THE STRENGTHS OF WOMEN

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Dedication page

I dedicate this dissertation to my two daughters, Taylor and Jocelyn, in hopes that they always pursue work that is interesting to them and to my father, Jack P. Royer.
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I am happy to be closing this chapter of my education and look forward to watching my daughters start their own journeys!
ABSTRACT

THE STRENGTHS OF WOMEN

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This study uses the Clifton StrengthsFinder assessment to examine if patterns exist among five most and least frequent signature themes and associated leadership domain areas in students who attend a selective, liberal arts, women’s college, as compared to people and other women in the general population. Understanding whether certain patterns of themes exist could help inform a customized strength-based development curriculum in relation to internship preparation. Three data sets including 964 cases from a selective liberal arts college (C), 14.7 million cases from Gallup (G), and 6.1 million Gallup women (GW) were analyzed using frequency tables, chi-square tests for independence, and relative risk ratios.

While one of the most frequent and three of the least frequent themes overlap across samples, statistically significant differences exist in the patterns for the most and least frequent themes in sample C as compared to samples G and GW. Part of the methodology involved calculating relative risk ratios for sample C compared to samples G and GW. The five most frequent themes and statistically significant RR ratios for Sample C were Input (84.55%, 61.99%), Empathy (75.72%, 26.43%), Learner, Restorative (61.56%, 51.96%), and Intellection (125.4%, 116.78%) and the five least
frequent themes were Command (68.12% (GW)), Significance, Belief (-63.90%, -65.90%), Arranger (-70.01%, -67.37%), and Self-Assurance (-43.26% (G)).

Themes in sample C fell into the following four StrengthsFinder domain areas: Relationship Building (32.84%), Strategic Thinking (32.78%), Executing (23.49%), and Influencing (10.89%). Three of the five most frequent themes in sample C were part of the Strategic Thinking domain area and three of the five least frequent themes were part of the Influencing domain area. Compared to sample G and GW respectively, those in sample C have 26.33% and 42.14% more of a chance of having a theme in the Strategic Thinking domain. Similarly, those in sample C have 27.74% (G) and 16.72% (GW) less of a chance of having themes in the Influencing domain. The patterns identified in this study help education professionals chart a course for strength-based development training, by learning more deeply about these common themes and exploring developmental opportunities related to those specific areas.
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CHAPTER 1: INTRODUCTION

Over the last 50 years, there has been an 80% decrease in the number of women-only colleges in the United States, making the women only educational experience a unique opportunity (Women’s College Coalition, 2014). Students who graduate from the 44 women’s colleges located throughout the United States earn eight percent of the undergraduate degrees awarded from the private college sector (Women’s College Coalition, 2014). The women who attend discover the many benefits of attending college in a single sex environment. Women’s institutions create educational opportunities for women that lead to a long list of firsts such as the first fortune 500 CEO, the first speaker of the house, first to serve as an Army General, and the first to receive the Nobel Peace Prize (Freh, 2015). Hillary Clinton, a graduate of Wellesley, an all-women institution in the Northeast United States, campaigned to become the first women president in the history of the United States. Despite her loss, she still broke the ceiling of being the first female nominee of a major political party in the United States.

Along with the women’s college environment, liberal arts institutions offer a personalized and rigorous educational experience. Attending a women’s liberal arts colleges provides students with access to a wide range of resources from small faculty to student ratios to a supportive residential community. These experiences and resources allow students to develop both inside and outside of the classroom, preparing them for post-graduation opportunities in a wide variety of fields. This type of education faces pressures from many areas, but liberal arts alumni continue to thrive.
Evidence suggests that women can face challenges in their personal development journeys. For example, women tend to hold themselves to a very high standard, as demonstrated by a statement from a Hewlett Packard internal document and made popular by Sheryl Sandberg’s book *Lean In*. The statement, though not published as an original source, describes women as feeling the need to meet 100% of the qualifications to apply for a job, while their male counterparts are comfortable applying if they meet only 60% of the qualifications (Hannan, 2014; Rice, 2014; Sandberg, 2013). Recent books, such as *The Confidence Code*, provide studies and research to support the idea that women are more hesitant than their male counterparts.

Perfectionism is another confidence killer. Study after study confirms that it is largely a female issue, one that extends through women’s entire lives. We don’t answer questions until we are totally sure of the answer, we don’t submit a report until we’ve edited it ad nauseam, and we don’t sign up for that triathlon unless we know we are faster and fitter than is required. We watch our male colleagues take risks, while we hold back until we’re sure we are perfectly ready and perfectly qualified. We fixate on our performance at home, at school, at work, at yoga class, even on vacation. We obsess as mothers, as wives, as sisters, as friends, as cooks, as athletes. Bob Sullivan and Hugh Thompson, the authors of *The Plateau Effect*, call this tendency the “enemy of the good,” leading as it does to hours of wasted time. The irony is that striving to be perfect actually keeps us from getting much of anything done. (Kay & Shipman, 2014, n.p.)

Women’s liberal arts colleges have the platform to build women’s confidence and leadership capabilities. While there are many leadership theories outlining how to develop leaders, using a strength-based approach to leadership development has a great deal of potential, particularly for women. Seligman, Steen, Park, and Peterson (2005) found in their research that those who discovered their strengths were happier and less depressed, but these positive impacts on the individual did not last unless they actively
used or applied their strengths. Equipping women with information about themselves in a positive way can help to build their confidence. Ideally, through the process of applying their strengths, they can also learn to operate in a manner where perfection is not the end goal. The Clifton StrengthsFinder (CSF) assessment provides respondents with their top five signature themes out of 34 signature themes. Along with the themes, respondents also gather information about how to apply these strengths and talents in their work, education, and other areas of life. Colleges can use the data from the CSF assessment to develop strength-based curriculum to prepare students for the roles they will take in the future and prepare educators to work with students around their strengths.

