic term students were allowed the opportunity to change sections of the GS course. Also, students were allowed to drop the GS course until the fourth week of the academic term. The fluctuation of student enrollment in courses impacted possible student participation. A total of 1135 email invitations and reminders were sent to possible participants. Initially, 434 survey responses were received resulting in an approximately thirty-eight percent response rate. After receiving enrollment verification for the
GS course in October 2010, there were 193 and ninety-nine students eligible for the post-test, students with the strengths-based approach and students without the strengths-based approach, respectively. Of the 193 eligible participants in the student with strengths cohort, ninety-three responded to the post-test survey resulting in an approximately forty-eight percent response rate. Of the ninety-nine students in the without strengths cohort, forty-four responded to the post-test survey resulting in an approximately forty-four percent response rate. In order for students to participate fully in the study, respondents must have completed all ten items of the strengths instruments, must have indicated whether they had previously completed the Clifton StrengthsFinder instrument in the pre-test survey, and answered a minimum number of questions for statistical analysis. After completing the review of responses, eight-eight students remained in the study for the students with the strengths-based approach and forty-three remained for the students without the strengths-based approach. Final response rates as a function of the number enrolled in GS course were 17.85% and 18.99% for the students with the strengths-based approach and students without the strengths-based approach, respectively. If you were to hope for a forty percent response rate to a single survey, then conducting a student with repeated measures would expect a sixteen percent response rate after two survey periods. Therefore, the final response rates for this study are higher than an expected response rate.

**Interview Recruitment**

A purposive sample was used in the selection of respondents for the interview process (Krathwohl, 1998). Students surveyed indicated if they were willing to have their survey results reviewed for the opportunity to participate in the individual interview. Only students, who have indicated they would like to be considered, had their survey responses analyzed for individual interviews invitation to participate. Twenty-five students from student without and forty-six
students with the strengths-based approach indicated they would like to be considered for individual interviews.

A review of the Likert-type questions and opened-ended survey responses was conducted and compared to the principles of the strengths-based approach. Upon initial review of the surveys, students were divided into three groups: large increase in strengths measures, large decrease in strengths measures, and relatively no change in strengths measures. After the strengths measure review of the surveys, student demographic information, such as gender, race/ethnicity, and instructor, was considered to solicit participation from multiple perspectives and viewpoints.

Using the procedures above, the researcher narrowed the list to fifteen interviews that have the highest probability of informing the research questions with the hopes of yielding twelve interview participants. Since the minimum number of participants was not met after the initial invitations, eight additional students were selected for participation. Students were offered an incentive to participate in the individual interviews. The interview lasted from forty-five to sixty minutes and were semi-structured containing a variety of open-ended questions to start conversations in areas of interest and allow the researcher to ask follow-up (probing) or new questions based on the participant’s responses (Krathwohl, 1998). To help standardize the interview process, the researcher conducted each interview with the following behavior scheme (Fowler, 1993). First, the study was presented in a similar manner so that participants have the same understanding of the purpose. Second, the interview protocol was repeated with each interview. Third, probing questions used were non-directive. Fourth, the participant’s responses were audio recorded and transcribed; the interviewer used a rubric or interview guide to record responses and determined appropriate probing questions. Fifth, the interviewer was aware of the
interviewing relationships, context and tone, and did not communicate agreement or acceptance of answers as valid or desired responses and to help ease participants into sharing.

On November 1, 2010, fourteen students were sent an email invitation to participate in the individual interview. To ensure a participation rate of at least twelve students and additional ten students received an invitation by November 8, 2010. In total, twenty-six students were sent an invitation to participate in a forty-five to sixty minute interview. Fourteen students participated in the individual interview portion of the study between November 4th, 2010 and November 18th, 2010. Interviews were conducted in public spaces on the University of Illinois campus at a location convenient to the participant. Students were given a gift card as incentive for participation in the interviews. Interviews were electronically recorded and transcribed.

Instrumentation

This study utilized a pre/post-survey and semi-structured interview protocol. The research instruments can be found in Appendices A and B. The pre-survey was administered to students one week prior to the start of the introductory course and the post-survey was administered one week after the course. Students were invited to participate in the survey by email. Interviews were conducted after the completion of the introductory course at the conclusion of the first eight-weeks. Students were invited to participate in the individual interview by email.

The pre-survey contained thirty-four items. All thirty-four pre-test items were included in the post-survey which consists of forty-four questions. The reason for the difference in the number of questions is due to the intervention activity. For example, the students cannot respond to the question, at this time, have you made changes to your career or major plans as a result of
new information learned in GS 101,” if they have yet to be enrolled in the introductory course. The pre-test survey consisted of twenty-three Likert-type questions, two open-ended/short answer questions and eight yes/no questions. Since this was a self-administered survey, simple Likert-type questions will used to yield more valuable data as open-ended may require additional follow-up such as an interview (Fowler, 1993).

There were two versions of the post-survey because students in the non-treatment could not be asked some questions. For example, “at this time, have you made changes to your career or major plans as a result of your strengths development?” The post-surveys consisted of twenty-two Likert-type questions, two open-ended/short answer questions, ten yes/no questions, eight other questions. The strengths-based group received two additional yes/no questions. The pre-/post-survey instruments were developed based on the fundamental principles of the strengths-based approach, knowledge of the introductory course and the advising process. Feedback on the questions was solicited from advisors in the Division of General Studies who have taught the introductory course and advising undecided students.

Ten questions were pulled from the Strengths Self-Efficacy Scale (Chaichanasakul, Tsai, Zhao, Flores, and Lopez, n.d.). The instrument was designed for research and practitioners to measure strengths utilization in everyday life. The reliability of the complete instrument was calculated by Cronbach’s Alpha and the assessment measured 0.97. These scales were checked for content validity by four positive psychology scholars and have a test/retest of \( r = .92 \) at \( p < .01 \). Strengths Index and the Strengths Self Efficacy subscales are each five Likert-type questions. These ten questions were used in this study.

The semi-structured interview protocol was derived from the pre- and post-survey instruments with the goal of seeking in-depth information from students concerning the research
questions. The semi-structured interview guide contained twenty questions and lasted between forty-five and sixty minutes.

**Data Analysis**

The analysis of the data occurred in two parts since this was a mixed methods study. First, I will describe the quantitative analysis including the preparation of data, validation of responses, and the use of SPSS. Then, I will discuss the qualitative procedures of analysis including the creation of interview summaries, the coding of transcripts and summaries, and theme emergence.

The naming convention for the cohorts and tables consist of the follow: students enrolled in a strengths-based course (treatment) are labeled “with strengths” and student enrolled in a course with no strengths component will be called “without strengths.” This naming convention is utilized because this is a quasi-experimental study and students not exposed to the treatment cannot be characterized as control or standard

**Quantitative Analysis**

Responses from the electronic surveys and student academic records were merged into a complete data set by the use of Microsoft Access and the linking of unique identifiers. The merged results were double-checked by the selection of random cases to ensure queries were completed accurately.

Student responses to open ended questions were coded into categorical variables. For example with the strengths definitions, “a strength is activity I perform well.” This response would be coded as a positive indicator for activity and success for eventual use in SPSS. Student responses to Likert-type data were converted to a number scale for input into SPSS. For
example, students without the strengths-based approach were coded ‘0’ and students with the strengths-based approach were coded ‘1’.

Once responses were coded, the validation of data responses was conducted. First, respondents who had previously completed the CSF prior to the study were removed from the sample. Second, responses to the two 5-item instruments, Strengths Index and Strengths Self Efficacy, were checked for completeness, all items must have received a response. Third, student must have made a good faith effort to answer all or almost all the survey questions answered. Student with frequently skipped questions, at least 10% of the survey sets, were removed. After the validation of data was completed, the data set was entered in SPSS for analysis. The version of SPSS used in study was PASW Statistics 18. Where appropriate frequencies, descriptive statistics, and inferential statistics were analyzed and discussed in the quantitative findings chapter.

**Qualitative Analysis**

During individual interviews, initial notes were taken on the interview rubric. After completing the interview, audio files were sent for transcription. The researcher created a summary of each individual interview. Added to each summary were quotes pulled from the transcripts where relevant. Once all fourteen interviews were summarized, responses were themed and categorized to discern trends and patterns. Some themes has previously been identified by the treatment of the strengths-based approach or themes emerged as participant files were reviewed. Once themes were identified, individual interviews were reduced to case style summaries in order for readers to develop an understanding of the participants and to provide a consistent order and topics shared about each participant. After completing these two processes, a review of the audio files and transcripts was conducted to ensure each theme was represented
Standards of Validation

Given this is a mix-method study, I address the standards of validation in two ways 1) the pre-/post-surveys and 2) the individual interviews. First, I will discuss my overall approach for the research. Then, I will address the pre-/post surveys including the issue of construct validity. Finally, I will discuss the issues of trustworthiness and authenticity for the individual interviews.

Overall, Stake suggested some practical steps to allow for validation of the inquiry: (a) describe the methods of the research (b) include information about the researcher (c) a summary of the data prior to interpretation (d) including enough detail to allow for the reader’s judgment of accuracy and bias (Stake, 1995). I have utilized each of these practices outlined by Stake. In this chapter, I have provided a detailed description of the methods employed and have included my personal standpoint. In the qualitative findings chapter, I provide a case style summary of each participant including their time, place, and person prior to interpretation of findings. Further, when appropriate, participant’s own words were used to demonstrate the findings.

The issue of construct validity was relevant to the pre- and post- surveys conducted in this research study. Construct validity, put simply, asks researcher to consider the following, does the test measure what the research intends it to measure and is it interpreted appropriately (Cronbach and Meehl, 1968). This notion of contrast validity must be addressed when no acceptance standard of measure or operation occurs. Two methods to address construct validity is group difference and correlation analysis. This study utilized both in that there were two comparison groups (students with the strengths-based approach and students without) and the
analysis of findings uses correlation and multivariate analysis to determine difference between groups. In addition, as discussed in the instrumentation section, the Strengths Index and Strengths Self Efficacy scales were retrieved from the Strengths Self-Efficacy Scale Instrument that have been shown to meet acceptable levels of validation. Further, additional questions included in the pre-/post came directly from concepts of the strengths-based approach or treatment. Finally, some survey questions were used in the fourteen interviews to understand better participants’ interpretations of these questions.

For the qualitative portion, the issues of trustworthiness and authenticity were addressed (Schwandt, 2007). An accepted standard to assist with validation of trustworthiness is to address issues of credibility, transferability, dependability, and confirmability (Guba & Lincoln, 1985). The current practice of validation for authenticity is to address the issues of fairness, ontological authenticity, educative authenticity, and catalytic authenticity (Lincoln and Guba, 1989). In order to address the issue of creditability, the researcher could utilize the following techniques: (a) observations should focus on the details of the questions at hand (b) utilize sources of triangulation (c) member checking (d) peer debriefing (Guba & Lincoln, 1985; Lincoln & Guba, 1989; Schwandt, 2007).

The process of developing, conducting, and analyzing data was completed under the direction of a qualified research and committee of faculty as mean of an external audit. The research has provided a personal standpoint which includes the research in-depth knowledge of the location and context of the research to address reflexivity and engagement. During the process, each phase of the process was conducted with feedback of peers through regular meetings with a dissertation workgroup to address peer debriefing. During interviews,
participants were provided with an immediate summary of my notes and thoughts to allow participant the opportunity to supplement my initial reflections.

**Organization of Findings**

The findings chapters are split into two chapters. Chapter IV addresses the results, interpretations of the pre- and post-surveys. Chapter V provides case-style summaries of the fourteen interviews and thematic analysis. After review of the findings from the survey and interviews, chapter VI includes a discussion of the findings with the relevant literature, my recommendation for policy and future research. Now, the next chapter will begin with the survey findings.
CHAPTER IV

FINDINGS AND INTERPRETATIONS OF STUDENT SURVEYS

In this chapter, the findings from the pre- and post-surveys will be discussed. I will describe the correlation and multivariate analysis conducted to determine the quantitative findings from this study. The significant finding is that students who were enrolled in a strengths-based section of General Studies 101 (GS 101) indicated thinking about their weaknesses less often than students enrolled in a traditional GS 101 courses. During the discussion of the correlation and multivariate analysis, I will discuss the relevant demographics of survey participants. Finally, although not statically significant, I will discuss the survey results of students’ perceptions of strengths, weaknesses, and the GS 101 course.

To understand the differences between the two cohorts, the change in individual students’ responses from pre- and post-survey were calculated. The scheme for calculation was, for example, to subtract the post-survey Strengths Index item one from pre-survey of Strengths Index item one (S2StrIdx – S1StrIdx). The scheme was established in order for positive results to correspond with an increase and a negative result corresponds with a decrease in the Strengths Index or Strengths Self Efficacy.

Correlation and Multivariate Analysis

With the understanding that pre-college characteristics may influence college students’ success, an investigation of possible interactions between the pre-college characteristics and the outcomes is warranted. This analysis will focus on the independent variables of gender, race/ethnicity, and ACT scores because correlation analysis of these independent variables suggested possible interactions with the dependent variables. The Race/Ethnicity variable was recoded to white and other races (Asian, Black, Hispanic, Multi, and NHPI) and will be referred to as race
recoded due to a limited response rate for students from other races. The steps for this analysis include: independent samples t-test, correlations of pre-college characteristics with the outcome variables, and a multivariate generalized linear model analysis.

**Independent-sample T-test**

This study was quasi-experimental because students’ enrollment in the GS 101 was not random. Students, during registration, worked with an advisor to select a GS 101 that fit best into their fall 2010 academic schedule. Therefore, I begin the analysis by testing whether or not the two cohorts of students were equivalent in pre-college characteristics, specifically in ACT scores, at the start of the study. Using the independent samples t-test function on SPSS, a comparison of means was conducted to explore the relationship between the ACT scores of the students with the strengths-based approach and students without the strengths-based approach cohorts. The SPSS output of the independent sample t-test is contained in Appendix C. The results of the independent sample t-test for the entire sample indicated ACT Math (p=.0222) and ACT Science (p=.049) are significant by Levene's Test for Equality of Variances. Further, ACT Science (p=.012) has significant results with a 2-tailed T-test for Equality of Means.

The initial difference in the two cohorts is likely the result of the GS 101 course offerings established by the Division of General Studies at the University of Illinois. Two GS 101 courses were specifically designated for James Scholar students and were taught by the same instructor who chose to include the strengths-based approach the GS 101 sections for James Scholars. James Scholars are selected based on scholastic aptitude which includes high school grade point average and entrance exam results. As displayed in table 4.1, 28.4% of students in the strengths-based cohort were James Scholars.
Table 4.1
Honors Program Participation of Respondents

<table>
<thead>
<tr>
<th>Honors Program</th>
<th>With Strengths</th>
<th>Without Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>James Scholar Program</td>
<td>25</td>
<td>28.4%</td>
</tr>
</tbody>
</table>

To confirm that the James Scholar sections of GS 101 impacted the initial cohorts, a second independent samples t-test removing the James Scholars indicated that ACT scores were no longer significant by use of Levene’s Test for Equality of Variances or 2-tailed T-test for Equality of Means suggesting the JS are at least partially responsible for the initial difference in cohorts.

Correlation Analysis

Since the initial sample population varied, I identified possible correlations between ACT Scores and the outcomes variable. With the assumption that ACT scores vary with race and gender, the correlation analysis included gender and race recoded. Table 4.2 contains the correlation results for the ACT Scores, gender, race recoded, and the results of the pre- and post-survey composites of the Strengths Index and Strengths Self Efficacy subscales.

The Pearson’s $r$ correlation results indicated weak correlations between the post Strengths Self-Efficacy Scale (S2StrSE) and ACT Composite, English, and Math. ACT scores had weak and moderate correlations with gender and race recoded. Further, there were moderate and strong correlations between the Strengths Index and Strengths Self-Efficacy scales for pre-and post-tests. Given the correlation results, future analysis of the data must consider the potential interrelatedness of the ACT scores, gender, race recoded, and the outcome variables.
Table 4.2

Correlations of Demographics with Survey Responses

<table>
<thead>
<tr>
<th></th>
<th>ACT Comp</th>
<th>ACT Engl</th>
<th>ACT Math</th>
<th>ACT Sci</th>
<th>ACT Read</th>
<th>Gender</th>
<th>Race Recode</th>
<th>S2 StrIdx</th>
<th>S2 StrSE</th>
<th>S1 StrIdx</th>
<th>S1 StrSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Comp</td>
<td>1</td>
<td>.746**</td>
<td>.735**</td>
<td>.868**</td>
<td>.775**</td>
<td>-.191*</td>
<td>-.256**</td>
<td>-.030</td>
<td>-.206*</td>
<td>-.041</td>
<td>-.142</td>
</tr>
<tr>
<td>ACT Engl</td>
<td>1</td>
<td>.249**</td>
<td>.659**</td>
<td>.654**</td>
<td>-.015</td>
<td>-.512**</td>
<td>-.006</td>
<td>-.183*</td>
<td>.089</td>
<td>-.052</td>
<td></td>
</tr>
<tr>
<td>ACT Math</td>
<td>1</td>
<td>.704**</td>
<td>.386**</td>
<td>-.309**</td>
<td>.172</td>
<td>-.012</td>
<td>-.077</td>
<td>-.148</td>
<td>-.101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACT Sci</td>
<td>1</td>
<td>.552**</td>
<td>-.211*</td>
<td>-.207*</td>
<td>-.101</td>
<td>-.282**</td>
<td>-.042</td>
<td>-.177</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ACT Read</td>
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<td>-.432**</td>
<td>.060</td>
<td>-.170</td>
<td>.010</td>
<td>-.152</td>
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<td>.064</td>
<td>-.025</td>
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<tr>
<td>Race Recoded</td>
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<td>-.037</td>
<td>.162</td>
<td>-.104</td>
<td>.052</td>
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<td></td>
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</tr>
<tr>
<td>S2 StrIdx Comp</td>
<td>1</td>
<td>.701**</td>
<td>.576**</td>
<td>.509**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>S2 StrSE Comp</td>
<td>1</td>
<td>.479**</td>
<td>.588**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>S1 StrIdx Comp</td>
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<td></td>
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<tr>
<td>S1 StrSE Comp</td>
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</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Multivariate Generalized Linear Model Analysis

Based on the results from the Pearson’s r correlations, a preliminary investigation of covariates was conducted to understand possible interactions with the change in respondents’ responses with ACT Scores, gender and race recoded. Using multivariate generalized linear model analysis, an initial model was considered using ACT scores. Table 4.3 displays the aggregated results for the analysis of between-subject effects and contain the significance and error values.
Table 4.3

Significance Values (p) and Error Results for the Initial Multivariate Model.

<table>
<thead>
<tr>
<th>Variable</th>
<th>S21 Str Idx Comp</th>
<th>S21 Str SE Comp</th>
<th>S21 Freq Strengths</th>
<th>S21 Freq Weakness</th>
<th>S21 Focus Strength</th>
<th>S21 Focus Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Comp</td>
<td>0.645</td>
<td>0.455</td>
<td>0.116</td>
<td>0.147</td>
<td>0.632</td>
<td>0.391</td>
</tr>
<tr>
<td>SB</td>
<td>0.539</td>
<td>0.848</td>
<td>0.262</td>
<td><strong>0.021</strong></td>
<td>0.060</td>
<td>0.420</td>
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<tr>
<td>Error</td>
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<td>1905</td>
<td>60</td>
<td>96</td>
<td>65</td>
<td>100</td>
</tr>
<tr>
<td>ACT English</td>
<td>0.404</td>
<td>0.119</td>
<td>0.604</td>
<td>0.377</td>
<td>0.394</td>
<td>0.309</td>
</tr>
<tr>
<td>SB</td>
<td>0.639</td>
<td>0.913</td>
<td>0.214</td>
<td><strong>0.018</strong></td>
<td>0.064</td>
<td>0.413</td>
</tr>
<tr>
<td>Error</td>
<td>1285</td>
<td>1925</td>
<td>70</td>
<td>109</td>
<td>76</td>
<td>109</td>
</tr>
<tr>
<td>ACT Math</td>
<td>0.139</td>
<td>0.990</td>
<td>0.222</td>
<td><strong>0.027</strong></td>
<td>0.611</td>
<td>0.365</td>
</tr>
<tr>
<td>SB</td>
<td>0.426</td>
<td>0.779</td>
<td>0.269</td>
<td><strong>0.031</strong></td>
<td>0.065</td>
<td>0.399</td>
</tr>
<tr>
<td>Error</td>
<td>1243</td>
<td>1914</td>
<td>60</td>
<td>94</td>
<td>65</td>
<td>100</td>
</tr>
<tr>
<td>ACT Reading</td>
<td>0.338</td>
<td>0.969</td>
<td>0.313</td>
<td>0.207</td>
<td>0.616</td>
<td>0.442</td>
</tr>
<tr>
<td>SB</td>
<td>0.549</td>
<td>0.904</td>
<td>0.369</td>
<td>0.110</td>
<td>0.069</td>
<td>0.557</td>
</tr>
<tr>
<td>Error</td>
<td>1065</td>
<td>1735</td>
<td>51</td>
<td>80</td>
<td>58</td>
<td>94</td>
</tr>
<tr>
<td>ACT Science</td>
<td>0.884</td>
<td>0.331</td>
<td><strong>0.097</strong></td>
<td>0.565</td>
<td>0.785</td>
<td>0.975</td>
</tr>
<tr>
<td>SB</td>
<td>0.542</td>
<td>0.916</td>
<td>0.613</td>
<td>0.155</td>
<td>0.067</td>
<td>0.566</td>
</tr>
<tr>
<td>Error</td>
<td>1074</td>
<td>1720</td>
<td>50</td>
<td>81</td>
<td>58</td>
<td>94</td>
</tr>
</tbody>
</table>

Using a value of p<.10 for the determination of covariates and p<.05 for statistically significant difference, analysis suggested that ACT Math was a covariate and significant for the change in frequency student think about their weaknesses (S21 Freq Weakness). In addition, the difference between the two cohorts was significant for ACT Comp and ACT Science indicated possible covariates. The University of Illinois did not require all students to complete the ACT and converts SAT scores to standardized ACT scores. The way in which the University of Illinois reports ACT scores resulted in several students not having ACT Science or Reading scores. Since not all students did not have an ACT Science score, a decision was made to remove ACT Science from the model. Further, the significance of ACT Composite is likely the results of ACT Math and the ACT Science scores being significant. Therefore, the ACT Composite item was removed in favor of the subscores.
Since the multivariate analysis suggested ACT Math as covariates, a review of the Pearson’s $r$ correlations from table 4.2 was conducted to explore further possible interactions. As a result, gender and race recoded were added to the multivariate analysis because of weak correlations with ACT Scores. Table 4.4 displays the results for the refined model that includes ACT Math, gender, and race recoded.

Using the results from the refined model, the multivariate analysis resulted in the change in the frequency that respondents’ thoughts about their weaknesses was significant at the $p<.01$ between the students with and without strengths-based approach. In addition, the multivariate analysis resulted in ACT Math was significant at $p<.05$ change in the frequency that respondents’ thoughts about their weaknesses. These results indicated that the strengths-based approach had a statistically significant relationship and, as described later, was in the anticipated direction of the given the strengths-based approach as a treatment.

Table 4.4

*Significance Values (p) and Error Results for the Refined Model*

<table>
<thead>
<tr>
<th>Variable</th>
<th>S21 Str Idx Comp</th>
<th>S21 Str SE Comp</th>
<th>S21 Freq Strengths</th>
<th>S21 Freq Weakness</th>
<th>S21 Focus Strength</th>
<th>S21 Focus Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Math</td>
<td>0.124</td>
<td>0.611</td>
<td>0.279</td>
<td><strong>0.041</strong></td>
<td>0.938</td>
<td>0.528</td>
</tr>
<tr>
<td>Race Recoded</td>
<td>0.935</td>
<td>0.217</td>
<td>0.074</td>
<td>0.847</td>
<td>0.637</td>
<td>0.386</td>
</tr>
<tr>
<td>Gender</td>
<td>0.764</td>
<td>0.071</td>
<td>0.481</td>
<td>0.558</td>
<td>0.289</td>
<td>0.348</td>
</tr>
<tr>
<td>SB</td>
<td>0.549</td>
<td>0.874</td>
<td>0.207</td>
<td><strong>0.005</strong></td>
<td>0.192</td>
<td>0.780</td>
</tr>
<tr>
<td>SB * Race Recoded</td>
<td>0.628</td>
<td>0.883</td>
<td>0.141</td>
<td>0.173</td>
<td>0.399</td>
<td>0.543</td>
</tr>
<tr>
<td>SB * Gender</td>
<td>0.353</td>
<td>0.158</td>
<td>0.617</td>
<td>0.250</td>
<td>0.730</td>
<td>0.625</td>
</tr>
<tr>
<td>Gender * Race Recoded</td>
<td>0.574</td>
<td>0.771</td>
<td>0.819</td>
<td>0.085</td>
<td>0.719</td>
<td>0.210</td>
</tr>
<tr>
<td>SB * Gender * Race Recoded</td>
<td>0.109</td>
<td>0.286</td>
<td>0.867</td>
<td>0.938</td>
<td>0.667</td>
<td>0.082</td>
</tr>
<tr>
<td>Error</td>
<td>1211.954</td>
<td>1817.454</td>
<td>57.928</td>
<td>87.549</td>
<td>63.051</td>
<td>94.129</td>
</tr>
</tbody>
</table>
Cohen’s d

Current research guidelines for educational research suggest the reporting of effect size as measured by Cohen’s d when reporting results from multivariate analysis. The results from the calculation of Cohen’s d are displayed in table 4.5. Using standards developed by Cohen (1977, 1988), the frequency of respondents’ thoughts about their weaknesses was 0.471 indicating a medium effect size. Other variables’ Cohen’s d were included; however, as indicated in table 4.4, these results were not significant. Wolf (1986) suggested that absolute values of at least 0.25 are educationally significant based on meta-analysis of utilization of effect sizes. The Cohen’s d value for the frequency of respondents’ thoughts about their weaknesses was approaching practically significant. Therefore, the frequency of respondents’ thoughts about their weaknesses was both significant and had an effect size to suggest the intervention should factor into future educational decision-making. It should be noted that standards of reporting effect sizes, as measured Cohen’s d, have not been established for higher education and Wolf’s meta-analysis used the broad field of education for recommendations based on effect size.

Table 4.5

*Cohen’s d Analysis of Variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>S21StrIdxComp</td>
<td>0.187</td>
</tr>
<tr>
<td>S21StrSEComp</td>
<td>0.132</td>
</tr>
<tr>
<td>S21FreqStrength</td>
<td>0.250</td>
</tr>
<tr>
<td>S21FreqWeakness</td>
<td>0.471</td>
</tr>
<tr>
<td>S21FocusStrength</td>
<td>-0.326</td>
</tr>
<tr>
<td>S21FocusWeakness</td>
<td>-0.152</td>
</tr>
</tbody>
</table>
Analysis and Interpretations of Survey Results by Gender and Race Recoded

Given the results of the multivariate analysis, a review of the survey results by gender and race recoded was warranted to discern trends and patterns within the data. Consistent with the previous analysis, race/ethnicity has been recoded into white and other races given the number of respondents by individual race/ethnicity was not adequate for analysis. Further, the numbers of males and others races were limited resulting in large shifts in percentages. For examples, one female response was approximately worth 1.6% while a male response was measured at 3.5%. The overall trends and patterns discussed within the following sections should consider the limited responses in this data set for males and others races. This analysis and discussion will begin with students’ perceptions of strengths and weaknesses. Then, I will review the results to the Strengths Index and Strengths Self Efficacy. Finally, I will conclude with students’ recommendation of the GS 101 course.

Students’ Perceptions of Strengths and Weaknesses

The frequency in which students have thought about their strengths is displayed in table 4.6. From the original aggregated results, students with the strengths-based approach reported thinking about their strengths less often compared to students without the strengths-based approach. When breaking the results down further, females and other races in the students with the strengths-based approach exhibited this trend. Males and white students showed only a slight difference between cohorts.
Table 4.6

*Students’ Reported Frequency of Thinking about Their Strengths*

<table>
<thead>
<tr>
<th>Response</th>
<th>With Strengths</th>
<th></th>
<th></th>
<th>Without Strengths</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-Survey</td>
<td>Pre-Survey</td>
<td></td>
<td>Post-Survey</td>
<td>Pre-Survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Rarely</td>
<td>14</td>
<td>16.10%</td>
<td>7</td>
<td>8.00%</td>
<td>5</td>
<td>11.60%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>48</td>
<td>55.20%</td>
<td>34</td>
<td>39.10%</td>
<td>19</td>
<td>44.20%</td>
</tr>
<tr>
<td>Often</td>
<td>25</td>
<td>28.70%</td>
<td>46</td>
<td>52.90%</td>
<td>19</td>
<td>44.20%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th></th>
<th>Females</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Rarely</td>
<td>7</td>
<td>26.90%</td>
<td>3</td>
<td>12.00%</td>
<td>4</td>
<td>28.60%</td>
<td>1</td>
</tr>
<tr>
<td>Sometimes</td>
<td>10</td>
<td>38.50%</td>
<td>8</td>
<td>32.00%</td>
<td>5</td>
<td>35.70%</td>
<td>7</td>
</tr>
<tr>
<td>Often</td>
<td>9</td>
<td>34.60%</td>
<td>14</td>
<td>56.00%</td>
<td>5</td>
<td>35.70%</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th></th>
<th></th>
<th>Other Races</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Rarely</td>
<td>11</td>
<td>20.80%</td>
<td>4</td>
<td>7.50%</td>
<td>4</td>
<td>14.30%</td>
<td>1</td>
</tr>
<tr>
<td>Sometimes</td>
<td>28</td>
<td>52.80%</td>
<td>25</td>
<td>47.20%</td>
<td>14</td>
<td>50.00%</td>
<td>12</td>
</tr>
<tr>
<td>Often</td>
<td>14</td>
<td>26.40%</td>
<td>32</td>
<td>51.60%</td>
<td>14</td>
<td>48.30%</td>
<td>17</td>
</tr>
</tbody>
</table>

Although the multivariate analysis did not show a statistically significance difference, these results beg the question as to why female and others races, after a strengths-based treatment, would think less often about their strengths as compared to the students without the strengths-based approach. It may be possible that students with the strengths-based approach
have a new definition of strengths, defined by the strengths-based approach that is different from
the traditional use of the terms “strengths.”

In the strengths-based approach, students were given the results to the Clifton
StrengthsFinder that included their signature theme profile. The signature theme profile results
may be interpreted by the students with the strengths-based approach as their new definitions of
a “strengths” instead of their previously conceived traditional definition of a strengths.
Therefore, students with the strengths-based approach may not be thinking about their signature
theme results and thus indicated thinking about their strengths less often.

The frequency in which students have thought about their weaknesses is contained in
table 4.7. Reviewing the aggregated results, students with the strengths-based approach reported
thinking about their weaknesses less often compared to students without the strengths-based
approach. Overall, 26.1% of students with the strengths-based approach thought about their
weaknesses “often” compared to 51.20% of students without the strengths-based approach.
Males with the strengths-based approach indicated a larger decrease in how often they thought
about their weaknesses (42.3% to 7.7%) compared to no change for males without the strengths-
based approach. Female with the strengths-based approach had a decrease in frequency (58.1%
to 33.9%) compared to an increase for females without the strengths-based approach (51.7% to
62.1%). Other races and white students followed a similar pattern as females cohorts reported
having thought about their weaknesses less often.
Table 4.7

*Students’ Reported Frequency of Thinking about Their Weaknesses*

| Response | With Strengths | | | Without Strengths | | |
|----------|----------------|-----------------|-----------------|-----------------|-----------------|
|          | Post-Survey Count | % | Pre-Survey Count | % | Post-Survey Count | % | Pre-Survey Count | % |
| All      | | | | | | | | |
| Never    | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 2 | 4.70% |
| Rarely   | 21 | 23.90% | 11 | 12.50% | 9 | 20.90% | 4 | 9.30% |
| Sometimes | 44 | 50.00% | 29 | 33.00% | 12 | 27.90% | 18 | 41.90% |
| Often    | 23 | 26.10% | 47 | 53.40% | 22 | 51.20% | 19 | 44.20% |
| Males    | | | | | | | | |
| Never    | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 2 | 14.30% |
| Rarely   | 13 | 50.00% | 5 | 19.20% | 5 | 35.70% | 2 | 14.30% |
| Sometimes | 11 | 42.30% | 10 | 38.50% | 5 | 35.70% | 6 | 42.90% |
| Often    | 2 | 7.70% | 11 | 42.30% | 4 | 28.60% | 4 | 28.60% |
| Females  | | | | | | | | |
| Never    | 0 | 0.00% | 1 | 1.60% | 0 | 0.00% | 0 | 0.00% |
| Rarely   | 8 | 12.90% | 6 | 9.70% | 4 | 13.80% | 2 | 6.90% |
| Sometimes | 33 | 53.20% | 19 | 30.60% | 7 | 24.10% | 12 | 41.40% |
| Often    | 21 | 33.90% | 36 | 58.10% | 18 | 62.10% | 15 | 51.70% |
| White    | | | | | | | | |
| Never    | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% | 2 | 7.10% |
| Rarely   | 14 | 25.90% | 10 | 18.50% | 8 | 28.60% | 2 | 7.10% |
| Sometimes | 23 | 42.60% | 15 | 27.80% | 9 | 32.10% | 13 | 46.40% |
| Often    | 17 | 31.50% | 29 | 53.70% | 11 | 39.30% | 11 | 39.30% |
| Other Races | | | | | | | | |
| Never    | 0 | 0.00% | 1 | 2.90% | 0 | 0.00% | 0 | 0.00% |
| Rarely   | 7 | 20.60% | 1 | 2.90% | 1 | 6.70% | 2 | 13.30% |
| Sometimes | 21 | 61.80% | 14 | 41.20% | 3 | 20.00% | 5 | 33.30% |
| Often    | 6 | 17.60% | 18 | 52.90% | 11 | 73.30% | 8 | 53.30% |

The multivariate analysis result shows a statistically significant difference for the frequency in which students have thought about their weaknesses with an effect size of medium and educational significant. Further analyses of the survey results indicated students with the strengths-based approach adopted the strengths-based treatment after a relatively short
intervention (a reading, the Clifton StrengthsFinder instrument, and a lecture). In addition, the results suggested that male students were more likely to adopt the strengths-based approach of managing their weaknesses and focusing on their strengths. Future users of the strengths-based approach should consider males as “early adopters” and may want to consider how materials are presented to better facilitate adoption for students who are female, are of other races, or are white.

Contained in table 4.8 are the results to the question whether students should focus on their strengths compared to their weaknesses to be successful in college and table 4.9 displays the results to the question whether students should focus on their weaknesses compared to their strengths to be successful in college. In the surveys, students were asked: first, “to be successful in college, I need to focus most on my areas of weakness rather than my strengths”, and then later, in reverse sequence, students were asked if they should focus on their more than their weaknesses.

The anticipated results would be for students with the strengths-based approach to indicate focusing on their strengths more and their weaknesses less often. As displayed in table 4.8, males from both cohorts indicated focusing on your strengths more often in the post-survey. However, males with the strengths-based approach reported less disagreement in the post-survey (19.2% to 3.8) compared to male without the strengths-based approach (21.4% to 14.7%). There was no change from pre- to post-test for females without the strengths-based approach; however, females with the strengths-based approach had an increase from 77% to 87%. There appeared to be only a slight difference by race recoded; however, students with the strengths-based approach indicated greater agreement in focusing on their strengths compared to students without the strengths-based approach. The results indicated an alignment with strengths-based approach.
Table 4.8

Focus on Strengths for Success

<table>
<thead>
<tr>
<th>Response</th>
<th>With Strengths</th>
<th>Without Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-Survey</td>
<td>Pre-Survey</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Str. Disagree</td>
<td>1</td>
<td>1.10%</td>
</tr>
<tr>
<td>Disagree</td>
<td>8</td>
<td>9.10%</td>
</tr>
<tr>
<td>Agree</td>
<td>49</td>
<td>55.70%</td>
</tr>
<tr>
<td>Str. Agree</td>
<td>30</td>
<td>34.10%</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Str. Disagree</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>3.80%</td>
</tr>
<tr>
<td>Agree</td>
<td>15</td>
<td>57.70%</td>
</tr>
<tr>
<td>Str. Agree</td>
<td>10</td>
<td>38.50%</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Str. Disagree</td>
<td>1</td>
<td>1.60%</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>11.30%</td>
</tr>
<tr>
<td>Agree</td>
<td>34</td>
<td>54.80%</td>
</tr>
<tr>
<td>Str. Agree</td>
<td>20</td>
<td>32.30%</td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Str. Disagree</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>13.00%</td>
</tr>
<tr>
<td>Agree</td>
<td>30</td>
<td>55.60%</td>
</tr>
<tr>
<td>Str. Agree</td>
<td>17</td>
<td>31.50%</td>
</tr>
<tr>
<td>Other Races</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Str. Disagree</td>
<td>1</td>
<td>2.90%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>2.90%</td>
</tr>
<tr>
<td>Agree</td>
<td>19</td>
<td>55.90%</td>
</tr>
<tr>
<td>Str. Agree</td>
<td>13</td>
<td>38.20%</td>
</tr>
</tbody>
</table>

When asked about focusing on weaknesses, no differences were observed between cohorts when reviewing aggregated data. Students generally trended towards disagreeing with the statement (18.1 students with strengths-based approach; 18.6 students without the strengths-based approach). However, some trends can be observed in analyzing the results based on gender.
and race recoded, which is displayed in table 4.9. Males with the strengths-based approach had a stronger shift towards disagreement from pre-survey to post-survey (46.2 to 84.6) compared with males without the strengths-based approach (42.8% to 71.4%). Males indicated over twice the difference compared to the aggregate data. Females with the strengths-based approach had a 9.6% shift toward disagreement compare to a 13.9% shift towards disagreement for females without the strengths-based approach. For white students with strengths-based approach, there was a shift towards disagreement from pre-survey to post-survey (26.0%) while students of other races indicated a shift towards disagreement (5.9%). Further, the 5.9% shift towards disagreement for students with the strengths-based approach was less than the 13.3% shift toward disagreement for student from other races without the strengths-based approach. I speculate that these trends in race and gender are likely due to the socially constructed norms and values as well as the manner in which society treats each social identity group. More research is necessary to further understand the results on race and gender since this phenomena was not specifically investigated in this study.

Overall, both gender and race appeared to be a factor in how students view success as it relates to the strengths-based approach and how they describe their personal weaknesses. The strengths-based approach by itself offers no insight into why gender and race appeared to impact students’ perceptions on success and the focus on strengths and weakness. I would hypothesize that because they are part of the dominant culture and hence, may have developed a greater sense of competency and agency, males and white students found it easier to “give up” commonly held notions about strengths and weaknesses. I would recommend further study into this result to better understand the social dynamics that are occurring during strengths development. I posit the
following questions: what socio-cultural factors allow for or inhibit strengths development in college students as it relates to societal norms, values, and behaviors.

Table 4.9

**Focus on Weaknesses for Success**

<table>
<thead>
<tr>
<th></th>
<th>With Strengths</th>
<th>Without Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-Survey</td>
<td>Pre-Survey</td>
</tr>
<tr>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>9</td>
<td>10.2%</td>
</tr>
<tr>
<td>Disagree</td>
<td>52</td>
<td>59.1%</td>
</tr>
<tr>
<td>Agree</td>
<td>20</td>
<td>22.7%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>8.0%</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>7.7%</td>
</tr>
<tr>
<td>Disagree</td>
<td>20</td>
<td>76.9%</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
<td>11.5%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>1</td>
<td>3.8%</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>7</td>
<td>11.3%</td>
</tr>
<tr>
<td>Disagree</td>
<td>32</td>
<td>51.6%</td>
</tr>
<tr>
<td>Agree</td>
<td>17</td>
<td>27.4%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>6</td>
<td>9.7%</td>
</tr>
<tr>
<td>Whites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>6</td>
<td>11.1%</td>
</tr>
<tr>
<td>Disagree</td>
<td>34</td>
<td>63.0%</td>
</tr>
<tr>
<td>Agree</td>
<td>9</td>
<td>16.7%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>5</td>
<td>9.3%</td>
</tr>
<tr>
<td>Other Races</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>8.8%</td>
</tr>
<tr>
<td>Disagree</td>
<td>18</td>
<td>52.9%</td>
</tr>
<tr>
<td>Agree</td>
<td>11</td>
<td>32.4%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>2</td>
<td>5.9%</td>
</tr>
</tbody>
</table>
**Strengths Index and Strengths Self Efficacy**

The following series of tables displays the results from the two five-question strengths instruments used during this study: Strengths Index and Strengths Self Efficacy. To begin, an analysis of reliability was conducted using the Cronbach Alphas. As displayed in table 4.10, the alphas for each the instruments during both the pre- and post-survey periods were above 0.70.

Table 4.10

*Cronbach Alphas for Strengths Index and Strengths Self Efficacy*

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Pre-Survey</th>
<th>Post Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Items</td>
<td>Number of Items</td>
</tr>
<tr>
<td>Strengths Index</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Strengths Self Efficacy</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Combined</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 4.11 contains the individual composite scores changes for instruments. Strengths Index scale (Index) and Strengths Self Efficacy scales (Efficacy). As a reminder, the strengths scales were five questions each using a six-point Likert-type response and therefore, a maximum score would have been thirty. On the whole, the results of the instruments indicated that students without the strengths-based approach had an increase in the Index scale and a slight decrease in the Efficacy scale compared to decreases in both scales for students with strengths-based approach. Breaking down the results by gender and race, male students without the strengths-based approach had greater decrease in Efficacy (-1.57) compared to all other categories. Males with the strengths-based approach decrease was only -.58 suggesting that the strength-based treatment may have buffered the change in Efficacy. Students who are white follow this pattern as well. The anticipated results would have been for the strengths-based cohort to have greater increases in both scales after treatment since the strengths-based approach was developed to increase strengths awareness and development. Female students with strengths-based approach,
also, did not fit the anticipated pattern having indicated a lower Index and Efficacy compared to an increase for females without the strengths-based approach. Students with other races shared this pattern with females as well.

Table 4.11

*Individual Comp Change Means for Strengths Index and Strengths Self Efficacy*

<table>
<thead>
<tr>
<th></th>
<th>With Strengths</th>
<th></th>
<th></th>
<th>With Strengths</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>St Dev</td>
<td>N</td>
<td>Mean</td>
<td>St Dev</td>
</tr>
<tr>
<td>All</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S21Str Idx Comp</td>
<td>88</td>
<td>-.08</td>
<td>4.06</td>
<td>43</td>
<td>.58</td>
<td>2.91</td>
</tr>
<tr>
<td>S21Str SE Comp</td>
<td>88</td>
<td>-.68</td>
<td>4.27</td>
<td>43</td>
<td>-.14</td>
<td>3.90</td>
</tr>
<tr>
<td>Males</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S21Str Idx Comp</td>
<td>26</td>
<td>.42</td>
<td>2.16</td>
<td>14</td>
<td>.57</td>
<td>2.56</td>
</tr>
<tr>
<td>S21Str SE Comp</td>
<td>26</td>
<td>-.58</td>
<td>2.94</td>
<td>14</td>
<td>-1.57</td>
<td>3.65</td>
</tr>
<tr>
<td>Females</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S21Str Idx Comp</td>
<td>62</td>
<td>-.29</td>
<td>4.63</td>
<td>29</td>
<td>.59</td>
<td>3.10</td>
</tr>
<tr>
<td>S21Str SE Comp</td>
<td>62</td>
<td>-.73</td>
<td>4.74</td>
<td>29</td>
<td>.55</td>
<td>3.89</td>
</tr>
<tr>
<td>White</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S21Str Idx Comp</td>
<td>54</td>
<td>-.31</td>
<td>4.31</td>
<td>28</td>
<td>.54</td>
<td>2.55</td>
</tr>
<tr>
<td>S21Str SE Comp</td>
<td>54</td>
<td>-1.07</td>
<td>4.34</td>
<td>28</td>
<td>-1.57</td>
<td>4.15</td>
</tr>
<tr>
<td>Other Races</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>S21Str Idx Comp</td>
<td>34</td>
<td>.29</td>
<td>3.65</td>
<td>15</td>
<td>.67</td>
<td>3.58</td>
</tr>
<tr>
<td>S21Str SE Comp</td>
<td>34</td>
<td>-.06</td>
<td>4.13</td>
<td>15</td>
<td>.67</td>
<td>3.37</td>
</tr>
</tbody>
</table>

Although the multivariate analysis indicated, the Index and Efficacy scales were not statistically significant. The change in these scales appeared to be inconsequential. The minor changes in the scales showed a similar pattern with the previous discussed changes in students’ perceptions (frequency and focus on strengths and weaknesses). The minor and statistically insignificant changes may have been the results of an inadequate treatment period or evaluation timeframe. With these results in mind, the building evidence suggested that when applying a strengths-based approach in a university 101 course, race and gender must be attended to during design and facilitation. More research is necessary to understand in the influence or impact of
gender and race with a strengths-based approach. To further support race and gender argument, results from whether or not students would recommend the G101 course may shed some light as displayed in table 4.12.

Table 4.12

Students’ Recommendation of G101

<table>
<thead>
<tr>
<th>Response</th>
<th>With Strengths</th>
<th></th>
<th>Without Strengths</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do Not Recommend</td>
<td>1</td>
<td>3.8%</td>
<td>4</td>
<td>28.6%</td>
</tr>
<tr>
<td>Slightly Recommend</td>
<td>9</td>
<td>34.6%</td>
<td>4</td>
<td>28.6%</td>
</tr>
<tr>
<td>Recommend</td>
<td>10</td>
<td>38.5%</td>
<td>3</td>
<td>21.4%</td>
</tr>
<tr>
<td>Highly Recommend</td>
<td>6</td>
<td>23.1%</td>
<td>3</td>
<td>21.4%</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do Not Recommend</td>
<td>6</td>
<td>9.7%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Slightly Recommend</td>
<td>17</td>
<td>27.4%</td>
<td>9</td>
<td>31.0%</td>
</tr>
<tr>
<td>Recommend</td>
<td>23</td>
<td>37.1%</td>
<td>16</td>
<td>55.2%</td>
</tr>
<tr>
<td>Highly Recommend</td>
<td>16</td>
<td>25.8%</td>
<td>4</td>
<td>13.8%</td>
</tr>
<tr>
<td>Whites</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do Not Recommend</td>
<td>5</td>
<td>9.3%</td>
<td>3</td>
<td>10.7%</td>
</tr>
<tr>
<td>Slightly Recommend</td>
<td>19</td>
<td>35.2%</td>
<td>11</td>
<td>39.3%</td>
</tr>
<tr>
<td>Recommend</td>
<td>18</td>
<td>33.3%</td>
<td>13</td>
<td>46.4%</td>
</tr>
<tr>
<td>Highly Recommend</td>
<td>12</td>
<td>22.2%</td>
<td>1</td>
<td>3.6%</td>
</tr>
<tr>
<td>Other Races</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do Not Recommend</td>
<td>2</td>
<td>5.9%</td>
<td>1</td>
<td>6.7%</td>
</tr>
<tr>
<td>Slightly Recommend</td>
<td>7</td>
<td>20.6%</td>
<td>2</td>
<td>13.3%</td>
</tr>
<tr>
<td>Recommend</td>
<td>15</td>
<td>44.1%</td>
<td>6</td>
<td>40.0%</td>
</tr>
<tr>
<td>Highly Recommend</td>
<td>10</td>
<td>29.4%</td>
<td>6</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

Males without the strengths-based approach were more likely not to recommend the course (28.6%) compared to males with the strengths-based approach (3.8%). As previously discussed, male with the strengths-based approach indicated a greater adoption of the strengths-based approach, as well. White students with the strengths-based approach were more likely to indicate highly recommend (22.2%) compared to 3.6% for white students without the strengths-
based approach. Students from other races without the strengths-based approach were more likely to recommend the course (80%) compares to the without the strengths-based approach cohort (73.5%). This overall pattern in the students’ recommendation suggests that the adoption of the strengths-based approach was related to gender and race and to how the students recommend the course. Again, further research is necessary to understand in the influence or impact of gender and race with a strengths-based approach.

**Summary of Findings**

I began this research with the aim to build upon the current scholarly work available on college students and a strengths-based approach to demonstrate the efficacy of this approach in higher education setting. In doing so, I set forth an ambitious plan to understand how students with the strengths-based approach changed overtime in comparison with students without the strengths-based approach. Given the limited intervention, my expectations were to show even the smallest of differences between groups with hope to provide justification for continued research and development.

Considering that previous research showed pre-college characteristics matter (Astin, 1977, 1984, 1993, 1999; Tinto, 1975, 1987, 1993), I chose to create a multivariate analysis model that controlled for gender, race recoded, and ACT Math because of an investigation of Pearson’s $r$ correlations which indicated potential relationships between variables. With this model, the multivariate model indicated there was a statistically significant difference for the change in the frequency students have thought about their weaknesses ($p<.01$) between the students with the strengths-based approach and without a strengths-based approach. Further, the effect size (Cohen’s d) for the change in the frequency students have thought about their
weaknesses was medium, suggesting the result to be educationally significant (d=0.417). The effect size analysis suggested the influence of the strengths-based approach rose to the level that college and university administrators should pay attention.

The results of the multivariate analysis are quite profound considering the treatment was a limited intervention of a reading, a lecture, and an inventory (Clifton StrengthsFinder) and the inventory is currently priced at approximately $15.00. This results begs the question, what impact would this low cost intervention have if expanded in size, treatment, and duration?

When colleges and universities consider adopting strengths-based approaches, further analysis indicated that race and gender may influence the integration of strengths-based approach including the frequency and focus on strengths and weaknesses. White and male students with the strengths-based approach indicated greater adoption of strengths-based approaches. Females and students from other races reported less adoption of the strengths-based approach.

Although this study did not seek to understand the difference between race and gender, I can speculate on the possible reasons as to why these differences occurred in this study. I attribute race and gender results to the cultural norms, values, and morals imparted on students as they have matured before entering college. For example, whites and males student generally enjoy privileges within our society that may be at play with strengths-based approaches. One could easily imagine a life where white and male students have been continually reinforced with positive message of excellence and one could equally imagine the negative messages, often, given to females and students from other races based on traditional social roles. It would not be a significant leap to assume that larger social forces are involved as students’ engage in a strengths-based approach. Further, the strengths-based approach is counter cultural to messages students would typically hear during their primary and secondary education and these messages
likely vary by the location of the education. For example, high school students are more likely
told to be “well-rounded” or to excel in all areas to be successful while the strengths-based
approach asked students to center their efforts on their strengths and manage their weaknesses.
Race and gender appeared to matter in the development and utilization of a strengths-based
approach. Future study is warranted to understand how and to what extent does race and gender
matter when engaging in strengths-based development.

One exception to the general integration was females and students from other races in the
with strengths-based approach cohorts indicated thinking of their strengths less often after the
treatments and only slight differences were observed males and students who were white. I did
not anticipate this result. As previously discussed, the strengths-based treatment was designed to
increase students’ focus on strengths. I believe there were three potential causes of this result.
One, students did not have enough time to synthesize and integrate all parts of the strengths-
based approach. Two, the research period was not long enough to measure a change or impact in
the students. Given that the only statistically significant results between cohorts was for the
change in the frequency students have thought about their weaknesses, I would suggest that
further longitude analysis is required to investigate the mid-range and long term impact of the
approach. Third, this intervention was too short to combat accepted notions of cultural norms,
values, and morays.

Overall, the data from the survey analysis indicated the strengths-based approach
influences college students in a university 101 with undecided to a level the college and
university administrators should consider supporting future research and utilization of a
strengths-based approach with college students. I suggest an increased intervention period with
post-test and delayed post-test data collection to better understand the longitudinal influence of
the strengths-based approach. In the next chapter, Chapter V, I will discuss the findings from the qualitative analysis and the fourteen interviews conducted for this study that supports and provided additional insights to this quantitative analysis that may help to guide future research and utilization.
CHAPTER V

FINDINGS AND INTERPRETATIONS OF INDIVIDUAL INTERVIEWS

In this chapter, the findings from the fourteen interviews will be discussed. Table 5.1 below includes a summary of the participants interviewed. Displayed in the table are the demographic variables of gender, race/ethnicity, if they were enrolled in strengths-based general studies (strengths), and the size of the course. The large lecture consisted of seventy-five to one hundred students while the small lecture/discuss had an enrollment of thirty-five to forty-five students.

Table 5.1

*Participant Summary*

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
<th>Strengths</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chow</td>
<td>Female</td>
<td>Asian</td>
<td>Yes</td>
<td>Large</td>
</tr>
<tr>
<td>Wen</td>
<td>Female</td>
<td>Asian</td>
<td>Yes</td>
<td>Large</td>
</tr>
<tr>
<td>William</td>
<td>Male</td>
<td>Asian</td>
<td>Yes</td>
<td>Large</td>
</tr>
<tr>
<td>Maria</td>
<td>Female</td>
<td>Hispanic</td>
<td>Yes</td>
<td>Small</td>
</tr>
<tr>
<td>Dawn</td>
<td>Female</td>
<td>Multi</td>
<td>Yes</td>
<td>Small</td>
</tr>
<tr>
<td>Adil</td>
<td>Male</td>
<td>White</td>
<td>Yes</td>
<td>Small</td>
</tr>
<tr>
<td>Dale</td>
<td>Male</td>
<td>White</td>
<td>Yes</td>
<td>Small</td>
</tr>
<tr>
<td>Joe</td>
<td>Male</td>
<td>White</td>
<td>Yes</td>
<td>Small</td>
</tr>
<tr>
<td>Michele</td>
<td>Female</td>
<td>White</td>
<td>No</td>
<td>Large</td>
</tr>
<tr>
<td>Claire</td>
<td>Female</td>
<td>White</td>
<td>No</td>
<td>Large</td>
</tr>
<tr>
<td>Jackie</td>
<td>Female</td>
<td>Black</td>
<td>No</td>
<td>Large</td>
</tr>
<tr>
<td>Jenni</td>
<td>Female</td>
<td>White</td>
<td>No</td>
<td>Large</td>
</tr>
<tr>
<td>Jaijing</td>
<td>Female</td>
<td>Asian</td>
<td>No</td>
<td>Small</td>
</tr>
<tr>
<td>Fred</td>
<td>Male</td>
<td>White</td>
<td>No</td>
<td>Small</td>
</tr>
</tbody>
</table>

*Participant Summaries*

To help understand the participants in the study, a summary of each participant’s interview is provided. Each summary begins with an understanding of how the student came to the Division of General Studies (DGS) and a brief description of their major exploration process. There is also an accounting of the topics from the general studies course the student remembers
and their impressions of the course topics. Next, there is a discussion of the participant thoughts regarding their strengths and weaknesses. Finally, for students not enrolled in a strength-based course, a summary of the student’s views on whether a strengths-based topic would have been useful or helpful in the course is provided.

**Participant Chow**

Chow is a female international student from China and is a student in a large strengths GS 101 class. She came to the DGS because she was truly undecided in her major exploration and was redirected from her first choice in the College of Business (COB). Chow’s parents strongly encouraged her to pursue a major in the COB in an effort to “be near the top achieving students at the university.” Chow was still considered several majors in the College of Business and the College of Liberal Arts and Sciences (LAS). Although drawn to a variety of majors in LAS, Chow was concerned about her English language ability and as a result, questioned pursuing an LAS major. She based most of her decisions related to her choice of major on her parents’ feedback and through her informal interactions with family and friends.

When reflecting upon the topics from her general studies course, Chow remembered the following topics: strengths exploration, course registration, and intercollegiate transfer. She described each of these topics as helpful. She was able to recollect three specific course topics as these were the topics that she found most useful. When she was asked about why she found these specific topics helpful, she said, “I think the strengths part really impressed me.” In addition, she began to describe the topic of strengths exploration,

> It’s not my first time to do a class like that, but I think the result is really accurate in some ways. And at that time, when we do this part in class, I was really confused because I was still at the adding and dropping classes period, so I was confused about my schedule and I was really stressed about my schedule at that time. And, after doing this test, I finally decided to change some courses and that
decision was, so far, I think was a good decision. So, I think the strengths part was really helpful to me.

When asked to reflect on the strength’s components of her GS 101 course and specifically what she was strong in; Chow discussed her “ability to collect information” (input signature theme), her “intelligence” (intellection signature theme), and her “optimism” (positivity signature theme). Later in her interview, Chow recollected a fourth signature theme of “adaptability.”

When talking about how well the Clifton StrengthsFinder instrument’s signature themes fit her, Chow recalled a conversation about her strengths with her parents and she shared the following:

They totally agreed with the result. They were like, “Wow! This is amazing how can they know you so well after several questions?” And, they were happy to hear about my strengths because they were like me before I took the strengths. They know that I am good at something, but they cannot name them. So they feel really good after they know that I have strengths like I can actually use this strength in different areas.

Chow discussed that she thinks about these strengths “half of the time” and approximately half of her time worrying about her weaknesses. Chow believed it was much easier to identify her weaknesses during the interview because they often arise when there is a problem. Although, as a result of the general studies course, she felt it was easier to identify her strengths. She described the following:

before I took the strengths part, I’m not really sure what I’m good at. Sometimes I feel like I’m good at this, but I can’t really name it and I don’t know what can I do. But after that, I found that, for example, when I know I like reading and information, I didn’t always have strengths. I feel like I’m wasting time on looking around and searching for useless stuff. And, after that I feel like, oh, it’s a strength. I can actually use it in my life and yeah, I know myself better.

She believed that strengths development is an individual activity that each person must engage with in order become more confident and to lead to better outcomes. Further developing her strengths would allow her to be more successful and help her become more involved in university activities. She agreed with the assertion “to be successful in college, you need to focus
on your strengths” as she believed that she could grow most in her areas of strength in college as opposed to her areas of weakness. Chow believed that her success thus far in life has been because she has been able to focus on her strengths. However, she was not fully aware when she was actually using her strengths. Strengths were something that just happen for Chow. She felt that she was more intentional now about using her strengths in college compared to her high school experience.

**Participant Wen**

Wen is an Asian female with permanent resident status. She is a member of the Presidential Award Program and enrolled in a large section of GS 101 class. At the time of her application, she was redirected to the Division of General Studies (DGS) from the LAS.

Wen selected Illinois based on its strong overall reputation and because of her interest in the sciences. Wen enrolled at the University and initially hoped to pursue one of the engineering majors. Wen reported that she plans to pursue an engineering major currently in question based on her weaker performance so far in her engineering course. As a result, she is now considering becoming a doctor. Although not necessarily confident in this decision, her interest in the health professions is strong. At several points during the interview, Wen mentioned a lack of confidence regarding her abilities. She made the following remarks, “I don’t think I have a special talent, like I don’t think I have one thing that’s really good. I think everything is really average.”

When reflecting upon the topics from her general studies course, Wen remembered the following topics: course registration, strengths exploration, and intercollegiate transfer. She described each of these topics as useful. In particular, she stated that course registration and intercollegiate transfer were useful because they were practical components of the course. And,
when asked about the topic of strengths exploration, Wen said that it was good, but a major component of strengths exploration was individual reflection and development that must be done on her own time. The course would not be able to help her with that personal development.

Throughout the interview, Wen repeatedly used the terminology of strengths and talents. She credited the use of these terms and her new understanding with the reading from her GS course. Also, she learned that her future employer may focus on strengths development and this was very a comforting idea in her opinion. As a result of the course content and readings, she had a more positive view of herself. She did comment, however, that this was not all due to the course; other factors contributed to helping her feel more confident in her abilities that she could use as a guide for future success.

When asked to reflect on what she was strong in, she said that she was responsible, diligent, and logical. She was responsible because she completed tasks in a timely manner. She described herself as diligent because she studied hard for school, and she was good at science and math that require logic reasoning. She admitted that she did not think about her strengths much. However, when asked about her weakness, she responded with “a lot actually.” Compared to her strengths, she thought about her weakness “sixty to seventy” percent of the time. She felt it was much easier in the interview to think about weaknesses because of the confidence she has in herself. When asked why she thought it was easier for her to focus on her weaknesses, she replied,

Not easier, but it’s just that it always comes to me. Even though I want to focus on good things I can do, but I will always focus on the things I cannot do, which is not good. But, I’m trying.

This was likely because she felt a lack of confidence in herself even though she wanted to focus on things she does better. In her words,
Because I think it’s good that you can be confident. I think it makes life easier to focus on the things that you’re good at, but also try to do your best to do the things that you’re not good at.

She discussed that she used her strengths often and described getting to apply her strengths in a variety of situations. For example, she referred to being responsible and when she agreed to do something, she generally has done it. She felt her strengths in action the most when working on school projects and preparing for exams, but did not immediately see her strengths when spending time with her friends.

As a whole, she did not feel the university is committed to building strengths because student need to complete general education courses that she was not good at, such as composition. However, there were other ways the university did allow students to explore their strengths because the university is split into different departments, thus allowing students to focus on a specific major to enter into a career field.

Participant William

William is an Asian male and was a student in a large strengths GS 101 class. He is a member of a campus honors program. William chose the DGS because he had no clear direction of his major choices and did not have any strong feeling towards any particular major. He came to Illinois because he felt comfortable with the school. Some majors he was considering were from various colleges at Illinois from Engineering to Fine Applied Arts. These majors were based on his childhood interest of building things. He was uncertain to start, but has ruled out several majors because of experience in classes at Illinois. As of today, he has settled on a major in Fine and Applied Arts.

When reflecting upon the topics from his general studies class William remembered the following topics: strengths explorations, registration, plagiarism, career exploration, and
choosing a major. He found the most helpful part of the course was the registration system because it was very practical. He also mentioned that the strengths exploration and choosing a major were useful. He remembered strengths exploration because he really liked the concept, but was not sure how much he would use it in the future. In his own words,

I think 34 strengths, and those were just really interesting to read about, especially the ones that went over me. It was like, “Oh, I think this is something I do,” or maybe it points out something and you’re like, “Oh, yeah, now that I think about it, I do that.” So I just found that really interesting.

When asked to reflect on the strengths component of his course and specifically what he was strong in, William focused on managing and arranging his time. He also provided an example of his strategic signature theme when he discussed his strength,

I definitely think I’m good with keeping tabs on things and arranging them in maybe an efficient way to do it so I’ll arrange my time to better use: when to do homework, when to go work out and try to fit that in with my class schedule so that I can best use my time. And then I’m pretty flexible I guess, or I can work on the fly. So I don’t really have a set routine but I know in my head what I’m going to do. On a daily basis I have this homework, this homework and I have to meet this person over here, so maybe I’ll move my homework time from 4:00 to 5:00 until more like 6:00 to 7:00.

When reflecting on his weaknesses, William described being easily distracted and often wasting time; however, he managed this weakness by adjusting his schedule. He believed that he thought about his weaknesses far more than his strengths. He did not consciously think about his strengths often. He described his belief in the following ways,

Maybe it’s just that weaknesses are something that when they – strengths I just kind of do and when I have weaknesses it’s something I can’t do. It bugs me more so then I’ll think about it more. Especially with strengths because it comes so naturally – or I believe that they come so naturally that I don’t have to really think about it all the time. It just comes – whereas a weakness, it doesn’t come as natural so you have to be intentional about working on them.

When reflecting upon his strengths and academics, William believed the key to academics was being able to have fun in the curriculum. Overall, your grade point average
should be higher if you were to take courses that allow you to utilize your strengths. However, William felt it is important for students to understand their weaknesses. People should not avoid their weaknesses because one cannot have an area of complete deficiency and be successful. He also stated that strengths apply to your major,

You want to choose a major where your strengths apply, or at least that’s how I feel. And then so it’s helpful to know where your strengths are. And, of course, you have to choose a major that you’re passionate about but definitely want to have strengths in there. So, it’s good to know your strengths.

**Participant Maria**

Maria is a Hispanic female and was a student in a small strengths section of GS 101 course. She was also selected for the Presidential Award Program (PAP), a campus initiative to increase underrepresented students participation at Illinois. Maria originally applied into a LAS major because her guidance counselor in high school recommended this action hoping that she would have an edge as a female applying into this major. When applying, she considered herself to be an undecided student and was pleased to be redirected from LAS into DGS. She was considering three majors originally, two in LAS and one in the College of Media (Media). She chose these majors because she felt that she had excellent teachers as role models. As of the interview, she was considering multiple majors in multiple colleges. She has been making decision based on her current academic coursework. To help in her exploration process, she has relied heavily on her older sisters and discussions with her parents. When thinking about her majors and future directions, she remarked, “I’m eighteen and I will figure it out.”

When reflecting upon the topics from her general studies course, Maria remembered the following topics: strengths exploration, campus resources, and intercollegiate transfer. The topic she found to be the most helpful was strengths exploration. In her opinion, GS 101 has been a good experience because it helped her transition to the university, gave requirements for
transferring to other majors, and provided insights into her signature themes. GS focused more on major exploration that allowed Maria to feel like she was making progress towards a future goal. For Maria, the major exploration course content was more useful to her than other topics. The course was especially helpful after she completed several assessments and was able to explore what she was good at in life. “I want to be good at something…and I do not want to struggle with college.”

When asked to reflect on the strengths component of her GS course and specially what she felt strong in, Maria described her writing skills and that she is a good social person. Her examples of these strengths in action were her solid performance in writing courses and when she is meeting new people; she has been always able to keep the conversation going. Maria remarked the following about the Clifton StrengthsFinder assessment, “Oh, I guess they [the themes] do describe me; that was really interesting, the computer knew me better than I knew myself.” She mentioned three signature themes during the interview: positivity, strategic, and restorative. She observed her positivity signature theme come out when she was talking with people and found that she seeks out other positive people. She liked the idea that an instrument could give her some directions. Although she admitted that she does not think about her strengths regularly.

One of Maria’s weaknesses was reading. She did not feel she was a solid reader. Also, she mentioned that team sports were a weakness because she was not good at them, but has preferred the team environment. She felt that teams are supportive and positive environments. She has tried not think about her weakness, but always notices “when I do something wrong, it always stands out more than when I do something right.” Over the course the previous week to her interview, she thought about her strengths more because she had been thinking a lot about
her potential majors and whether or not she would be good at that major. Comparing her strengths and weaknesses, she found it difficult to name her strengths quickly and described it as weird. Maria felt that it was easier to talk about her weaknesses and that talking about her strengths seemed like bragging. “When people ask me about my strengths, I have to take a step back, and well, let me think about this for a minute.”

She described that she uses her strengths on a daily basis and in a variety of activities such as her extracurricular activities. She felt that she has several ways to develop her strengths on campus including using campus resources to develop her skill through the writer’s workshop. Although she was not sure that she has many strategies to develop her strengths, she did think that there are many opportunities on campus to develop your strengths. Maria thought college is a way to build up to a job and be successful. She believed that being successful is about achieving your goals. She stated one of her current goals is to pick the right major and not transferring out of that major once admitted. Picking the right major means that she is enjoying her courses and managing to have a solid grade point average.

**Participant Dawn**

Dawn is a multi-racial female and was a student in a small strengths section of GS 101 course. She chose to direct-admit to the DGS because she thought it was easier to get into than other colleges and she had always planned to apply as undecided. She really liked the fact the Illinois had advisor who only advised undecided students. At the time of her application, she was interested in five majors from LAS. She continues to have an interest in creative writing and the sciences, with the possibility of entering into the health field. In the last eight weeks, she has struggled in her sciences courses, but has done very well in her composition course. She believed her academic performance, thus far, as the major reason why she chose her future direction.
Also, she would cite her campus mentor as another factor in helping her make major choice
decision.

When reflecting upon the topics from her GS course, Dawn remembered the following
topics: strengths exploration, course registration, campus resources, and career exploration. She
found all of these topics to be helpful as each of the topics added some unique knowledge. She
did make the following comment about the strengths exploration topic,

the strength class gave me words. So, I started interviewing for a job. So, if they
asked me what five words I’d use to describe myself, I have them. I can tell them
and give them specific examples from my life.

When asked to reflect on her GS course and specifically what she was strong in, Dawn
remembered two of her five signature themes: competition and deliberative. When asked about
to reflect on these themes, she described a story about competitiveness,

I usually do well – I try my best and everything. So after you do well for a while,
you want to see how you match up to other people and want to do better than that
to make yourself better. I actually like to see all these achievements I’ve had
because then that make my parents proud. Then there’s determination for the
same reason. I’m really creative. I like to sit down and just make collages and
stuff like that and write stuff, like short stories.

Finally, she added that she thinks she was creative as well. She did not feel that she
thought about her strengths often. Dawn only thinks about her strengths when others tell her
about her performance. She wished that she would think about her strengths more often. Since
being exposed to strengths, she believed that using the strengths approach would make her
happier, provide more confidence in the future. She did not feel she could name her own
strengths quickly.

Dawn thought she was weak in test taking; she often second-guesses herself. Also, she
said she is a little shy and she starts to think about weaknesses a few days before exams and
when she was asked to be in social situations. Compared to her strengths, she thinks about her
weaknesses more often. In the past, Dawn has let her weaknesses affect her more than her strengths. In her words,

I guess I just let that get to me too easily. I’ll start something and I’ll do well. But I don’t bask in the glory long enough. “Okay, you know what, I have this other assignment to do. I have this other class that I want a better grade in.” Then after the triumph, I’m still, “But I have five other things to do, and I’m worried about that. I haven’t met with a T.A. or someone to talk about this thing or find out that. Or I have no idea why I didn’t do so well this exam. So I worry too much.

As a result of her competitiveness, she often thinks that others are better than her, which makes her feel bad. However, when asked to reframe her thinking, she began to realize that her theme of competition that has been causing negative feelings could be looked at as a driving force for improvement and celebration. She had not really thought out competition in this way. She did not agree with the statement of focusing on strengths in college leads to success. She provided the following rationale,

I need to get better. I need to, like, do better on tests because right now some classes are just, you have three tests and three papers and that’s your grade for the whole semester. Then my shyness – I want to meet new people. I really feel like if I start to meet people that I won’t usually meet back in Chicago, then that’ll make me more cultured. I’ll learn about things that I never would have learned about if I stayed back in Chicago.

Dawn’s current focus in school appeared to be managing for some deficiencies and felt these weaknesses were preventing her from being able to use her strengths and focusing.

**Participant Adil**

Adil is first generation college student and is a white male. He was a student in a small strengths section of GS 101 course. Adil chose DGS because he thought his student profile more closely aligned with DGS’s published admission criteria compared to LAS. When applying to the university, he thought he was interested in becoming a LAS major with teaching. He chose this path based on his high school experience in working with other students and his honors
courses. After some time reflecting upon the current economic conditions in the United States, teaching did not to appear to be a viable option for Adil. This was probably shaped by his brother’s experience as a teacher. Over the summer, Adil did some additional major exploration and was considering a major in the College of Applied Health Science (AHS). Adil was confident that this was the major for him based on the academic term thus far. During the past eleven weeks, his experiences finding courses for the next semester and inter-collegiate transfer requirements (such as his grade point average and his volunteer work) have helped to shape his decision.

When reflecting upon the topics from his GS course, Adil remembered the following topics: strengths exploration, diversity, intercollegiate transfer, career exploration/development. He further mentioned the usefulness of building upon experiences while in college not only for eventual transfer into a major, but also for future career opportunities. This course focused more on the positives than the negatives. He believed that this is what made the course successful because he has been able to focus on his strengths.

When asked to reflect on his GS course and specifically what he was strong in, Adil discussed that strengths allowed him to see his future major direction. Adil was able to remember five signature themes from his profile: significance, command, learner, focus, and context. When asked about how strengths related to his exploration process, he mentioned one signature theme “command” and how he could use this ability to take charge of the situation and organization while he works. Further when thinking about his strengths, Adil discussed his ability to focus, “Focus is staying on topic, not getting sidetracked by other distractions that might happen in school or something like that.” When asked if he always used the term focus before the course, he answered, “No, I haven’t always used the term ‘focus,’ but it kind of
summarizes what my actions have been in the past.” The signature theme of focus was a new way of thinking for Adil.

Adil has thought about his strengths more than he did prior to the GS course. He reported noticing his strengths on a daily basis. He related his strengths mostly to his academics such as studying for exams and writing for papers. He believed his signature themes emerge while being involved on campus with the marching band. His signature theme of focus has emerged, as he must concentrate to make sure that he hits his notes and placement. Adil compared his experiences in the marching band with the working world such as knowing and working with other people.

Adil was asked specifically about how he could further develop his strength and appears to struggle with answering this question, but had the following realization,

I think as I progress throughout the university I’ll find more and more [strengths] I didn’t used to always label things that I do, but this course has put a label on things, like ‘focus’ or ‘organization.’ Now, I haven’t quite mastered how to define them yet, but in the future, I hope I can.

Adil believed that this course has help to put a label on his strengths, a new way of thinking and articulating his strengths to others that will be beneficial in the future. He said,

We had to draw upon examples, and more and more examples came throughout the semester. Like, yeah, this is really a part of what I am.

Being able to use his strengths now will benefit him in the future. In his words,

I think that’s a good thing because if we spend time focusing on our negatives, then it might not be as beneficial to us as – we can’t make as much progress. I just always want to be positive, and I’ve been – throughout my past, the more times I’ve been positive, the more successful I’ve been. There have been times, if I think about my weaknesses or, “Oh, I’m going to screw up” or something like that, then I will screw up.

Adil felt the university does allows students to focus on their strength with the variety of options and decisions students make especially as students think about course schedules.
Decision-making has allowed Adil to feel more confident in his decisions. DGS has been committed to building the strengths of each student by recognizing that students are undecided about the future direction and by helping students figure out what they are good at in life.

Participant Dale

Dale is a white male and was a student in a small strengths section of GS 101 course. He was a direct admit to the Division of General Studies (DGS). Dale was always interested in coming to the University of Illinois, though he felt his grades were not solid enough to be admitted into the COB, so Dale chose to apply directly into DGS. He believed that DGS would be easier to get into and his best chance to enroll at Illinois. Even though he applied thinking he was certain he was going into business. He has since changed to a LAS major. He has based this decision on an AP course in high school.

When reflecting upon the topics from his GS course, Dale remembered the following topics: strengths exploration, academic policy, career exploration, intercollegiate transfer, and later in the interview learning styles. The most useful aspect of the course has been grade point calculation, the transfer process and requirements. Dale’s least helpful topic was strengths exploration. He felt this topic to be least useful because he did not connect with the signature themes and the process did not directly apply to his major exploration. The strength’s topic was about how to become a stronger person and improve on them or what he described as a “better person.”

When asked to reflect on her GS course and specifically what he was strong in, Dale remembered reading from the StrengthsQuest book, taking the Clifton StrengthsFinder Instrument, and when completing each assignment throughout the course he referred to his strengths and the application of them. When asked if he recalled his signature themes, he recalled
consistency, learner, achiever, and responsibility. He says he did not connect with his themes because the information presented was not new information. Upon deeper questioning, he felt that he has already used strengths his signature themes throughout high school, in his own words,

I felt like they didn’t really work well. I can’t really say that this, it’s hard to explain… I never saw the connection between strengths and picking a major. It was, here’s how you can become a better person. Find things that you’re good at, and improve upon them. And, I’m like, I don’t think, at least for me, like what I would consider my strengths the test.

Dale felt that he has a good understanding of what he is strong in and did not think that the assessment gave him new insights into his strengths, I’m a normal responsible person, I believe. I don’t do anything stupid. I’m fairly rational. I’m like reliable. I enjoy learning, so I knew I was a learner, and I knew I was an achievement person, just like through my experience as a runner in high school and like I knew every day I had to do something to feel productive.

He has not really thought about his signature themes since being exposed to them in the GS course. He was not intrinsically motivated to develop them. When completing the assignment for the course, Dale said he just went through the motions to complete the work.

When Dale was asked to identify what are one or two areas he was strong in, he asked if it had to be something from the course. Dale was given the option to choose anything he felt strong in and said “responsibility.” He was surprised about how is able to complete his work on time compared to other students at Illinois. He described the following:

I do my work, which coming here it’s surprising that a lot of people don’t do their work and a lot of people ditch class, which I don’t understand. So, I go to class and do what I’m told to do.

Dale felt that he sometimes over analyzes situations and this would be his main weakness. He had trouble articulating other weaknesses, but he admitting having them. He reported thinking about his weaknesses too much because you should focus more on the positive things. When asked where he came up with this belief about focusing on positive things and
being optimistic, he responded “partially from the GS course.” Also, he stated that he received this message from his high school coach.

One example of something he loved and felt successful at in high school was running. He has been an avid running and has run every day in college. He has set goals for running each time and has been very happy when he meets these goals. Dale’s strengths have come out when running. He credited that fact the he has run every day for the last couple of months as an example of his strengths. When he set up plans for training, he described himself as goal oriented and each time has come up with plans to meet those goals.

Dale felt that he was able to name his strengths quickly. He reported being better now thinking about his strengths since he used to be in high school. Compared to his weaknesses, he has thought about his weaknesses and strengths about the same. His main concern shared was that he over analyses too much. He preferred to think about his strengths more because

I’d rather think about things I’m good at, then things I’m bad at. It’s not really a big confidence booster when you think about things you’re not so good at.

Towards the end of the interview, Dale was asked to reflect on the information collected during the interview. When presented with a summary of the key items and specifically his signature themes of responsibility, achiever, and consistency. He felt his themes were a good match. When asked about how the GS course could challenge him to use his strengths,

I don’t think so, because it’s really easy to just like make stuff up. Or like write something to get an assignment done. So, if you’re taking classes just to try and get an A or complete the assignment, you just write whatever comes to mind. That always, because the teacher isn’t going to know if you really truly thought about it.

Throughout the interview, Dale expressed that he felt he had solid understanding of his strengths and had been applying them for years. However, when Dale was given the strengths concept that it takes about 10,000 hours or about ten years to develop a strength, Dale appeared
to be surprised by this concept. He was curious to know more about the development piece. Dale was asked how he could apply this knowledge and he said “has it been ten years”. When asked how he could use the strengths approach in the future, Dale described how he could fill out an application for a job. Dale has not had a job and felt he has some gaps in what he could put in a resume or cover letter.

**Participant Joe**

Joe is a white male and was a student in a small strengths section of GS 101 class. He chose to enroll in to the DGS after being redirected from the College of Business and being deferred from another university. Although he was later accepted to another university, Joe decided to accept his offer from Illinois because he felt it was a better fit. At the time of his application, Joe was considering majors in LAS and COB. In the summer before coming to college, he sought feedback from a friend and settled on a direction in LAS. Joe made this decision because, in his opinion, it can lead to many opportunities and demonstrates to others a certain level of prestige just by graduating with this major.

When reflecting upon the topics from his general studies course, Joe remembered the following topics: major exploration, strengths exploration, campus resources, student involvement, and later in the interview, learning styles. Joe believed that the major requirements topic was the most helpful topic because it was a good tool to help students understand what you have completed and what needed to be completed prior to graduation. The second topic that was useful was campus resources because it exposed him to the opportunities available since he has only been on campus a short time. These two topics were immediately helpful to Joe as he transitioned from high school to college. Joe felt the strengths exploration topic was not as useful. Joe talked about his experience in this way,
StrengthsQuest, it was about like our personal strengths, which I feel that I’ve been doing for 14 years or – maybe not that long, but ten years, at least. There was nothing that I got from the StrengthsQuest that I didn’t already know about myself. I just felt it was useless.

However, he said the material would be helpful, as it would stimulate individual reflection and development. He could see strengths being a necessary topic if the goal of the course was to have a broader view of self-development and long term planning. As Joe discussed the strengths material, his understanding crystallized and he began to realize that strengths may be more useful than he previously thought. He described his class experience in the following way:

When we were going over it, it was, “Well, what did you get?” It was like a mystery prize game. Everyone wants “woo” or something. If you wanted a certain theme, you could have just picked the ones that would correlate to the theme that you wanted. But, it’s not like it’s a raffle and only a certain number of people get “woo.” But, it was more on – I would have liked it to focus more on how these strengths are unique to us and how they can be used and the strengths profile can be used to help us develop a résumé and help us in the job interviews.

When asked to reflect on the strengths components of his GS 101 course and specifically what he was strong in; Joe identified that he has very strong people skills and can influence people towards a decision. He has had past success at soccer, is very athletic and determined. When asked about how often he thinks about his strengths, he responded “not as much…” Joe did not feel that he was able quickly name his own strengths and he would need some additional reflection time; then, it would likely be easier. Joe remembered three of his signature themes- woo, positivity, and input. With some discussion, he was able to remember belief and, likely, individualization. He felt his signature themes were a good description of his talents.

Joe stated that one of his weaknesses was being a little “cocky.” Also, he sometimes has felt that he put his opinions out to others too much. He has recognized his weakness when he reflects upon past experiences. He stated that he does think about these weaknesses more and he
described it as the following “the bad needs to be addressed more.” Joe felt that he holds himself
to a higher standard than others and he does not want to let them down because he is responsible.
Overall, he does not want to hurt others and when it does hurt others, it hurts him more to let
them down. Joe believed that you need to focus on your strengths in college to be successful,

students need to be able to use their strengths in the major. You really need to
focus on what you are good at school until you get a major. But I think there’s a
big difference between what you’re here at school for as an academic purpose, but
there’s a difference between that and as a person.

However, he stated that students needed to be well rounded because being well rounded
was important for future success. However, in school, students needed to choose a major to be
successful. In general, Joe felt that he has the opportunity to use his strengths in a variety of
settings. He has developed his strengths through repetition; he has often used a “trial by fire
approach.”

In general, Joe agreed with many of the principles in the strengths-based approach. Joe
believed that he could have articulated the same strengths prior to taking the Clifton
StrengthsFinder assessment. One way he could use the information was during a job interview,

I would think about what my strengths were, I think I’d be drawn to the
StrengthsQuest names for them and be able to articulate what they are and what
they mean to me and how I could bring them to the workforce.

However, the instrument was able to describe it in a new which resulting in him reflecting more
about them. But, if wanted to dedicate some time, he could have came up with the same results.
Overall, Joe wished he could have learned more about his individual themes and his personal
strengths. The material presented in class should not just be about identification, but about how
to practically use the strengths approach in the future.
Participant Michele

Michele is a white female and was a student in a large non-strengths GS 101 class. She originally applied and enrolled in DGS because she had no specific idea of what she really wanted to do and she was considering a variety of majors from LAS, Media, and Social Work (SocW). She chose these majors because she believes she is good at them. “My parents always told me to choose something that makes me happy, and that I want to do the rest of my life.” She feels “empowered” by the exploration process and having the opportunity to try out a variety of majors. After being on campus for about ten weeks, she had narrowed down to a major in the College of Media because she would be able to combine her interest in reading and writing with her arts interests. She chose this major because of her general studies course when she was given information about Media and it seemed to just fit.

When reflecting upon the topics from her general studies course, Michele remembered the following topics: group projects, time management, major exploration, intercollegiate transfer, course registration, and campus resources. She really liked the “major does not equal career” discussion and discussions focusing on the skills all job require. She did not appreciate the group project work because she has had positive experiences in group and felt that she worked well with others.

Since Michele was not in the treatment group, she was given the proposal of adding strengths exploration to her general studies course. She would add strengths exploration and remove the group project and said, “I think since for me it was hard to describe my strengths, and the strength quest puts a label on it and just, it’s a better direction, better guide”

When asked about what she was strong in, she used her signature theme of “include” and “positivity.” She feels that she relates to people well and has good leadership skills. Although
Michele was not in the treatment group, she happened to complete the Clifton StrengthsFinder during a recent leadership retreat that occurred during the sixth week of the fall semester. She described this experience as just completing the instrument and not really talking about the results. She did not remember discussing any of the central tenants or definitions articulated by the strengths approach during the retreat. She stated that she does not think about her strengths that often. She said,

Well, not very, it’s not very apparent to me. I don’t like sit down and contemplate what I’m good at. It kind of just happens. Like, I guess I think about it, as it really asks me to reflect on myself.

When asked about what she is weak in, she said thinking logically. She has always struggled in math and science. When talking about her weaknesses she referred to what other people have as strengths such as learner, determined, self-discipline, and procrastination. She feels these are qualities that she could have if she had to, but she struggles in them. When asked about how often she thinks about her strengths, she stated that she does not think about them often, rather they just come up. She further describes thinking about them when she encounters a failure or difficulty.

She believes that strengths and weakness needed to be accounted for at different times. She believes you should use your strengths when selecting a major, but need to remember your weaknesses, so they do not inhibit you. In her words,

well, strengths itself is just the abilities and skills that you excel at. And, when choosing a major, that’s so important, because then, especially if you enjoy. I feel like that’s the basis of choosing what you want to do for the rest of your life.

Overall, she thinks that she accomplishes a great deal by using her strengths because she has chosen opportunities where her strengths are in play as opposed to, for example, math and science courses where here weaknesses would affect her. Further,
[it is] confidence in knowing, I don’t know, because strengths and interests I think are correlated, but they can be different. You know? So, I have confidence in the fact that you know what you’re saying. So, you were able to recognize what StrengthsQuest tells you in yourself? Then you’re just – prepare to choose a major, there’s still so many out there, that I guess it’s not prepared, just because there’s so many options. That’s hard for me to describe.

She believes she uses her strengths every day. But she does not necessarily plan or set goals to use her strengths daily. They come back naturally in what she does but not intentionally.

Her friends probably have a more accurate picture of her strengths than she does. She describes,

Like my friend Ashley, she’s always like, ‘I get along with you so well, you’re like one of the only people I can talk to.’ And, then she’s like, ‘Oh, I didn’t realize that’s what I am to you.’ It’s hard to see yourself like from the outside looking in, so yeah.

She found it hard to think about her strengths during the day. She has done some reflection about her strengths, but not enough to come up with them immediately. She does believe it would be more helpful to engage in some additional reflection. During the interview, she was given examples about how her signatures themes had come to life during the interview. When engaged in this activity and came to the realization her strengths had been evident. She responded, “It’s encouraging, overall that my strengths are being utilized, like very obviously, that’s cool. Yeah I don’t know, I mean, I’m used to that.”

**Participant Claire**

Claire is a white female and was a student in a large non-strengths GS 101 class. She chose the DGS because her guidance counselor from high school told her that it would be easier for her to get into the University of Illinois through DGS than by applying into the COB. Claire has always planned to major in Business. She was absolutely certain in her choice, and has not changed her mind since enrolling at the university.
When reflecting upon the topics from her general studies course, Claire remembered the following topics: major exploration, career exploration, and a group project. Her experiences in her introductory course have helped to confirm her belief about her choice of major, specifically activities regarding major exploration and talking with her fellow freshman. One example from her introductory course that helped to confirm this choice was the EPICS: Interest explorer administered by the Career Center.

When asked to reflect on her strengths, Claire discussed that she believed that she was strong in communication, organization, and perseverance. An example of her perseverance was in Math 125, “I am not doing good in Math 125 but I am dedicated to going to tutoring. I’m always there. I’m not going to give up on my classes and things like that.” She also believed that she could use her strengths in a job interview. For example, “you’re not afraid to talk and if you’re good at speaking, that’s obviously like a plus. It makes you look more professional.” And she was proud that she was just hired for a job.

Claire admitted to rarely thinking about her strengths. She has focused most on what she was bad at. “Not that often, I think since it’s the beginning of college, I was kind of focusing on what I was bad at more often.” As she reflected upon her experiences, she wishes she could have done better. She identified showing up on time as one of her weaknesses. She did not think about her weaknesses often, but definitely more often than her strengths. She has always been worried about her weaknesses. Claire believed one wants to be well rounded. “You don’t want to be like amazing at one thing and horrible at another thing. You want to kind of have, be good at I guess both.” Overall, Claire said that she wanted to try to be good at both her strengths and weaknesses. She believed that she could develop her weaknesses as well as her strengths, but would probably excel more at her strengths.
Claire was given an overview of the possible additional topics of strengths to the general studies curriculum and when asked what she thought about this potential additional topic, she felt the strengths approach would be useful because it would allow her to reflect on what she does well. Claire believed that by knowing what you are good at, then you can engage in strengths development in order to improve upon what you are good at. When asked if she felt that this new way of thinking could be empowering to Claire, “Yeah I mean you if you’re working on one right now, I guess you could finish it or you could start working on a new one or make better ones that you already have.”

**Participant Jackie**

Jackie is a black female and was a student in a large non-strengths GS 101 class. Her academic records indicated she was a direct admit to the Division of General Studies (DGS). However, according to Jackie, she did not originally apply to the DGS; instead, she was looked at Applied Health Sciences (AHS). At the time of application, she was interested in an AHS and was also considering several LAS majors. She chose the AHS major as a potential major because she felt that she needed to choose a major so that she was not behind. As a result of taking GS 101, she now has settled on this AHS major with a pre-health option. She felt that this is the right choice because this major will lead to a career in which she could be happy. She has many friends who are unhappy with their major and upon reflection is happy that she decided to explore her major further.

When reflecting upon the topics from her general studies course, Jackie remembered the following topics: major exploration, global society, career exploration, and learning styles. She felt most of the topics were helpful or useful to her except for the global society topic. She
thought that major exploration was the most helpful aspect because it allowed her to see the
courses required for a major.

When asked to reflect on her strengths, Jackie discussed that she believed that she was
strong in communicating with others. Also, “I’m very assertive. I am very assertive because if
something is not the way it’s supposed to be, I like to correct it.” When asked how often she
thinks about her strengths, she responded, “a lot less than I think about my weaknesses.” She
thought that a lot of people struggle with thinking about their weaknesses instead of thinking
about strengths. She believed that this could best be attributed to self-doubt. Her mother has tried
to instill into her that she should begin with the things she is good at in life, but she has often
thought about what she cannot do.

Because I know, my mom always tells me that when I go about doing something,
‘Think about what you’re good at and apply it. Don’t think about what you’re
going to do bad at. Just start at what’s good.’ And, I’m definitely not one of
those people that, when I go at a situation, I think, ‘Okay, what can I do?’ I think
about ‘what can’t I do?’ first before what I think, ‘What can I do?’

She stated one of her weaknesses was procrastination because she does not want to fail at
a task, so she has often avoided task because of her weaknesses. A second weakness, she
mentioned was not asking for help. She felt that she thought about her weaknesses very often;
especially, when she has struggled with something. She felt was much easier to name her
weaknesses than her strengths.

Jackie described the concept that you can use your areas of strengths for good which will
lead you to believing in yourself instead of focusing on your weakness. She has had the
opportunity to use her strengths in a variety of settings such as in an academic setting or when
participating in sports. For example,

I don’t have that much experience, but I think about things thoroughly, and when
I think about them, I like to share my ideas and I think it’s important to a coach.
If I’m not happy with the situation, or sometimes I just feel, communication is always necessary. Like, you can’t grow as a person if you’re not communicating with other people. I think that knowing other people, and I always do this thing where I try and explain myself, but I think it’s important to communicate with other people because you learn from other people as well as like give them your own knowledge. That’s how you grow as a person.

After explaining the possible addition of the strengths approach to the GS course to Jackie, she initially thought there could be better topics. She wanted to explore her interests further during the class. In Jackie’s words,

I think the interests would be a better topic for me. It makes you think about what you want to do? What you want to do more? Like, your own strengths, because I feel like if you’re interested in something you automatically like apply your strengths to that. I think that, because I’d be good at this.

After relating a strengths-based approach to her experiences, such as talking about finding her happiness and her mother’s thoughts, she changed her mind. She says

It’d be very useful, because then I’d be able to apply my strengths better, rather than having to think about my weaknesses first and being set back because I wasn’t sure how I was going deal with that. I think that if I knew that I could do it because I’m going at this, this and that, then I’d be better off.

After reflecting, she would add the strengths-based approach first, followed by the discussion of happiness and major selection, and concluding with major and career exploration. Jackie believed this would allow students to begin with something they are successful at in life.

Jackie described what she believed this experience would be like for DGS students.

I think that if more students thought about like what they were good at, then they’d have an easier time, because DGS is the time where you’re supposed to be career exploring and finding out what you want to do, and I think that if they thought about that the things they were good at, they could apply that to their major exploration. Not choosing things that other students have chosen, and then have gone through that major and realized that maybe this isn’t something that I’m really good at, or something that I want to do. And, just starting with that, would allow them to see what they’re good at, and then build on that. And, just choosing what’s good for them because that’s what they’re good at.
Participant Jenni

Jenni is a white female and was a student in a large non-strengths GS 101 class. She was a direct admit to DGS and was selected for the James Scholar honors program, a college-based honors program. She chose the DGS because she wanted time to explore her major and she was uncertain as to what to select during the college application process. She was considering a variety of majors in LAS. After being in college for the term, she has settled on doubling in two LAS majors. She has chosen these majors because she felt this is the right path for her based on her academic coursework thus far.

When reflecting upon the topics from her general studies course, Jenni remembered the following topics: campus resources, group work, major exploration, academic policies, career exploration/development, and student involvement. The major focus of the class was exposure to resources on campus each week. The topics that she felt were most useful were major exploration and the campus resources. She generally wished that the material had a more practical focus. She describes this as,

I wish when we talked about groups in any class they told us what to do if you get stuck in a bad group. Because I feel a lot of what they talk about is idealized and “you can make a contract” and you’re not going to have problems. But that’s really not the reality of college students, so it would have been helpful to really talk about what do you do if a group member isn’t showing up. What do you do if you want to take charge – you know the right way to do it, but all of your group members want to do a different route. So, what we talked about didn’t really help you in these different situations.

Overall, she did not find GS101 very helpful because the course was primarily “busy work.” Jenni could have figured out the material taught on her own, by reviewing websites, or asking for help. She generally agreed with the general purpose of the course specifically to assist with major transition and major exploration. She described the group project focused on campus resources as not helpful. When asked if the course would be better if she was still actively
exploring majors, Jenni did not think so. She articulated that the course might have been more tedious.

When asked to reflect on her strengths, Jenni described herself as a determined person because once she has her mind set; she completes the necessary tasks. Overall, she said she was very organized and responsible. She has thought about her strengths a lot lately because of one of her courses this term besides GS. This course required her to write a larger reflection paper as it related to leadership studies. In terms of weakness, she said she was very “business-y,” by that she meant she is straight to the point. In addition, she described herself as stubborn and once she makes up her mind, there will be no changing it. As she has become older, she has engaged in self-reflection more often. This reflection has focused more on her weaknesses. Her example was “because I know that in order to be the best person and leader I can be, I need to work on what’s not so great about me.”

When thinking about strengths and weaknesses in college, she articulated the need for balance between the two. She did preference strengths as the primary focus; however, people need to develop their shortcomings in order to improve, for example:

okay, I feel like there’s two options. Option no. 1 is you can work on strengthening them and maybe becoming more comfortable with that. Or no. 2 is you can work on finding places where those weaknesses don’t come into play. So you can work on putting yourself in situations where you avoid using whatever trait is a weakness.

In general, she felt that most people can accomplish a lot by using their strengths. She believed she gets to use her strengths in a variety of setting such as school and work and has had the opportunity to use her strengths each day. Her leadership experiences in high school have taught her valuable lessons of building on your strengths. Overall, she said that she was good about naming her strengths. However, on the day of the interview, she felt it was a little more
difficult as compared to her weaknesses. When she was thinking about her strengths during the interview, “a lot of things pop in my head”. However, she did think of some very specific weaknesses.

After hearing a description of the strengths theory, Jenni responded, “that sounds so helpful.” And Jenni wished that all students could have had an experience like she had in high school where she was able to understand what she was good at doing. “So I think if they had an instrument like that to show them what they’re good at and see what kind of jobs could connect, it would really, really help them.” She predicted that the use of the theory would be helpful to provide reassurance and understanding about her strengths. The topic of strengths would be more useful than other topics in the course such as the group work because it seemed to be more aligned with the goal of the course.

**Participant Jiajing**

Jiajing is an Asian female international student and was a student in a small non-strengths GS 101 class. She was redirected from the College of Business (COB) to DGS. Jiajing originally wanted to study business and she chose this major because she was good at math. She thought she was originally placed into DGS because of her English scores. She originally chose to apply to COB because it was very highly ranked. However, she was no longer considering Business, but is instead becoming a LAS major because she felt this major was more aligned with her strengths, especially in the area of math. She has always loved to research and investigate. Also, she cited the salary and job potential as exciting features of this major. She identified going to business clubs and organizations as a means of helping her choose her major. These experiences were not as “attractive” to her because of all of the presentations required in these activities and in a business major.
When reflecting upon the topics from her general studies course, Jiajing remembered the following topics: group work, website resources, time management, and campus resources such as the library, career center, and leadership center. According to Jiajing, the most useful part of the course was the websites of various resources available on campus that would enable her to learn more about potential majors and careers. The Career Center was helpful and she attended two workshops on campus. In addition, she felt that time management was very important for her because she was able to make changes to her behaviors to improve her performance. The topic of working in groups was the least helpful, but Jiajing recognized that this topic might be helpful in the future as she will have group projects assigned later in college.

When asked to reflect on her strengths, Jiajing identified mathematics and logic. She would say she was very good at picturing space, images, or figures in her mind. She did not think about her strengths every day. She did think about her strengths when she chose her courses for the term and again when considering possible majors. The reasons she thought about her strengths during her major exploration was because her strengths are a driving force, these have been the areas she was superior to others in, and were her areas of passion. However, she does not have confidence in her strengths in part because she has been in environment where other students also have strengths. She seemed to base her strengths in comparison to others.

She described herself as weak in languages including her first language of Chinese and then English. In addition, she has often been careless whether it was copying numbers down or sometime just making mistakes unconsciously. Jiajing immediately identified that she has regularly thought about her weaknesses especially her language struggles since it is a salient issue in her daily life. She recalled thinking about weaknesses far more often than her strengths. She said she did not easily recognize her strengths because she found that she moves on quickly.
without reflection, but as the occurrences mount up she has traditionally acknowledged them usually in the terms of “strengths versus weakness.” Jiajing recognized her strengths while performing mathematics. This subject has given her confidence, in her words,

Because strength is your passion. If you always pay more attention to your weaknesses, you will just lose your confidence, like for your strength, it’s whatever, when I do math, I think this is my strength. But I also make weaknesses when I got some things from a problem wrong. I still think your interest is the most important and so the strength is the most important.

She did not know where this philosophy came from. She did not recall being told that by anyone that “strengths equal passion.” And her strengths have been a significant part of her life and she has not always realized when she has been using her strengths.

I just think strength – takes most part of my life and I have to use it always to use it, although, I didn’t realize it or reflect on it, but it’s what is my power. But like for weaknesses is, I don’t know, it’s something I need to make up for it, but I still can postpone it, although this is a bad habit, but maybe sometimes I didn’t realize it, okay. I just postponed whatever, this is my weakness. Everyone has a weakness. That’s no excuse.

She believed her weaknesses are something she has to make up for in some way. She has tried to avoid her weakness or, as she described, “postpone” them.

She thought the strengths approach as described could be an interesting part of the GS course. She did a reflection paper in her GS course that she described as a strengths reflection. Jaijing was not enrolled in a course with a strengths approach and had no specific assignment or reflection involving strengths; however, she felt there was this requirement. She really liked the idea of talking about her strengths and believed that the experience of talking about her strengths would have helped her build confidence.

**Participant Fred**

Fred is a white male and was a student in a small non-strengths section of GS 101. Fred came to the DGS after being redirected from the College of Fine and Applied Arts. He chose to
accept his admission offer from DGS in order to help him determine his future major.

Originally, he deferred his admission to the university. He was interested in a variety of directions and he was not able to discern a particular direction and described himself as,

Pretty dag undecided. I’m just all over the place. I just have – just knowing things is a very important cultural value to me, so I – you can just like tell me anything and I’ll be happy to know it, so that makes it hard to zero in on any one particular thing. Also, I tend to prefer to consume information and media than to try to create things, which also makes it difficult to zero in on a particular discipline because I’ll take anything in but it can be hard for me to spit something out.

As of today, he was very confident about the choice of becoming an engineering major.

In the last eight weeks, one of his classes has been very influential in making this decision. He has felt a significant amount of pressure to declare a major because he was interested in scholarships and there are few scholarships available for undecided students.

When reflecting upon the topics from her general studies course, Fred remembered the following topics: campus resources, major exploration, intercollegiate transfer, course registration, and career exploration. The campus resources and the intercollegiate transfer topics were the most useful to him although Fred overall did not feel the class was very useful.

When asked to reflect on his strengths, Fred responded, “what is strength? What is – your question is a weird question. I’m afraid that I don’t really know what you’re asking.” After clarification, Fred described his ability to concentrate, his ability to remember things, and his strong moral center. He does not think about his strengths very often. He just has not stopped not recognize or keep track of them. When asked his weaknesses, he quickly said,

there’s one thing that I’ve been thinking about pretty often these days, which is details. I’m bad at details. I just tend to lose track of something or another along the way. This manifests itself a lot in multivariable calculus because you do these really complicated things that are all fairly simple operations individually.
He has thought about these everyday because he has assignment due every day and these assignments require attention to detail. Overall, he recalled that he has thought about his weaknesses far more often. Fred said the following about weaknesses,

it’s just a weakness that manifests itself so frequently in my daily life. Because I have to deal with it so often, it’s just more apparent. Also, I don’t find it odd because – I mean, it’s the same thing as why nostalgia exists. It’s because people – the good stuff is what we assume is constant and natural and normal, and the bad stuff is just the stuff that takes us out of the normal level.

Fred was about focusing on strengths in college, he responded the following way,

that sounds like it’s most applicable when choosing a major. When you choose a major, it’s better to choose something that you’re strong at, particularly if you think that you might be doing it for the rest of your life. So your strengths seem most important when choosing a path. When following that path, it seems most important to focus on your weaknesses because that what will get you better. I mean, even if it’s just avoiding your weaknesses, which could be characterized as concentrating on your strengths, I think that that is the most important thing to do.

When thinking about how to build upon his strengths, Fred did not have an answer. He did not really have anything that came to mind, which also meant he had a difficult time thinking about strategies he has used to grow his strengths.

He generally believed that his weaknesses were limiting factors. There was minimum level of functioning required in all areas, so that they do not hold someone back. He felt that it was important to improve of these weaknesses because weaknesses are the area in which he could show great improvement in his life. Overall, Fred shared a strong desire to be a “jack of all trades.” He also articulated that by improving on his weaknesses, he would improve on his strengths. Fred’s perspective on strengths versus weaknesses is the following,

I think that it is true that some people are just better at some things than other people. I’m a big believer in multiple intelligences. So I think that it’s really – that that’s the truth. You are better at some things than you are in other things, but you shouldn’t let the things that you’re not necessarily naturally talented in hold you back from trying to pursue your interests and your passions.
It’s just – I realize that this is ultimately idealistic and perhaps a bit naïve, but if you can do what you love rather than what – I mean, ideally, they’d be the same thing, what you love and what you’re good at. But if they’re not, I think that you should still try to pursue what you love rather than what you’re good at simply because that’s what will make you the happiest, assuming, of course, that you’ll be able to eat.

When the strengths approach was explained to Fred, he felt the strengths-based approach sounded interesting, but was skeptical about a computer analyzing him. Fred was not opposed to the topic, but was concerned about someone telling him how to analyze himself or telling him how to develop. He said that he instinctually rejected authority even though he “knows” it is probably better for him.

In an impromptu setting, one week after the interview, Fred came up to the interviewer and said that he has reconsidered some of his statements. When he originally gave his interview, he thought the topic of strengths was interesting and useful. Originally, Fred was a collector of knowledge, but was concerned about the instrument and some of the basic themes. However, today he wanted to know more about the concepts of strengths. He no longer was opposed to the topic, but felt that strengths exploration could be a useful topic. Fred had a delayed realization that the strengths approach could be a valuable tool for future use. The interview itself became a treatment that resulted in Fred reflecting on the concepts of strengths. His initial rejection became curiosity and understanding.

**Thematic Analysis**

The previous pages were written to help develop and understanding of the fourteen interview participants, their experiences and recollections of their first eight weeks on campus and specifically in the context of a GS course. From these stories and interviews, several important themes have emerged. First, all eight students in the GS course that included strengths
remembered the strengths-based topic from the GS course and had mostly positive impressions with the strengths-based approach. Second, students without the strengths-based approach, were presented with the strengths-based approach as a possible additional topic to the course and most believed the topic would be a practical and useful addition. Three, strengths identification and development were an individual journey where students assimilated the knowledge of the strengths-based approach in their own ways. Four, students began to express the integration of strengths-based approach in personal and academic settings. Five, the culture of fixing weakness persisted in students’ thoughts and feelings after the course was completed.

Theme One: Students’ Recollections and positive Impressions of the Strengths-based Approach

Students enrolled in a strengths-based GS course, in general, had positive recollection of the course material and believed it to be practical and useful. An analysis of the topics each student remembered from the GS course yielded the following information. Table 5.2 contains a summary of the top four or five topics remembered by the students. All eight members of the strengths-based cohort remembered discussing the topics of strengths exploration in their GS course. As the strengths-based topic was the treatment, it was not possible for the student without strengths to recall this topic unless an instructor deviated from the course syllabus. However, all other topics could be recalled by both cohorts and some topics of the GS course were required topics, see Appendix E for a memo on required and suggested topics.
Table 5.2

*Topics remembered by students from the GS course*

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<thead>
<tr>
<th>Students With Strengths-based Approach (8)</th>
<th>Students Without Strengths-based Approach (6)</th>
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<tbody>
<tr>
<td>Strengths Exploration (8)</td>
<td>Major Exploration (5)</td>
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<tr>
<td>Intercollegiate Transfer (5)</td>
<td>Campus Resources (4)</td>
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<tr>
<td>Career Exploration (4)</td>
<td>Group Project (4)</td>
</tr>
<tr>
<td>Academic Procedures (4)</td>
<td>Intercollegiate Transfer (3)</td>
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<td></td>
<td>Career Exploration (3)</td>
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Students without the strengths-based approach recalled, most often, the major exploration topic of the general studies course. Major exploration for these students involved understanding the opportunities academic majors and minors available to students at Illinois and the requirements for graduation. Five of the six students remembered this topic the most. Major exploration was not specifically mentioned by the students with the strengths-based approach because students did not use relevant language in the interviews; however, the strengths-based approach was taught as a means of major exploration. The students’ integration of the strengths-based approach to majors will be discussed later in this chapter.

Other topics remembered by students included intercollegiate transfer, career exploration, group project or working in groups, academic procedures and regulations, and campus resources. The students who remembered career exploration as a topic most often indicated career exploration in the GS course through the use of the EPICS: Interest Explorer, a program created by the Career Center at Illinois which was based on the Holland Codes, see chapter II for info on Holland’s Code. Most students without the strengths-based approach would have been exposed to working in groups or teams as an alternative topic to strengths. After reviewing the course syllabi, all but one student interviewed would have been exposed to this topic. Although lower in
the number of citings by students, four out of the five remember remembered this topic.

Academic procedures and regulations ranged in student response from learning how to calculate a grade point average to understanding the university’s registration system. Finally, students recalled a variety of campus resources, which may also be characterized as student services, such as the library or the Writers’ Workshop.

The topics remembered in the GS may be an indication of the perceived efficacy of each topic by the students. This is evident by the students’ responses. When recalling topics from the GS course appeared to be the result of how well the student connected with or detached from the topic. For example, Wen remembered only three topics from the course because she did not find the other topics useful; hence, she did not remember them. Other participants did not recall additional topics, but gave no reason or rationale.

Of the topics participants did recall from the course, two reasons were cited for remembering course topics, either they found the topic practical/useful or not practical/useful. Michelle described her experience with some topics in the following way,

I felt like they were just reiterating things I already knew. But, I’m sure like that’s my opinion. You know, I’m sure there are other kids who are not as familiar with working as group, or like working to the best potential with other people, you know, so to me it was just like, I already know how to work well with others.

Further, Michelle would describe her experience in the course as demeaning,

I felt like it’s kind of talking down to me. Like, during the lecturing, because just a lot of things I already knew, and like we did offer group projects for our campus resource, but like my group like, we already know what we had to do. Like, we got together, and we completed and it’s like, I don’t think we really needed that lecture just to tell us how to do it.

Michelle’s words from the interview provided an understanding of the some students’ perceptions of GS topics when the materials were deemed not useful or a topic they already
knew or mastered. However, when students enjoyed a topic, they often described it as practical or useful. For example, Adil described the GS course, overall, as helpful,

I thought the boosting the résumé part was very useful. It opened up my eyes; it’s not all about the grade point average here. You need to get involved at the university as well. You can’t just rely on that one line that’s going to be on your résumé. Also, I thought that, for the strengths, that kind of made me see what I was going towards and I can see that they related to the major choice I want to go for.

However, Fred had a very different take on the course; overall, he was not as pleased with the course, but stated the following about a topic, “the only important thing that came out of that class was the campus resources available to students. I also seem to remember some sort of attempt at counseling”. Fred’s had a reaction to the course material that was very negative. In addition, Fred said the following about the course,

to be bluntly honest, I felt like a lot of this class was not a very good use of my time. I do have to say it was good to get the information about the campus resources, and this is probably the most effective way to get that information out, but I felt like sometimes you were just kind of filling time. ‘Let’s just give them some very generalized information that might help them.’

The topics most likely to receive praise from the student’s interviews were strengths exploration, major exploration, intercollegiate transfer, and campus resources. The topic most likely to not receive accolades was the group project or working in teams. The determining factor between positive and negative topics was the practicality of the topics. The practical use could be defined as a new approach to a concept or a concept that they knew nothing about prior to taking the GS course. When a student felt the topic could be used for their future success both in academics and in future careers, students responded more favorably. Students reacted to the topic negatively when the material seemed to not be relevant or to address a topic they ‘mastered’ in the past.
Overall, students with the strengths-based approach often recalled the topics of strengths exploration in class and mostly found the topic to be useful or practical. The second topic that appeared to be important was the intercollegiate transfer process. For students without the strengths-based approach, the topics remembered most was major exploration followed by campus resources and working in groups. For both cohorts, the students’ perceptions of the course and its topics were most often based on how practical or how each could apply the material both immediately and long-term.

**Theme Two: Strengths-based Approach as a Practical and Useful Topic**

Students without a strengths-based course were given the hypothetical scenario of adding the strengths-based approach to their GS course. The researcher gave a short description of the strengths-based approach and asked students how they felt about the addition of this topic and the relevance. Almost all participants interviewed had a positive response to this concept. First, students felt the topic would be practical to their major exploration and possible provide direction that their original GS course did not. Second, students could see the benefits of the adding a strengths-based approach to the course. Third, some students were skeptical of the new approach.

Student generally had a positive first response to the concept of adding a strengths-based approach. When given the basic principles, students could immediately relate to the concept and often compared this topic to previously covered topics in their section of GS. For example, Michelle felt the new topic could help provide her with some additional direction that the original course did not give her,

I just think I would’ve liked it [strengths] instead of group projects – it would have been more helpful. And, I think since for me it was hard to describe with my strengths, and the StrengthsQuest put a label on it and just, it’s a better direction, better guide.
Not only was there a notion of direction, sometimes students could see greater possibilities and development with the strengths-based approach. Jackie expressed that she could utilize the new knowledge to help find her passion and discover her strengths further,

it’d be very useful, because then I’d be able to apply my strengths better than having to think about my weaknesses first and being set back because I wasn’t sure how I was going to deal with that. I think that if I knew that I could do it because I’m going to be good at this, then I’d be better off.

Participants also described the potential to use this knowledge to better understand themselves. Jenni felt that all students should have the opportunity to explore the strengths like she had in high school. She has been able to apply her strengths for years. Furthermore, Claire wanted to apply this knowledge, as well, to her future career, “Well, I mean I would definitely want to have the experience of that [strengths exploration] and be able to talk about it better for like a job interview. That would help a lot.”

Not all of the students would be early adopters of the strengths based approach. Jaijing expressed mixed feelings about the strengths-based approach. She thought the topic sounded interesting and she wanted more information to make a decision. She thought it could be helpful because she related her past experiences to her strengths. Her experiences are important to her because that is what gives her confidence. Jaijing’s feelings were similar to others; however, she was unconvinced about the addition of the approach without additional information.

Mixed feelings did not only result from needing more information, but also skepticism towards the Clifton StrengthsFinder Instrument. For example, Fred’s initial reaction to the strengths-based materials was not fully positive, although he thought it might be an interesting topic. He was concerned about a computer telling him who he was and instructors trying to counsel him. Fred’s concern was,
it’s just like whenever you do an exercise like that, in my mind, it just feels kind of hokey. It’s just – I generally prefer to try to apply things like that to myself instead of having somebody else trying to tell me how to apply them to myself.

However, as noted in Fred’s story earlier, he had reflected on his interview and changed his mind. Later, he felt the approach could be useful to him and others. His reflection of the interview over several days resulted in Fred thinking differently about the strengths-based approach. His initial skepticism was diminished with time.

Overall, all participants interviewed felt the strengths-based topic could be a useful and practical addition to the GS course and at least one desired a little more information before committing to the adding the approach. The future directions and possible development the approach was enough for students to preference this topics over others topics already learned. And with the short description provided, participants were able to begin to apply the strengths-based approach to their experiences and future possibilities.

**Theme Three: Strengths Identification and Development is an Individual Journey**

As participants were interviewed, it became apparent that each had their own journey when thinking and reflecting upon their strengths and weaknesses. Participant reflections on weakness will be discussed later in this chapter. First, to focus on participant’s strengths exploration, how well did the students remember their signature themes from the Clifton StrengthsFinder? Second, students were asked what they were strong in. Third, how did the students connect to their signature themes?

The Clifton StrengthsFinder instruments gave students a brief theme report which included their top five signature themes. During the interviews, seven students from the students with the strengths-based approach cohort were asked if they could remember their signature themes from the Clifton StrengthsFinder. Six of the students remembered four or all five of their
signature themes and one student, Dawn, remembered only three of the five themes. Michele, who took the Clifton StrengthsFinder at a leadership conference, remembered only two of the five signature themes from the assessment. Some participants did need a little help recalling the specific signature themes. There appeared to be a high recall rate in the participant’s signature themes.

Also, during the interview, participants were asked about what they were strong in. Two ways of describing their strengths emerged. One way participants described their strengths was by using their signature themes from the Clifton StrengthsFinder. For example, Adil said the following while talking about the topics in the course, “also, I thought that, for the strengths, that kind of made me see what I was going towards and I can see that they related to the major choice I want to go for.” And, for Chow, she and others began to talk about their strengths when prompted to answer the question, what are you strong in? She initially used a synonym for the one of the signature theme profiles, but was trying to find the appropriate term. With a little help, Chow made an immediate connection with the signature theme profile identified.

For participants, who did not start with their signature themes, some began to use words and concepts from the strengths-based approach and when asked, identified their signature themes later, which were consistent with their previous responses. For example, one participant in the study signature theme results was competition and in describing what they were strong in said,

so then after you do well for a while, you want to see how you match up to other people and want to do better than that to make yourself better. Like, I actually like to see all these achievements.

The response to the CSF instrument and the strengths-based approach varied by individual. However, participant’s responses in talking about their strengths exploration in the
general studies course can be categorized in three ways of knowing: immediately knowing, delayed knowing, and already knew. William used the 34 themes and his signature theme profile to understand more about his past actions and demonstrated immediately knowing, “oh, I think this is something I do or maybe it points out something and, oh, yeah, now that I think about it, I do that.” Dawn had a similar experience when she received her signature themes,

So first there’s strength class. I like that because it’s – I already had in my mind, like, what I like to do. But I wasn’t sure, like, what I was good at, like if what I like would be actually a strength or something. So after taking that quiz and stuff, it pointed out, like, five things and then descriptions. And I thought, “Oh, my God, that is like me.”

However, not all students had an immediate connection to their signature themes. Maria’s experience that she shared was an example of delayed knowing and her words about her strengths experience describe this well,

Because when I first got my themes, I agreed with one of them. And, that was the positive theme. I was like, yeah, ‘I’m kind of a positive person.’ But, the rest of these, I didn’t feel like they suited me at all. But, as the weeks progressed, I had to do my campus resource and stuff, and I was talking to this woman and one of my themes was strategic. And, she was like, ‘Oh, that’s a really interesting way to approach this problem, I would’ve never have done that.’ And, the definition of strategic was to go about things in an interesting way to solve problems in different ways. And, I was like, ‘oh, maybe I am strategic.’ And, I started to like look at the things and be like, ‘Oh, I guess they do describe me.’ And, so I just thought that was really interesting that the computer knew me better than I knew myself

Furthermore, a couple of students felt the exposure to strengths was something they already knew. This was the case for Dale, “I mean, I did, but it’s stuff I already knew, like I didn’t need a quiz to tell me that.” And, for Joe, the experience was similar with a little difference,

I don’t think it’s not useful. I just think I personally think about that a lot, and I think, for me, it just kind of reiterated what I’ve already decided by myself on what my strengths are. If I was just asked to – if I had the same list of choices of things that I would have, I would probably pick the same five that StrengthsQuest
did, but I don’t think I would need StrengthsQuest to tell me what my strengths were.

Joe, also felt that if he had engaged in some additional reflection on his strengths, he could have come up with his themes as presented,

when I was reading the paragraphs for them, it was like okay. I didn’t think about that aspect of it, or this is something new. But I think I could – if I had some time to sit down and create my own strengths and paragraphs to fit with them, I think I could articulate it.

However, for William, it was not necessarily about being exposed to something he already knew or had learned, but was about additional reflection that resulted in a larger knowledge base,

I guess I came to some realizations but I don’t know if I really learned anything. Just like maybe a different way of putting it or I realized that I think some like strategize and organizer or and some other things. I mean, I knew that maybe I would arrange things but that’s more in depth and the more I thought about it the more I actually thought that was right.

Overall, students experience high amount of recall of their signature themes from the course. Each participant’s identification and exploration of strengths occurred in their own ways; however, they appeared to follow several patterns: immediately know, delayed knowing, and already knew. The patterns are not mutually exclusive and some students’ experiences seemed to engage the material through multiple ways.

**Theme Four: Integrating Strengths in Personal and Academic Settings**

While discussing their strengths, participants began to articulate the settings each had utilized the strengths-based approach during their personal and academic lives. There were three primary ways students described the integration of strengths: (1) the ability to “have the words” to share with other and describe their strengths further, (2) the applications of strengths when selecting coursework, majors and eventual careers (3) the use of strengths to improve one (4) some students struggled with the ability to use and develop their strengths.
Participants enrolled in the strengths-based sections of the GS course expressed a new ability to articulate their strengths. Chow, for example, “Because before I took the strengths part, I’m not really sure what I was good at. Sometimes I feel like I’m good at this, but I can’t really name it and I don’t know what can I do.” Adil articulated an understanding that he may still need to work or explore his signature themes further,

I think as I progress throughout the university I’ll find more and more. I didn’t used to always label things that I do, but this course has put a label on things, like “focus” or “organization.” Now, I haven’t quite mastered how to define them yet, but in the future, I hope I can.

This ability to articulate appeared to be helpful to participants and the applications of these strengths held deeper meaning for these students who are undecided. For example, Chow used her signature themes to make an academic decision,

when we do this part in class, I was really confused because I think I was still at the adding and dropping classes period, so I was confused about my schedule and I was really stressed about my schedule at that time. And after doing this test and I finally decide to change some courses and that decision was, so far, I think that’s a good decision. So I think the Strengths part was really helpful to me.

And Wen, who was undecided about her major at the time of the interview and has since adopted the approach by finding her strengths,

I think for me, I’m still confused about my major and my future. I think it’s important to find out my talent and strength while in college as soon as possible because some people had already decided what major.

The integration of the approach was not always broad, but narrowed into thinking about possible majors. William has a philosophy of applying strengths and majors,

You want to choose a major where your strengths apply, or at least that’s how I feel. And then so it’s helpful to know where your strengths are. And you have to choose a major that you’re passionate about but definitely want to have strengths in that major.
Major selection was not the only activity described by participants. Student described adopting the principles into the curricular and co-curricular. Chow has integrated the concept of the strengths-based approach in her major exploration process,

Because I think in college I have more freedom of options maybe. So I can just avoid my weakness part when I’m selecting courses or participating in any activities, I think. It’s not like high school where I have to take something I’m not good at. But in college, I can just choose the things I like and choose the things I’m good at. So I think if I really want to improve my strength, I can actually do that.

However, at least on student made deeper use of the strengths concepts. Maria applied strengths-based concept to her major exploration process, as Chow has, and she added a new level of application. She made the leap of using her strengths within a major to excel. Overall, she recognized that there might be part of a major she is not as good at, but could compensate for with her strengths for example.

Well, because you’re supposed use your strengths to help you be better at something you like. And, I want to be good at what I like to do. And, so if I find a major that I really like, but I happen to be not that great at it, I can probably use my themes and my strengths to be better at it.

Some participants made the leap from majors to eventual careers and the ability to articulate their strengths on résumés. William connected his strengths with his major and his future career. He valued being noticed by a future employer by being good at something,

because I think in college it’s a period of time that you focus on a specific field because my dad always tells me that in the future, in the society, in order to get a job or something, it’s good that you have specific things that you’re good at so employers would – you draw more attention from the employers. So, I think it’s important to develop the field that you’re good at.

However, not every participant interviewed has adopted a strengths-based philosophy completely with their major exploration. Joe recognized the need to specialize in college or a more, but still yearned to be well rounded,
Because there’s no Renaissance major. You really need to focus on what you are good at in school until you get a major. But I think there’s a big difference between what you’re here at school for as an academic purpose and as a person. I feel like it’s important to be well rounded, even in school, but definitely as a person. But if you’re in school, you should focus on the areas that you’re good at because you’ll be more likely to succeed in them. Also, it’s important to kind of fine-tune the things that you’re good at so you can use them in the workplace.

Several participants interviewed had trouble articulating how they could utilize and develop their strengths Dawn provided an example of the difficulties of applying strengths in academics,

I’ve gotten Cs on my exams. I don’t know how to make them better. I don’t know how to get up to a B. Because some of them are like three points away from a B and I’m, like, “What am I not doing?” So I think it’s easier just to talk to people about things. Because if I just stay in my head, I’m going to always worry. I’m going to just come to the conclusion where I’m like, “What am I supposed to do?” So I don’t know how to build it.

From Dawn’s words, you can sense the frustration between knowing and identifying strengths compared to the application and development of strengths in life. A more in depth understanding of weaknesses is presented later in this chapter.

Finally, Dale did not make the initial connection of strengths and major. His words echoed that of Joe who saw the dual purpose in college of both major and personal development. Dale saw strengths as a personal characteristic and area where he could grow as an individual.

I never saw the connection between strengths and picking a major. It was how you can become a better person by finding things that you’re good at, and improve upon them. And, I don’t think, at least for me, what I would consider my strengths to be the test [of having become a better person].

The connections of strengths and major did not permeate into Dale’s thoughts of college. Some students implied that working on their strengths would make them better, but Dale shared this thought implicitly. Of interest, Dale had the same instructor as Adil and Adil believed that strengths and major went hand in hand. As discussed previously, each participant engaged in the
exploration as an individual. In this case, the individual journey shaped the integration of the strengths-based approach.

The integration of the strengths-based approach appeared to help participants better articulate their strengths as each engaged in the major and career exploration process. The exploration of strengths, likely, resulted in each student becoming a better person. And, for some, there was a lingering question of how to best use and develop your strengths.

**Theme Five: Weakness-centered Cultured Persisted in Students’ Perceptions**

In all fourteen interviews, weaknesses permeated the reflections of the participants, for some more strongly than others did. Although students with the strengths-based approach reported thinking about their weakness less often compared to the students without the strengths-based approach, some participants felt that thinking about your weaknesses was a natural or daily part of life. And other participants articulated a need to fix their weakness. To begin, Fred offered a perspective on his weaknesses,

I think about those weaknesses in particular pretty often because I need to deal with them a lot because, whenever I’m doing that, I’ll get a question wrong three or four or five or six or ten times before I get it right because I’m bad at details. So whenever I’m doing math, which is every day to every two days because I have an assignment due every other day, it comes up. I freak. Then a lot of times, I’ll think about – if I’m thinking about math, that will come up because it’s the thing – it’s the one thing that keeps me from being as good at math as I could be. The fact that I’m bad at details has occupied a pretty important place in my mind recently. It’s just a weakness that manifests itself so frequently in my daily life. Because I have to deal with it so often, it’s just more apparent. Also, I don’t find it odd because – I mean, it’s the same thing as why nostalgia exists. It’s because people – the good stuff is what we assume is constant and natural and normal, and the bad stuff is just the stuff that takes us out of the normal level.

For several students who have encountered struggles with current academic coursework, having to work on your weaknesses is a daily adventure. Jackie’s narrative added another level to focusing on weakness. When asked how often she thought about her weaknesses she responded,
“very, very often. When I’m struggling with something, that’s the first thing I think about. What I did wrong?” She believed that most people are in a similar situation and provided the following rationale,

I think that’s something that a lot of people struggle with. That you don’t really think about your strengths before you start a project or a situation, because the first thing that comes to mind is, Gosh, this is going to be hard, because either I’m not good at this, or I’m not good at that. Really, a lot of self-doubt.

Thinking about your weakness did not just come up when facing an immediate concern or dilemma. Jiajing believed that when she has thought about her weakness, the feelings lasted for days and were ongoing struggles.

These are my weaknesses, I should do something, but actually, I always postpone my dream. Like for language, I wanted to repeat the sentence from like speeches or something, I try to speak more and to be confident. I always think about that. But, once I begin, it’s just continuous for two days.

For some students, the focus on weaknesses has been increasing, especially as they have matriculated into the university. Jenni talked about, “as I’ve gotten older, probably more often than I think about my strengths.” However, for Jenni becoming older came with increased reflection time, thus her thinking about weaknesses has shifted,

I don’t know. It really bothers me when people can’t realize that they do something wrong. And so there are certain things in my life – in my whole life I’ve been really stubborn. And so I’ve known that’s something I need to work on so I’m more conscious of it. And so I’m more conscious of when I’m feeling, “Oh my God, do I really have to change this?” Now I’m able to take a deep breath and realize, it’s not a big deal. Go with the flow. And I’ve become so, so much better at that.

There was one outlier to the predominance of thinking about weaknesses in the students without the strengths-based approach. Claire did not feel she thought about her weaknesses much and espoused the principle of being well rounded as a rationale for thinking about her weaknesses,
Not that often, well I guess more often than I think about my strengths. I’m always worrying about it. I want to fix it. Because you want to be well rounded. You don’t want to be like amazing at one thing and horrible at another thing. You want to kind of have, be good at I guess both.

Each of the students’ perceptions of weaknesses presented, thus far, have come from the students without the strengths-based approach cohort. However, the participants from the students with the strengths-based approach thought about their weaknesses, in similar ways, with less frequency. For example, Chow described thinking about her weaknesses half the time, but less now that she has been in college. She shared the following when thinking about her weaknesses,

actually, I don’t have to deal with math so much this term because I dropped my math class at the beginning of the semester, so I don’t feel very stressed about that. But still, I have to do math next semester, so I just cannot help thinking about what will happen in math class, what if I get a bad grade in that, will that affect my GPA and everything. So yeah, half of the time I’m thinking about that stuff, math and –

William provided an additional insight as to why he has not thought about his strengths more often and has focused on his weakness when spending time with others,

I think when I’m talking about my strengths I feel like I’m boastful almost. And then, with weaknesses, maybe I can get their view on what’s going on and I can try and help correct that. Whereas strengths, they’re already strong enough and I don’t really need their point of view as much. I mean, I guess it helps if they give me little critiques, they’re like, “Oh hey, good job because you did that.

For William, there appeared to be a barrier to talking about his strengths with others and no barrier existed for talking about weaknesses. Several participants indicated that it was easier to talk about weaknesses with others.

Overall, students from all cohorts indicated that weaknesses were ingrained in their conversation with others and their self-reflections. Weaknesses were part of their everyday lives
and we often described as barriers to future achievement. Further, weaknesses needed to be fixed and were included in conversations they had with others in a variety of contexts.

The weakness-centered culture described by most students is in direct conflict with the strengths-based approach. Students with the strengths-based approach were presented with the idea of ‘managing weaknesses.’ However, no matter what cohort the students were in, the focus on weaknesses dominated any thoughts of managing weaknesses.

**Conclusion**

My hope in conducting the individual interviews was to seek out the voice of students to better understand their changes occurring during the first term and learn more about the efficacy of a strengths-based approach in a university 101 course. At first, I provided a summary of each participant’s interview and included a short narrative on how the participant came to the Division of General Studies, their major exploration process, impressions from the GS course, a glimpse into their strengths and weaknesses. The goal of these narratives was to allow the reader to understand better each participant separate from the themes that emerged during my research.

I learned that students in the GS course with the strengths-based approach remembered the strengths-based topic from the GS course and had mostly positive experiences with the topic suggesting that the topic was of use and value to the students. I believe this to be true because students articulated the ways in which a strengths-based approach could be helpful to them such as in career and major exploration. When students without the strengths-based approach where presented with the strengths-based approach, students believed the topic would be a practical and useful addition providing further evidence of the efficacy of the strengths-based approach. I
believe this to be true because students valued the new topic over other topics each had experienced in the GS course.

I gained insight into the exploration of strengths by students as an individual journey where students assimilated the knowledge of the strengths-based approach in their own ways. This was an anticipated result as the Clifton StrengthsFinder instrument has over one million combinations of signature themes and students would draw upon their own experiences to articulate their views and beliefs. Further, students began to express the integration of strengths-based approach in personal and academic settings. Students articulated that majors and the vast number of activities were means and opportunity to specialize and develop their strengths. However, the integration of strengths into the students’ lives was inhibited by a culture of fixing weakness. Students often reported wanting to and needing to become more well-rounded and students’ thoughts and feelings persisted after the course was completed. This is likely due to the socio-cultural messages heard often throughout each one of their lives.

Overall, the student’s voices paint a compelling picture for the utilization of a strengths-based approach with some initial insights its integration into student personal and academic lives. I would suggest additional longitudinal interviews to better understand the overall efficacy and integration of the students’ lives. Further, I would expand the interviews to being to unearth how race and gender influence the adoption of strengths-based approaches as suggested by the survey analysis. In the next chapter, my goal will be to integrate the five themes discussed with the survey findings from chapter IV and the relevant literature from chapter II.
CHAPTER VI
DISCUSSION, IMPLICATIONS, AND FUTURE DIRECTIONS

Universities have historically approached college student success by measuring persistence and retention (Astin, 1977, 1984, 1993, 1999; Tinto, 1975, 1987, 1993). College student persistence from the first year to the second year is of primary importance to higher education administrators because higher education is subject to the increasing accountability standards of stakeholders. As a result, a traditional practice employed by colleges and universities to help with the transition to college and enrollment for a second year is the first-year seminar or university 101 courses. Overall, research on the first-year seminar indicates that it is an effective practice (Barefoot, 2000); however, there is some inconsistency in the research as to the educational outcomes of the first-year seminars due to the vast array of offerings and definitions of first-year seminars (Miller, Janz, & Chen, 2007). Undecided students are a subpopulation of the student body for which prior research has suggested the need for increased attention by administrators and the university 101 is one mechanism for increased attention (Gordon, 2007). More substantive research on how to modify these introductory courses, specifically with undecided students, is necessary in order to enhance the success of university 101 courses and ultimately the persistence and retention of these students. This chapter provides an overview of the previous five chapters of this dissertation followed by a discussion of the findings in conjunction with the relevant literature.

As discussed in chapter I, the purpose of this sequential mixed method study was to understand how a university 101 course with a strengths-based approach (Schreiner & Anderson, 2005) impacted undecided students during their first semester. This study focused on the individual student experience. The objectives of this study were: (a) to compare students’ self-
reported perceptions before and after participation in the university 101 course, and (b) to allow respondents to share their own experiences of the changes that occurred as a result of the university 101 course. Further, the two research questions were: how does a university 101 course using a strengths-based advising approach:

1. impact undecided students’ reported abilities to identify and explore personal strengths?

2. influence how undecided students critically think about personal and academic choices related to careers and majors?

In chapter II, I presented a review of relevant literature including college student persistence, the strengths-based approach, academic advising, and the university 101 course. There are generally three theories or models of persistence utilized in the literature: Tinto’s Theory of Student Departure (1975, 1987, 1993), Astin’s Theory of Student Involvement (1977, 1984, 1993, 1999), and Bean’s Theory of Student Departures (1980, 1990; Bean & Eaton, 2000). Overall, these theories explore the pre-college characteristics of students with environmental and engagement factors related to the retention and departure of college students. I used the knowledge gained from the persistence literature in the design and analysis of this study.

In addition to the methodological considerations, these theories generally approach understanding college student success from a deficit reduction model. However, “more students leave college because of disillusionment, discouragement, or reduced motivation than because of a lack of ability or dismissal by school administration (Clifton, Anderson, & Schreiner, 2006, p. XIV).” As an alternative concept, Clifton proposed adopting strengths-based principles in the college environment. The strengths-based approach emerged from the field of positive psychology. Strengths-based education is:

a process of assessing, teaching, and designing experiential learning activities to help students identify their greatest talents, and to then develop and apply strengths-based on
those talents in the process of learning, intellectual development, and academic achievement to levels of personal excellence. (Anderson, 2004, p.1)

The inclusion of strengths-based education can occur within an advising context, where academic advisors are charged with the task of helping students explore academic, vocational, and life choices. A strengths-based advising approach is a four-stage process designed to facilitate the development of strengths in a college setting. The four stages are identifying, affirming, envisioning, and planning (Schreiner & Anderson, 2005). For this study, the strengths-based approach was added to a traditional university 101 course where the aim is to facilitate transition to the university and aid in career and major exploration.

Chapter III provided a description of the research methodology employed by this study as a quasi-experimental design with a sequential mixed-method approach. A logical starting point for advising students and exploring their strengths in the first stage of identity is the university 101 course. The purposes of the university 101 courses have traditionally been to help ease student transition to college and to help students develop academically, socially, and intellectually which can lead to outcomes of increased interaction with faculty, staff, and other students (Barefoot, 2000). Thus, the context of the study was an eight-week university 101 course (GS 101) taught for undecided students at the University of Illinois. For this study, the intervention included a strengths-based approach in the 101 course. Students in a strengths-based course were compared with students enrolled in a traditional 101 course that did not include a strengths-based approach. Using a pre- and post-test model, students were surveyed electronically to better understand the impact on students after the eight-week course.

At the conclusion of the GS 101 courses, fourteen students were individually interviewed to provide a better understanding of the changes that could not be discerned from an electronic survey. Interviews were transcribed and summarized in preparation for thematic analysis.
Summaries and transcripts were coded for emergent trends in students’ experiences and perceptions and to understand the utilization and integrations of the strengths-based approach into their academic and personal lives.

In chapter IV, I discussed the findings from the pre- and post-surveys. Given the limited intervention, my expectations were to show even the smallest of differences between groups with hope to provide justification for continued research and development. I conducted a multivariate regression analysis in order to discern possible relationships between the strengths-based approach and changes in students’ perceptions. As a result of correlation analysis, I created a multivariate model controlling for gender, race, and ACT Math. The one statistically significant finding from this study was that students who were enrolled in strengths-based sections of GS 101 indicated having thought about their weaknesses less often than students enrolled in a traditional GS 101 course did. The significant results of the multivariate analysis are especially meaningful considering the treatment was a limited intervention of a reading, a lecture, and the administration of the Clifton StrengthsFinder instrument. This result lends support to addition of strengths-based approaches in the university 101 course.

With support for the strengths-based approach in a university 101 course, I felt it was necessary to review further the data for guidance in utilizing a strengths-based approach with undecided students in the university 101 course. The results suggested that race and gender appeared to matter to the degree and direction and in which the strengths-based approach was integrated into the students’ personal and academic lives. White and male students with the strength-based approach indicated greater adoption of strengths-based approaches compared to males and students from other races reporting lower integration of the strengths-based approach. Although this study did not focus on the influence of race and gender, I can speculate on the
possible reasons as to why these differences occurred in this study. I believe students from different backgrounds and experience likely received different and consistent messages regarding their behaviors and expectation during their formative childhood and adolescent years. These expectations or norms likely influenced the integration or adoption of the strengths-based approach.

In chapter V, I provided a case-style summary of each of the fourteen interview participants to help readers understand the individual experiences of each student. These participants were selected for interviews because they exhibited in the pre- and post-surveys large positive, large negative, and/or no change in the strengths measures. After the summaries, I identified and described six themes that emerged during the open coding of the interview summaries and transcripts. The six findings were:

1. All eight students in the GS course that included strengths remembered the strengths-based topic from the GS course and had mostly positive impressions with the strengths-based approach.

2. Students without the strengths-based approach were presented with the strengths-based approach as a possible additional topic to the course and most believed the topic would be a practical and useful addition.

3. Students in the strengths-based cohort strengths exploration and identification can be described as an individual journey or personalized experienced in that students described and discussed their strengths based on their own unique experiences and backgrounds which ultimately related to their five signature themes from the Clifton StrengthsFinder.

4. Strengths-based students began to express the integration of the strengths-based approach in personal and academic settings such as the ability to “have the words” to better describe their strengths to others and articulated early utilization of strengths-based approached for course, major and career selection.

5. The culture of fixing weaknesses rather than focusing on strengths was present in all students’ thoughts and feelings after the course was completed.
In the next sections of this chapter, I will discuss my interpretation of the findings with reference to the broader literature. Then, I will provide recommendations for education policy as a result of this study and I will make a proposal for continuation of my research and future study. Finally, I will share my personal insights and reflections related to this research before concluding remarks.

**Discussion**

To assist with academic adjustment and college student persistence, previous research recommends 1) to include partial or full year orientation programs and 2) to provide for multiple opportunities to encourage student interaction (Braxton & Lee, 2005). These recommendations are carried out by the university 101 course that serves as one mechanism to address student transition and persistence. Two goals of the university 101 course, specifically GS 101, are to facilitate students’ transition to the university and facilitate in career and major exploration. As discussed in the previous chapter, the goal of this research was to understand the efficacy of a strengths-based within a university 101 course. With this in mind, I would first like address to the ways in which students have identified and explored their personal strengths during their first term. Next, I will share my insights on how students have integrated strengths into their personal and academic lives. Finally, I will discuss the need to control and account for pre-college characteristics of students during strengths-based research.

**Students Identifying Strengths**

The first research question of this study is to understand the abilities of students to identify and explore their personal strengths. And when making these connections, how do students understand their strengths? Upon further examination of the participants’ strengths exploration, I learned that first-year students in the GS course were in the identifying stage of
strengths-based advising with difference between the strengths-based and traditional GS 101 cohorts. Schreiner and Anderson (2005) identified four stages of strength-based advising: identifying, affirming, envisioning, and planning. Although Schreiner and Anderson did not go into detail regarding the individual stages of strengths-based advising; identifying was defined as understanding each student’s specific talents by using Clifton StrengthsFinder. During this eight week study, students were clearly in the “identifying” stage of strengths-based advising as evidence by students’ perceptions of their own strengths development and I describe these perceptions as immediate knowing, delayed knowing and already knew. Students did not provide clear examples of affirming, envisioning, nor planning. Some students from this study did begin to affirm their strengths; however, the affirmation of strengths occurred outside of the classroom for example during student activities and interviews for part-time employment. It may be logical to assume that an increased intervention with the strengths-based approach would result in students progressing through the stages identified by Schreiner and Anderson.

Evidence of the identification stage was observed when students with the strengths-based approach began to adopt the basic principles of the strengths-based approach during individual interviews and survey results. In general, the goal of the strengths-based approach is to solicit greater attention on individual strengths and manage personal weaknesses. The multivariate analysis indicated only one statistically significant, but profound difference between cohorts for change in the frequency students have thought about their weaknesses. Unfortunately, none of the other strengths-based principles surveyed showed a statistically significant difference between cohorts. The limited findings from the quantitative portion of this study may be due to three items: (a) the small treatment of one reading, a fifty-minute lecture, and the Clifton StrengthsFinder Instrument (b) low utilization or integration of strengths-based approach by
students (c) inadequate time for principles to be integrated into students lives. Future study is warranted to confirm the exact nature of the limited findings. I would suggest that future study consider how economic, organization, and social phenomena may or may not be impacting these results (Braxton, 2000).

Of interest, most students from either cohort would identify success as a definition of a strength. Success or the concept of being better than others can be compared to the study of excellence. The foundation of the strengths-based approach is the exploration of human strengths in order to understand what makes one strong or excellent (Clifton and Nelson, 1992). The utilization of success as an indicator of a strengths is a reasonable expectation for students and may suggest a mechanism for future practice during the identifying stage.

Another way in which to understand the stage of “identifying” was through the students’ utilization of the Clifton StrengthsFinder. From the individual interviews, all eight students remembered at least three signature themes from the CSF and most students remember four or five out of five signature themes. Some students with the strengths-based approach utilized their signature theme profiles to describe what they were “strong in.” Students not enrolled in the strengths-based course seemed to have a broader understanding of their strengths. This broader understanding could be describe as a generic or standard use of term “strengths” compared to students exposed to the strength-based approach had a new understanding of their personal strengths. Overall, these results suggested early integration of the strengths-based approach by students exposed to the strengths-based approach; although follow-up at a later date would certainly be warranted.

Finally, students with the strengths-based approach began to make connections to their academic and personal lives. In terms of academics, students with the strengths-based approach
could see how majors on campus may or may not match their personal talents, skills, and abilities. From the interviews, students began to conceptualize how their strengths could be “in play” when making progress in a major or major directions. In addition to academics, students made connections to their co-curricular activities and interests and saw how they could take advantage of their strengths through the plentiful and varied activities available on campus including seminars, workshops, and student organizations. When students from the traditional GS101 course were asked about integrating a strengths-based approach and their academics, most students without the strengths-based approach felt that the strengths-based concepts would be useful compared to other topics covered in their GS 101 course. In addition, students without the strengths-based approach immediately could identify some of the possible uses of the strengths-based approach into the personal and academic lives such as future careers and activities.

**Incorporating Strengths into Academic and Personal Lives**

The second research question of this study was to understand how undecided students think critically about personal and academic choices. What I learned from this study was that students’ integrated a strengths-based approach into students’ personal lives through their individual journeys of capitalizing on their strengths and through the utilization of strengths-based terminology. Students described changes in their attitudes and beliefs. Further, students saw the university as committed to building on students’ strengths.

**Personal lives.** As students began to tell stories about their experiences and beliefs, the emergent theme was that each student shared a unique perspective of his or her strengths journey. This theme was consistent with previous literature on the strengths-based approach. One study described the individual ways in which students utilized the strengths approach (Robles,
2009) and a second study documented the unique ways in which students capitalized on their strengths (Janowski, 2006), and finally, the strengths journey has been described as extremely personal (Pritchard, 2008). The previous studies’ description of strengths exploration as an individual activity is not surprising if you consider that the Clifton StrengthsFinder (CSF) has over 1 million possible results combinations of signature theme profiles. It is therefore logical that students would find their own paths to capitalizing on their strengths based on their personalities and experiences.

Even though the form of exploration was unique, common patterns of thought and behavior were observed from participants. In response to the CSF, students with the strengths-based approach experienced what could be described as immediate knowing, delayed knowing and already knew. When students first read their signature theme profiles from the CSF, some students (participants Chow, Dawn, Dale, and Adil) made an immediate connection to what they felt were strengths their whole lives. Other students needed an experience in life to have a “ah-ha” moment to make a connection from their signature themes to how they spoke or acted. This “ah-ha” moment appears to be similar to the learning epiphany described in a previous grounded theory study in Wales (Pritchard, 2008). Students had a response of already knowing where they felt they had been using the identified themes their whole life and the instrument did not bring any new ideas or meaning to their lives. A previous study entitled this phenomenon as “I know who I am” as a typical response to the instrument (Pritchard, 2008). The reaction to the instruments from this study and the previous study suggest how students begin to assimilate the knowledge of the strengths-based approach during the identification stage.

Regardless of which reactions the students had to the CSF, a strengths-based approach allowed students to learn more about themselves and increased their ability to articulate their
strengths to others (Clifton et al., 2006). When reflecting on the instrument, students indicated this new depth of knowledge of their strengths. There was an expanded sense of self. This research was similar to previous research with higher education administrators when exposed to the strengths-based approach encountered in a study on leadership (Xaver, 2008). Students who did not have the strengths approach typically described their strengths in traditional or commonly accepted norms of describing one’s strengths. Student without the strengths-based approach reported not thinking about their strengths often. The students without the strengths-based approach could be described as not having recently reflected on their strengths compared to the strengths-based cohort.

Another way of understanding this integration into the students’ personal lives was from individual students’ stories. The eight participants in the students with the strengths-based approach used general language or specific terms from the Clifton StrengthsFinder during the individual interviews. Some students, while discussing their strengths, immediately began to use signature themes from the CSF. The use of the signature theme helped students define and communicate their strengths to others. Upon further analysis, participants’ stories highly matched the signature themes. When asked to reflect upon espoused description of their strengths and their signature themes, participants in the strengths-based cohort quickly understood the connections between their individual strengths stories and their signature themes. The interview became an additional treatment for students from the strengths-based GS 101 course.

Students from a traditional course did not use terms associated with the CSF. There were two exceptions. One student had been exposed to the CSF outside and she knew her signature themes. Another student’s mother (Jackie) tried to instill a focus on “strengths.” However Jackie, from the traditional GS 101 course, had not really adopted the practice into her personal life. The
utilization of strengths was just another practice for Jackie. There was no unconscious utilization of a strengths-based approach for students in a traditional GS 101 course; however, there was a generic or common use of strengths for these students.

**Academic lives.** Students from the strengths-based cohort incorporated strengths into their academic lives in two ways. First, students with the strengths-based approach saw the university as strengths-based through the multitude of activities and through the curriculum. Second, students with the strengths-based approach articulated changes in attitude and behaviors related to strengths exploration. Universities, through majors, have already in an “unconscious” way adopted strengths-based principles. Individual majors can be described as the in-depth study of the basic skills and knowledge students need to be successful in a chosen field, and students have already grasped this connection between strengths-based principles and majors. I would caution the assertion that majors are strengths-based because, as previously defined, a strength is defined as a specific activity and there are many activities that occur within a major. Students also said that the large number of co-curricular activities were opportunities for them to choose which activity, whether a seminar or a student organization where they could do their best. One of the six goals of a university 101 course was to link and integrate the curricular with the co-curricular which appears to be a function of the strengths-based course (Barefoot, 2000). Finally, some students with the strengths-based approach felt that the GS 101 course and the study of the strengths was further evidence on how the university was committed to building the strengths of each student.

Students from the traditional GS 101 also described the university as committed to strengths. However, the descriptions were lacking in great detail and often, students were not able to articulate the ways in which the university was committed to building on the strengths of
each student. When students without the strengths-based approach would articulate the commitment, the description appeared to follow the pattern of students describing their strengths, in generic or broad terms. I would not describe the difference between the two cohorts of students studied to be vastly different, but I would describe the difference as slight and sometimes it was a matter of using new terminology.

As students already believed the campus was dedicated to strengths, what other modes of critical reflection connections were students using? Besides the previously mentioned connection to majors and activities, students made the link between strengths-based principles and self-improvement and between strengths-based principles and future careers. For example, one student in the strengths-based cohort shared the overall benefits of being a better person for having had explored the strengths-based approach. Most students from both cohorts made the connection of strengths with future career options. Often, this connection was related to the job interview process and having the ability to better and more thoughtfully describe their strengths to a potential employer. Students began to consider that if they were able to better articulate their unique and individual skills, employers would be more likely to hire them. However, students from the strengths-based GS 101 course described being able to have new ways to articulate their skills. By having available the amount and variety of opportunities, students would be able to find their niche on campus, which is a central purpose of positive psychology (Seligman, 2002).

Students indicated changes in attitudes and beliefs during the pre-/post-surveys when responding to how often they reported thinking about their strengths and weaknesses. Students with the strengths-based approach after the eight-week course were more likely to report thinking about their weaknesses less often than the students without the strengths-based approach. Students’ reduced effort in thinking about their weaknesses is central to the strengths-
based approach, which would hopefully correspond to an increased focus on strengths. However, students with the strengths-based approach indicated after eight weeks that they thought about their strengths less compared to students without the strengths-based approach. This result was not expected from the study, indicating that students with the strengths-based approach had a shift in thinking about their strengths. A possible explanation of this shift could be an internal change in the definition and terms of strengths and weakness, which is discussed further at the end of this section. Further investigation is warranted in understanding why there was a decrease in the frequency in which students thought about their strengths.

The adoption of the “managing weaknesses” or shifting focus away from fixing weaknesses appeared to be a key concept, which is a key principle of the strength-based approach. Learning to manage your weaknesses or the lesser strengths that impede productivity and success means that you are able to focus more on your strengths (Clifton et al, 2006). White students and males were more likely to spend less time thinking about weaknesses. This was contrary to a previous study where female students exposed to the strengths-based approach exhibited increased strengths awareness compared to males (Brodenson, 2008). The principle of fixing weaknesses was only a small portion of the strengths awareness scale used by Brodenson, which may indicate the reasons for different findings. The adoption of managing weaknesses by students could indicate the ease at which this practice was integrated into students’ lives and/or indicate the ease to remove an activity that takes a significant amount of time and provides little reward.

Although students with the strengths-based approach adopted the managing weaknesses principle of the approach, students with the strengths-based approach indicated thinking about their strengths less often, which on the surface appears to be contrary to the strengths-based

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treatment. In addition, not only did students with the strengths-based approach report a decrease in time spent thinking about their strengths, students without the strengths-based approach reported having thought about their strengths more often after eight weeks. These results suggested that a change in belief or attitudes had occurred for both groups of students; however, what remains is a question of what changed for students. The intervention itself may indicate a possible rationale for the difference. Students exposed to the strengths-based approach were given at least three new ways of thinking about strengths and, more specifically, a definition of strengths including a signature theme profile that provided direction to finding their individual strengths. Students with the strengths-based approach may have a decrease in thinking about their strengths because they are not utilizing their signature theme results, and thus their strengths.

The overall decrease may be the results in what I would describe as a baseline shift. For example, if you believe it only took one year of effort to develop a strength, the baseline of measurement of a strength is one year. However, the strengths-based approach described to students with the strengths-based approach was approximately ten years of investment to develop a strength. Therefore, after eight weeks, students may have experienced a baseline shift, meaning their initial evaluation baseline differed from the subsequent baseline. Another explanation may be students may have adopted their specific signature themes as a definition for their strengths and as a result have not been working on developing their signature theme. Generalization about working on your strengths may be easier to indicate until one identifies specific strengths.

**Pre-college Characteristics and Strengths-based Research**

On a final note, research on the outcomes of college has been well chronicled within the higher education research community (Pascerella & Terenzini, 2005). Relevant to this research
are the studies on college student success including persistence and retention. From these studies, researchers have learned that pre-college characteristics of students influence the outcomes associated with a college education and collegiate life (Tinto, 1993). Some examples of these pre-college characteristics that have been shown to impact the effect of college were ACT scores, gender, and race (Astin 1999). The data from these studies suggested that the variable from this study of ACT Math, gender and race may be confounding variables when trying to understand the outcomes of a strengths-based approach in a university 101 course.

The data gathered from this study have shown similar trends with pre-college characteristics as evidenced by the correlations, and multivariate general linear model analysis completed. Without controlling for ACT Math, gender, and a recoded variable of race (white and other races), the analysis yielded no statistically significant results. However, after controlling for the ACT Math, gender, and a recoded variable of race, the analysis, displayed in table 4.4, suggested strengths-based intervention may influence the perceptions of college students during their first term.

The effect of the pre-college characteristics should therefore be considered within this study and other studies involving strengths and college students. When students’ responses are separated by gender and race, separate patterns of attitude and behavior emerged. As I discussed in this chapter and chapter IV, the impact of race and gender was not fully explored during this study, however it is a topic that warrants further intentional investigation. It may be helpful for future research to not only focus on individual agency, but also students’ perception of the social environment and climate as it relates to gender and race. For example, in reviewing Tinto’s research, it has been suggested the colleges and universities should work to organize the multitude of climates to be in line with retention efforts. Further, the environmental conditions
that enhance social integration and social cohesion need to be explored and identified as they relate to students perceptions of climate (Baird, 2000).

Further, this study was narrowly tailored towards the individual agency of the student or the psychological process changes occurring during the first term. It may be helpful to gain a broader and more complete perspective by incorporating multiple dimensions that influence college student success including economic, organization, psychological, and social theories of persistence or departure (Braxton, 2000). Future research in strengths-based interventions should examine and explore the pertinent demographic variable as it relates to the student and the social environment (Bean & Eaton, 2005). Overall, these approaches may help to shed light into this complex phenomenon by addressing the interplay between individual, institutional, and social factors that increase or inhibit college student success (Bean, 2005).

Recommendation for Educational Policy

The current and the previously published research has shown that a strengths-based approach to higher education may lead to better college student outcomes. Further early educational activities with a strengths-based approach may not only impact students in the first year, but be carried throughout the students’ entire undergraduate education (Schreiner & Anderson, 2005). I have three recommendations for higher educational policy as a result: (1) increase and expand current strengths-based offerings in advising contexts, (2) increase and expand strengths-based approaches to additional campus environments, (3) modify current campus opportunities to include strengths-based principles. With each of these recommendations, I would recommend ongoing program evaluation and research to understand better the impact of the strengths-based approach on students during their collegiate education.
Currently, there are few strengths-based advising offerings. However, this research suggests that these offerings can influence students to adopt strengths-based principles which may increase confidence and satisfaction. This is particularly profound considering high school students have been asked to become well-rounded and/or to fix weakness as a means to achieve success and matriculate to college. In college, students are asked to excel in a particular field of study and to develop the related skills and knowledge to be successful after the baccalaureate. If colleges and universities would commit to increasing the current offerings or expanding the strength-based opportunities, students may be more likely to persistent and be satisfied with their collegiate experience. As students are able to demonstrate and articulate to others their successes, future rewards may be seen by the students, employers, and society.

**For Future Study**

The utilization of the strengths-based approach within the context of higher education is quite limited. Research into the efficacy of the strengths-based approach is by extension sparse; however, early research favors the employment of the strengths-based approach in higher education settings. I have five recommendations for further research: (1) further analysis of collected data in this study (2) continued data collection for longitudinal efficacy of the strengths-based approach (3) expansion and further development of strengths-based offerings (4) the study into the stages of strengths development (5) the integration of the strengths-based approach into the large advising environments.

There was a vast amount of data collected in the original study both used in this research and not used for this dissertation. I suggest continued investigation of data collected to understand further the interplay of pre-college characteristics with strengths development and
any possible insights from that data that can further aid our understanding of the efficacies of the strengths-based approach.

In addition to analysis of current data, I suggest the collection and analysis of data on respondents at the end of first, second, and fourth years of college. The data collected could help researchers understand the impact of the strengths approach at critical time periods for college students including the completion of the first year, the transition to a major, and at graduation. Further, the research could look into the satisfaction levels and utilization of strengths-based principles over time in multiple contexts from overall satisfaction with college, satisfaction with choosing and major and/or a career, and with advising. In addition, data can be collected to understand if the strengths-based approach has a significant effect on retention from the first year to the second year and so forth.

Given this study was of a limited intervention, (a reading, CSF instrument, and one hour lecture), the expansion of the intervention within the GS course may yield a more significant impact in the satisfaction and strengths development level of participants. Besides the expansion within the GS, strengths research has been integrated in various settings such as an introduction to public speaking course and leadership development. As the strengths-based approach is integrated into a broader range of collegiate activities, the possibilities for research and collaboration become exponential.

Since the use of the strengths-based approach with college students is in its infancy, the understanding of how students change in the process is essential to the creation and development of offerings. I suggest investigation into the understanding of the stages of strengths development. These studies would be a standard approach to understanding college students and are exemplified by the Seven Vectors of Student Development (Chickering, 1969; Chickering &
Reisser, 1993). With this information, higher education administrators could extend and modify current opportunities on campus that match the development of college students.

Ultimately, a strengths development model and strengths-based advising could be combined and integrated in the larger advising environment. The use of strengths in the GS course is one advising context. Suppose the approach can be utilized in all aspects of the advising process from new student registration until matriculation, what would the benefits to student be during the collegiate life and then after? How might the strengths develop impact the confidence to choose a major, the overall satisfaction with the major choice, and the retention of collection students?

**Personal Insights and Reflection**

I began my strengths journey by taking the CSF, just like the students enrolled in the strengths based course. Over the past eight years, I have learned more about my strengths and the strengths of others. My strengths journey and my work lead me to studying how the use of CSF could help students who were undecided about their major. I thought the application of the CSF would be easy. Students, whom I have taught in smaller settings, have gravitated towards the approach and made logical connections; however, I had never used the instrument with first year students. My student affairs training has taught me that the changes occurring in the first year are critical to the success of students. Therefore, a strengths-based approach should only aide students in a successful transition.

Today, I have a greater understanding the application of the strengths-approach with college students. My resolve for the integration of strengths into the college curriculum has not changed, however my understanding has certainly changed. I believed, prior to the research, that the assimilation of strengths-based principles, even after one intervention, would be easy for
students; however, this research and hearing the stories of students leads me to believe the integration of strengths is complex and not necessarily a linear process.

With this new knowledge and in the information shared, I believe the understanding has been enhanced and will benefit the strengths movement. My fear is that because the results of this study seem relatively inconclusive from the quantitative results, strengths will be ignored or neglected in the future. Although students, who were exposed to strengths, indicated thinking about their strengths less often, I can only hope that future researchers will look into the possible reasons. My hypothesis is that in learning about the strengths, first-year students were engaged in a paradigm shift or reframing of strengths. This shift in paradigm must be explored further. And what excited me about this research is how just one simple fifty-minute intervention could result in students thinking about their weaknesses less often. I suppose that is an accomplishment in itself.

Conclusion

Strengths-based advising is not the only context in which the strengths-based approach can be integrated into the campus environment. Strengths-based approaches have been utilized in paraprofessional staffing training and leadership development activities. What would happen if students experience a multipronged approach to understand and developing their strengths in all academic and co-curricular contexts? If a limited intervention was able to change attitudes and behaviors, an integrated approach has the possibility of changing attitudes and behavior in multiple environments on campus. Some colleges have undergone the additional step of becoming strengths-based campuses. The integration of the strengths-based approach in multiple
contexts, in multiple ways, should allow students to more consistently and more regularly engage in strengths development.

Although some campuses have gone the route of becoming strengths-based campuses, universities do not have to adopt large and expensive measures to integrate strengths-based approaches. Students already feel the university is committed to building strengths, whether that is through the specialization of a major, offering the strengths-based GS course, and the variety of activities available to students. Universities could modify their language and make subtle changes in concepts to adopt strengths-based approaches. There are several examples of possible ways to achieve this aim and one important example is through career development. Since students have already made the connection between strengths and careers, career advising could easily adapt resume and interview workshops to include strengths-based principles into their foundational programs. Overall, the change to a strengths-based focus would not require a significant amount of budget resources, but a shift in paradigm. This, in itself, might enhance the relevance of the first year university experience for undecided students.
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APPENDIX A
SURVEY MATERIALS

Sample Initial Email Invitation

Hello XXXX,

My name is Ryan Tomasiewicz, a staff member and graduate student at the University of Illinois at Urbana-Champaign. As part of my graduate studies, I would like to better understand your experiences at Illinois as an undecided student and the GS 101 course that you are currently enrolled in.

I am asking for your help by completing a web-based survey that will take approximately 10-15 minutes to complete. By participating, you will be eligible for one of five $25 gift cards for use at the Illini Union Bookstore. Please complete this survey by Sunday, August 22, 2010.

To begin the survey and consent to the research, click here or http://go.illinois.edu/GS101Survey.

Please feel free to email me at rtomas@illinois.edu with any questions you may have about participation or the survey. Thank you, in advance, for your participation, Ryan.
Sample Reminder Email Invitation

Hi XXXX,

A couple of days ago, I contacted you by email to ask for your participation in a research study on the GS 101 course that you are currently enrolled in. There is still time to participate in the study by completing a web-based survey that will take approximately 10-15 minutes to complete. By participating, you will be eligible for one of five $25 gift cards for use at the IUB Bookstore. Please complete this survey by Tuesday, August 24, 2010 to be eligible for the gift card drawing.

To begin the survey and consent to the research, click here or http://go.illinois.edu/GS101Survey.

Please feel free to email me at rtomas@illinois.edu with any questions you may have about participation or the survey.

Thank you, in advance, for your participation, Ryan.
Thank you for participating in this research study. By university policy, I must ask you to consent to the research the study. After reading through the consent paragraphs, please log into the survey using your university netid and password below. After completing the survey, your name will be entered in the drawing for one of five $25 gift cards to the Illini Union Bookstore.

To participate, you must be 18 years or older, enrolled in GS 101 course for the fall 2010, and be a first-time freshman. If an error was made and you do not meet these requirements, unfortunately, you are not eligible to participate.

Your participation is voluntary. This means that you can decide whether or not you want to complete this research. In addition, you do not have to answer any questions you do not wish to answer. You are free to withdraw from the study at any time and for any reason. Your decision to participate, decline, or withdraw from participation will have no affect on your grades at, status at, or future relations with this institution or the University of Illinois.

All of your responses will be kept strictly confidential. Results of this research study will be disseminated to researchers in the field of education via a doctoral dissertation, conference presentations and potential journal articles, book chapters, etc.

In order to increase accuracy and minimize the survey time, I am asking for your consent to access your official University of Illinois record that is protected the FERPA. By agreeing to participate in the survey, you will authorize the release of your student record information that includes the following: Gender, Age, Race/Ethnicity, Residency, International Student Status, ACT Scores, ALEKS Score, AP Exams, GS 101 section, Grade Point Average, GPA Credit Hours, Student Attributes (University Residence Hall, James Scholar, First Generation, etc.), Pell grant award status, graduation date and major(s). Your records will be used to assess your progress towards degree and your success in college over the next four to six years. All information collected will be secured and kept confidential.

There are no anticipated risks to participation beyond those that exist in daily life. A benefit to you for your participation is the opportunity to openly discuss and reflect on your personal development. You will help the Division of General Studies improve the undergraduate experience.

Finally, by agreeing to participate in the study, the researchers would like to be able to contact you in the future should the desire for a longitudinal study occur. The research will only contact you through email and you may choose not to participate in future research.

If you have questions about this research, please do not hesitate to contact us by phone 333-4710 or email at rtonas@illinois.edu. You may also contact the University of Illinois Institutional Review Board (IRB) if you have questions about your rights as a research participant (irb@uiuc.edu; 217-333-2670). The IRB is a group of people that reviews research studies to make sure they are safe for participants.

By logging into the survey, you are providing your consent and you understand the consent information on this webpage. To participate and consent, please click the box below.
Pre-Survey Instrument

Welcome
Thank you for agreeing to participate in this survey. After completing the survey, your name will be entered in a drawing. Winners will be notified by email around August 30, 2010.

1. Have you had a close friend or family member attend the University of Illinois?
   Yes
   No

2. How would you describe your opinion of the Division of General Studies?
   I have had a mostly positive experience.
   I have had a somewhat positive experience.
   I have had a somewhat negative experience.
   I have had a mostly negative experience.

3. How would you describe your opinion of General Studies 101?
   I have a mostly positive opinion.
   I have a somewhat positive opinion.
   I have a somewhat negative opinion.
   I have a mostly negative opinion.

4. So far, how satisfied are you with your overall experience at the University of Illinois?
   Very Satisfied
   Satisfied
   Somewhat Satisfied
   Not Satisfied

5. So far, how satisfied are you with your overall experience of academic advising at Illinois?
   Very Satisfied
   Satisfied
   Somewhat Satisfied
   Not Satisfied

6. Before coming to college, have you previously completed a personal inventory such as the Armed Services Vocational Aptitude Battery (ASVAB), Myers-Briggs Type Indicator (MBTI), Strong Interest Inventory, etc?
   Yes
   No (skip to question 9)

7. If you have completed a personal inventory, have the results influenced your choices of future majors or minors?
   Yes
   No
8. If you have completed a personal inventory, have the results influenced your understanding of your personal strengths?
   Yes
   No

9. Before coming to college, have you previously completed the Clifton StrengthsFinder or the Clifton Youth StrengthsExplorer?
   Yes
   No (skip to question 12)

10. If you have completed the StrengthsFinder or the StrengthsExplorer, have the results influenced your choices of future majors or minors?
    Yes
    No

11. If you have completed the StrengthsFinder or the StrengthsExplorer, have the results influenced your understanding of your personal strengths?
    Yes
    No

12. When applying to college, how frequently did you think about your major?
    Often
    Sometimes
    Rarely
    Never

13. When applying to college, how frequently did you think about your strengths?
    Often
    Sometimes
    Rarely
    Never

14. When applying to college, how frequently did you think about your weaknesses?
    Often
    Sometimes
    Rarely
    Never

15. How would you describe your academic major exploration?
    I am settled on one major.
    I am exploring one to three majors.
    I am exploring more than three majors.
    I am completely undecided.
16. How prepared do you feel for college?
   Very Prepared
   Prepared
   Somewhat Prepared
   Not prepared

17. What factors have helped you to feel prepared for college? (Select up to 3)
   High school experience
   Parents
   Friends
   Personal talents, skills, and abilities
   Results on placements tests
   Other (Please explain below)

18. To be successful in college, I need to focus most on my areas of weakness rather than my strengths.
   Strongly Agree
   Agree
   Disagree
   Strongly Disagree

19. How confident do you feel in your ability to choose a major that is right for you?
   Very Confident
   Confident
   Somewhat Confident
   Not Confident

20. What factors have influenced your choice of majors? (Select up to 3)
   Friends
   Parents
   Personal talents, skills, and knowledge
   Career outlook
   Salary potential
   Other (Please explain)

21. I believe that I will transition easily from being a high school student to a university student.
   Strongly Agree
   Agree
   Disagree
   Strongly Disagree

22. In one or two sentences, how would you define a strength?

23. Please identify three (3) strengths that you believe can help you choose a major.
24. To be successful in college, I need to focus most on my areas of strengths rather than weaknesses.
   Strongly Agree
   Agree
   Disagree
   Strongly Disagree

25. I accomplish a lot by using my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

26. I use my strengths in many situations.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

27. I find ways to use my strengths every day.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

28. I know how to build on my current strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

29. I use several strategies for growing my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree
30. In the last eight weeks, an advisor and I have had a meaningful conversation about my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

31. My friends know my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

32. My university is committed to building the strengths of each student.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

33. I can quickly name my own strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

34. Every week, I set goals and expectations based on my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree
Post-Survey Instrument with Strengths

Welcome
Thank you for agreeing to participate in this survey. This survey will be very familiar to you, please take your time to complete the survey fully. There are some new questions in the survey. After completing the survey, your name will be entered in a drawing. Winners will be notified by email around November 1, 2010.

1. Did you participate in sorority or fraternity recruitment this fall?
   Yes
   No

2. Have you held a part-time job during the fall semester?
   Yes, I worked more than 10 hours
   Yes, I worked 10 hours or less
   No, I did not work

3. How would you describe your opinion of the Division of General Studies?
   I have had a mostly positive experience.
   I have had a somewhat positive experience.
   I have had a somewhat negative experience.
   I have had a mostly negative experience.

4. How would you describe your opinion of General Studies 101?
   I have a mostly positive opinion.
   I have a somewhat positive opinion.
   I have a somewhat negative opinion.
   I have a mostly negative opinion.

5. So far, how satisfied are you with your overall experience at the University of Illinois?
   Very Satisfied
   Satisfied
   Somewhat Satisfied
   Not Satisfied

6. So far, how satisfied are you with your overall experience of academic advising at Illinois?
   Very Satisfied
   Satisfied
   Somewhat Satisfied
   Not Satisfied
7. In the last eight weeks, how frequently did you think about your major?
   Often
   Sometimes
   Rarely
   Never

8. In the last eight weeks, how frequently did you think about your strengths?
   Often
   Sometimes
   Rarely
   Never

9. In the last eight weeks, how frequently did you think about your weaknesses?
   Often
   Sometimes
   Rarely
   Never

10. In the last eight weeks, how would you describe your academic major exploration?
    I am settled on one major.
    I am exploring one to three majors.
    I am exploring more than three majors.
    I am completely undecided.

11. In the last eight weeks, do you feel, overall, that you were prepared for college?
    Very Prepared
    Prepared
    Somewhat Prepared
    Not prepared

12. What factors have helped you to feel prepared for college? (Select up to 3)
    High school experience
    Parents
    Friends
    Personal talents, skills, and abilities
    Results on placements tests
    Other (Please explain below)

13. To be successful in college, I need to focus most on my areas of weakness rather than my strengths.
    Strongly Agree
    Agree
    Disagree
    Strongly Disagree
14. How confident do you feel in your ability to choose a major that is right for you?
   Very Confident
   Confident
   Somewhat Confident
   Not Confident

15. What factors have influenced your choice of majors? (Select up to 3)
   Friends
   Parents
   Personal talents, skills, and knowledge
   Career outlook
   Salary potential
   Other (Please explain)

16. I believe that I have transitioned easily from being a high school student to a university student.
   Strongly Agree
   Agree
   Disagree
   Strongly Disagree

17. In one or two sentences, how would you define a strength?

18. Please identify three (3) strengths that you believe can help you choose a major.

19. To be successful in college, I need to focus most on my areas of strengths rather than weaknesses.
   Strongly Agree
   Agree
   Disagree
   Strongly Disagree

20. At this time, have you made changes to your career or major plans as a result of new information learned in GS 101?
   Yes
   No

21. At this time, do you plan to make changes to your career or major plans as a result of new information learned in GS 101?
   Yes
   No

22. At this time, have you made changes to your career or major plans as a result of your performance in an academic course this fall?
   Yes
   No
23. At this time, do you plan to make changes to your career or major plans as a result of your performance in an academic course this fall?
   Yes
   No

24. At this time, have you made changes to your career or major plans based on your Clifton StrengthsFinder results?
   Yes
   No

25. At this time, do you plan to make changes to your career or major plans based on your Clifton StrengthsFinder results?
   Yes
   No

26. How many GS 101 class sessions were spent talking about strengths exploration?
   0
   1
   2
   3 or more

27. Did you complete the Clifton StrengthsFinder instrument for GS 101?
   Yes
   No

28. Did you attend class the day the Clifton StrengthsFinder and StrengthsQuest was discussed?
   Yes
   No

29. Did you complete homework (readings, worksheets, etc.) related to the Clifton StrengthsFinder and StrengthsQuest?
   Yes
   No

30. What topics were most helpful in GS 101? (Select up to 3)
   Registration Process
   Major Exploration
   Strengths Exploration
   Campus Resources
   Inter-college Transfer Process (ICT)
   Other (Please explain)
31. What topics were least helpful in GS 101? (Select up to 3)
   Registration Process
   Major Exploration
   Strengths Exploration
   Campus Resources
   Inter-college Transfer Process (ICT)
   Other (Please explain)

32. Would you recommend the GS 101 to future undecided students?
   Highly Recommend
   Recommend
   Slightly Recommend
   Do not recommend

33. In one or two sentences, why or why not?

*34. I accomplish a lot by using my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*35. I use my strengths in many situations.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*36. I find ways to use my strengths everyday.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree
*37. I know how to build on my current strengths
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*38. I use several strategies for growing my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*39. In the last eight weeks, an advisor and I have had a meaningful conversation about my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*40. My friends know my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*41. My university is committed to building the strengths of each student.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree
*42. I can quickly name my own strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*43. Every week, I set goals and expectations based on my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

44. Would you be willing to participate in a 45-60 minute interview for this study? All participants interviewed will receive a IUB Bookstore gift card for $15. If selected, you will be contacted by email to discuss the individual interview.

   Yes
   No

* Items 34-43 Must received permission from the research director Gallup, Inc. Current contact is Shane Lopez
Post-Survey Instrument without Strengths

Welcome
Thank you for agreeing to participate in this survey. This survey will be very familiar to you, please take your time to complete the survey fully. There are some new questions in the survey. After completing the survey, your name will be entered in a drawing. Winners will be notified by email around November 1, 2010.

1. Did you participate in sorority or fraternity recruitment this fall?
   Yes
   No

2. Have you held a part-time job during the fall semester?
   Yes, I worked more than 10 hours
   Yes, I worked 10 hours or less
   No, I did not work

3. How would you describe your opinion of the Division of General Studies?
   I have had a mostly positive experience.
   I have had a somewhat positive experience.
   I have had a somewhat negative experience.
   I have had a mostly negative experience.

4. How would you describe your opinion of General Studies 101?
   I have a mostly positive opinion.
   I have a somewhat positive opinion.
   I have a somewhat negative opinion.
   I have a mostly negative opinion.

5. So far, how satisfied are you with your overall experience at the University of Illinois?
   Very Satisfied
   Satisfied
   Somewhat Satisfied
   Not Satisfied

6. So far, how satisfied are you with your overall experience of academic advising at Illinois?
   Very Satisfied
   Satisfied
   Somewhat Satisfied
   Not Satisfied

7. In the last eight weeks, how frequently did you think about your major?
   Often
   Sometimes
   Rarely
   Never
8. In the last eight weeks, how frequently did you think about your strengths?
   - Often
   - Sometimes
   - Rarely
   - Never

9. In the last eight weeks, how frequently did you think about your weaknesses?
   - Often
   - Sometimes
   - Rarely
   - Never

10. In the last eight weeks, how would you describe your academic major exploration?
    - I am settled on one major.
    - I am exploring one to three majors.
    - I am exploring more than three majors.
    - I am completely undecided.

11. In the last eight weeks, do you feel, overall, that you were prepared for college?
    - Very Prepared
    - Prepared
    - Somewhat Prepared
    - Not prepared

12. What factors have helped you to feel prepared for college? (Select up to 3)
    - High school experience
    - Parents
    - Friends
    - Personal talents, skills, and abilities
    - Results on placements tests
    - Other (Please explain below)

13. To be successful in college, I need to focus most on my areas of weakness rather than my strengths.
    - Strongly Agree
    - Agree
    - Disagree
    - Strongly Disagree

14. How confident do you feel in your ability to choose a major that is right for you?
    - Very Confident
    - Confident
    - Somewhat Confident
    - Not Confident
15. What factors have influenced your choice of majors? (Select up to 3)
   Friends
   Parents
   Personal talents, skills, and knowledge
   Career outlook
   Salary potential
   Other (Please explain)

16. I believe that I have transitioned easily from being a high school student to a university student.
   Strongly Agree
   Agree
   Disagree
   Strongly Disagree

17. In one or two sentences, how would you define a strength?

18. Please identify three (3) strengths that you believe can help you choose a major.

19. To be successful in college, I need to focus most on my areas of strengths rather than weaknesses.
   Strongly Agree
   Agree
   Disagree
   Strongly Disagree

20. At this time, have you made changes to your career or major plans as a result of new information learned in GS 101?
   Yes
   No

21. At this time, do you plan to make changes to your career or major plans as a result of new information learned in GS 101?
   Yes
   No

22. At this time, have you made changes to your career or major plans as a result of your performance in an academic course this fall?
   Yes
   No

23. At this time, do you plan to make changes to your career or major plans as a result of your performance in an academic course this fall?
   Yes
   No
24. What topics were most helpful in GS 101? (Select up to 3)
   Registration Process
   Major Exploration
   Strengths Exploration
   Campus Resources
   Inter-college Transfer Process (ICT)
   Other (Please explain)

25. What topics were least helpful in GS 101? (Select up to 3)
   Registration Process
   Major Exploration
   Strengths Exploration
   Campus Resources
   Inter-college Transfer Process (ICT)
   Other (Please explain)

26. Would you recommend the GS 101 to future undecided students?
   Highly Recommend
   Recommend
   Slightly Recommend
   Do not recommend

27. In one or two sentences, why or why not?

*28. I accomplish a lot by using my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*29. I use my strengths in many situations.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree
*30. I find ways to use my strengths everyday.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*31. I know how to build on my current strengths
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*32. I use several strategies for growing my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*33. In the last eight weeks, an advisor and I have had a meaningful conversation about my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*34. My friends know my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree
*35. My university is committed to building the strengths of each student.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*36. I can quickly name my own strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

*37. Every week, I set goals and expectations based on my strengths.
   Completely Agree
   Mostly Agree
   Slightly Agree
   Slightly Disagree
   Mostly Disagree
   Completely Disagree

38. Would you be willing to participate in a 45-60 minute interview for this study? All participants interviewed will receive a IUB Bookstore gift card for $15. If selected, you will be contacted by email to discuss the individual interview.
   Yes
   No

* Items 28-37 Must received permission from the research director Gallup, Inc. Current contact is Shane Lopez
APPENDIX B

INTERVIEW MATERIALS

Interview Consent Form

I am Ryan Tomaszewicz, a staff member and graduate student at the University of Illinois at Urbana-Champaign. I am conducting research at the University of Illinois at Urbana-Champaign as partial fulfillment of my doctoral degree requirements. I am inviting you to participate in the interview portion of this study.

As a reminder, the primary goal of this study is to better understand how a university 101 courses (GS 101) undecided students during their first semester. During the 45-60 minute interview, you will be asked about your major and career exploration and the GS 101 course. For example, I may ask you, “What have you learned about your strengths this past semester?”

Participants, who fully complete the individual interview, will receive a $15 gift card to the IUB Bookstore. Your participation is completely voluntary. This means that you can decide whether or not you want to participate in this research. Also, you don’t have to answer any questions you don’t wish to answer. You are free to withdraw from the study at any time and for any reason. Your decision to participate, decline, or withdraw from participation will have no affect on your grades at, status at, or future relations with this institution or the University of Illinois.

You must be 18 years or older, enrolled in GS 101 course for the Fall 2010, and be a first-time freshman. If an error was made and you do not meet these requirements, you are not eligible to participate.

All of your responses will be kept strictly confidential. The interview will be recorded on audio and then transcribed. Once the research is complete, the audio will be destroyed. Your consent form will be kept separate from the audiotape, so there will not be any way to associate your audiotape with your name. When we transcribe the audio, we will change any information you provide that would identify you, and we will destroy the audio after completion of dissertation requirements. Results of this research study will be disseminated to researchers in the field of Education via a doctoral dissertation, conference presentations and potential journal articles, book chapters, etc.

There are no anticipated risks to participation beyond those that exist in daily life. A benefit to you for your participation is the opportunity to openly discuss and reflect on your personal development. You will hopefully help the Division of General Studies improve the undergraduate experience.

If you have questions about this research, please do not hesitate to contact us by phone 333-4710 or email at rtomas@illinois.edu. You may also contact the University of Illinois Institutional Review Board (IRB) if you have questions about your rights as a research participant (irb@uiuc.edu; 217-333-2670). The IRB is a group of people that reviews research studies to make sure they are safe for participants.
Sincerely,

Ryan Tomasiewicz

I. ____________________________, agree to participate in the interview portion of this research. I have been explained and have an opportunity to read the consent form and agree.

_____________________________  __________________
Participant’s signature.             Date
Interview Guide

When applying to college, how did you choose DGS?

When you first started, what majors were you considering at that point?

Why did you choose those majors?

How would you describe your exploration process or level of decidedness?

What have you been thinking about in the last 8wks to help you make that decision?

ACTIVITY

Please write down topics that you remember from GS 101

Rank the most help (1-3)

Rank the least help (10-8)

Can you tell me one or two things you are strong in or think are a strength?

How often do you think about them?

Can you tell me one or two things you are weak in or think are weaknesses?

How often do you think about them?

To be successful in college, I need to focus most on my areas of weakness rather than my strengths.
To be successful in college, I need to focus most on my areas of strengths rather than weaknesses.

*I accomplish a lot by using my strengths.
*I use my strengths in many situations.
*I find ways to use my strengths every day.
*I know how to build on my current strengths
*I use several strategies for growing my strengths.
*In the last eight weeks, an advisor and I have had a meaningful conversation about my strengths.
*My friends know my strengths.
*My university is committed to building the strengths of each student.
*I can quickly name my own strengths.
*Every week, I set goals and expectations based on my strengths.

* Must received permission from the research director Gallup, Inc. Current contact is Shane Lopez
### APPENDIX C

#### QUANTITATIVE VARIABLES

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### Survey Demographics: Citizenship

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### Survey Residency Breakdown

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### Survey Demographics: Pell Grant Eligibility, Educational Opportunity Program, and President’s Award Program Status

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### Survey Demographics: Residents of University Housing and Living-Learning Community Participants

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### Survey Demographics: Miscellaneous College Characteristics

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### Independent-samples T-test

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### Independent-samples T-test with JS

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## Item Analysis for Strengths Index

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210
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APPENDIX E

GS101 MEMO

GS 101 Revised Learning Objectives, Course Topics, and Suggested Work Load

Hello!

Please find attached the new learning objectives, class topics, and suggested work load for GS 101. I think that you will find that the lesson plans from this year are still relevant, but you are welcome to create or revise the plans as needed. Please send me an electronic copy of your syllabus by August 9, 2010.

Zelda has offered to continue to coordinate our bookstore orders. Please notify her at zgarnder@illinois.edu if you plan to use StrengthsQuest and/or the iClickers. She will need to know if you are teaching a 40 person or 100 person section.

If you plan to require some sort of involvement or utilization of a campus resource, please do not ask your students to submit signed activity logs. The activity logs simply caused too many problems last fall. If you successfully used some other type of system in your 2nd 8 weeks section, please share your system with the rest of us. Thanks!

Please let me know if you have any questions. Thank you so much for all of your valuable feedback and suggestions!

Meghan E.M. Hazen
Associate Director
Campus Center for Advising & Academic Services University of Illinois
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Champaign, IL 61820
Phone: (217) 333-4710
Fax: (217) 244-4851
**Learning Objectives**

After completing this course, students will:

- demonstrate a greater understanding of personal strengths, interests, and abilities.
- acquire significant knowledge of the:
  - majors, minors, and pre-professional programs available at Illinois.
  - process and tools available for exploring potential majors and careers.
  - inter-collegiate transfer (ICT) process.
- understand and utilize personal, academic, and career resources offered by the university and specifically the Division of General Studies.
- develop a connection with the instructor and the Division of General Studies.
- understand the relationship between majors and careers.
- understand the tools and procedures related to course registration.
- develop time management and study skills.

**Class Topics**

*Majors exploration (tools, resources, utilizing personal strengths and abilities, etc.)*

*Career exploration (tools, resources, connection to majors, etc.)*

*Course registration*

*ICT process*

*Campus resources (academic, personal, major/career exploration, involvement, etc.)*

*Time management and study skills*

**Learning styles**

*Role of an academic advisor, preparing for appointments, academic advisors as a resource*

*Practical information such as: meeting instructors, email etiquette, understanding a syllabus, etc.*

*Transition from high school to college*

*StrengthsQuest or other strength assessment*

*Globalism, diversity, multicultural competency*

*Academic integrity*

*mandatory topic*
Suggested Work Load

- Thirty minutes of directed assignments per week
  - Worksheets
  - Reading
  - Quizzes
- Five pages of critical writing (as one or several assignments)
- Expectation is that students are spending at least one hour per week on GS 101 related work outside of class

All instructors should provide midterm grades. Ideally, assignments will be graded and returned prior to subsequent assignments. Final grades should be available two weeks after the end of the course.