Prior to the Literature Review Chapter, a glossary of terms, in order of relevance, outlines definitions to orient the reader to the key ideas and terminology used in the strength-based development framework and this study.

_Glossary of Terms_

- **Gallup Organization:** Gallup is a management consulting company based in Washington, D. C. Gallup “delivers analytics and advice to help leaders and organizations solve their most pressing problems. Combining more than 80 years of experience with its global reach, Gallup knows more about the attitudes and behaviors of employees, customers, students and citizens than any other organization in the world” (LinkedIn.com, 2017).

- **Sample C:** An anonymous sample of 964 students from a selective, liberal arts, women’s college in Northeast region of the United States. The data set includes
the top five themes for each respondent in the 1-5 rank order. Overall, there are 4,820 themes in the sample. C is color coded as blue in the figures.

- Sample G: An anonymous sample of 14,703,479 respondents, both men and women, from across the world. This sample does not report individual respondents’ top five themes. The data set includes the total number of reported themes, 73,517,395, found in the top five of sample respondents. G is color coded as grey in the figures.

- Sample GW: An anonymous subset of 6,127,604 women respondents out of the 14.7 million sample, from across the world. This sample does not include any reporting of individual respondents’ top five themes. The data set includes the total number of reported themes, 30,638,020, found in the top five of sample respondents. GW is color coded as red in the figures.

- Talent: “A natural way of thinking, feeling or behaving that can be productively applied” (Rath, 2007; Gallup, Inc., 2008, p. 35; Gallup Press, 2016, p. 89).

- Investment: “Time spent practicing, developing your skills, and building your knowledge base” (Rath, 2007; Gallup Press, 2016, p. 89).

- Knowledge: “What you know.” An example of knowledge is a computer programmer having knowledge of how to code. (Gallup, Inc., 2008, p.35)

- Skill: “The basic ability to move through the fundamental steps of a task.” An example of a skill is a basketball player being able to shoot a ball at the hoop and make a basket. (Gallup, Inc., 2008, p. 35)
• Strength: (Talent x Investment = Strength) “A strength is a talent that is honed with the knowledge and skills that are needed to achieve excellence; it is the ability to provide consistent, near-perfect performance in a given activity. The combination of skills, knowledge, and talents come together to generate a strength.” (Rath, 2007; Gallup Press, 2016, p. 89).

• StrengthsFinder Domain Areas: The 34 Signature themes are broken down into four domain areas including Relationship Building, Executing, Influencing, and Strategic Thinking. These four areas are color coded for this study. Rath and Conchie (2008; Rath & Conchie, 2009, n.p; Gallup Press, 2016, p. 284) defined these domains as:
  o Influencing Domain: “Those who lead by Influencing help their team reach a much broader audience. People with strength in this domain are always selling the team’s ideas inside and outside the organization. When you need someone to take charge, speak up, and make sure your group is heard, look to someone with the strength to influence.” Eight of the 34 themes are part of this domain, which is color-coded yellow.
  o Strategic Thinking Domain: “Leaders with great Strategic Thinking strengths are the ones who keep us all focused on what could be. They are constantly absorbing and analyzing information and helping the team make better decisions. People with strength in this domain continually stretch our thinking for the future.” Eight of the 34 themes are part this domain, which is color-coded red.
- Relationship Building Domain: “Those who lead through Relationship Building are the essential glue that holds a team together. Without these strengths on a team, in many cases, the group is simply a composite of individuals. In contrast, leaders with exceptional Relationship Building strength have the unique ability to create groups and organizations that are much greater than the sum of their parts.” Eight of the 34 themes are part of his domain, which is color-coded blue.

- Executing Domain: “Leaders with dominant strength in the Executing domain know how to make things happen. When you need someone to implement a solution, these people will work tirelessly to get it done. Leaders with a strength to execute have the ability to "catch" an idea and make it a reality.” Nine of the 34 themes are part of this domain, which is color-coded purple.

- Signature Theme: The CSF assessment measures talent, otherwise known as a theme. A theme is a combination of talents, knowledge, and strengths. The 34 themes provide a common language that classify talents, based on decades of human research (Rath, 2007, p. i; Gallup, 2000; Gallup Press, 2016). Each person who takes the assessment gets a ranking of these 34 themes, though most respondents only receive a report on their top five themes. Each theme is part of a domain area, has a specific definition, and has a specific number for this study. The following list is a compilation of the themes with abbreviated definitions, organized alphabetically by domain area, taken directly from Appendix C of
First, Break All the Rules, What the World's Greatest Managers Do Differently
written by Curt Coffman and Marcus Buckingham (Gallup Press, 2016, p. 284; Gallup, 2000). Reports provided to respondents provide more detailed definitions.

1. Activator (Influencing): People exceptionally talented in the Activator theme can make things happen by turning thoughts into action. They are often impatient.

2. Command (Influencing): People exceptionally talented in the Command theme have presence. They can take control of a situation and make decisions.

3. Communication (Influencing): People exceptionally talented in the Communication theme generally find it easy to put their thoughts into words. They are good conversationalists and presenters.

4. Competition (Influencing): People exceptionally talented in the Competition theme measure their progress against the performance of others. They strive to win first place and revel in contests.

5. Maximizer (Influencing): People exceptionally talented in the Maximizer theme focus on strengths as a way to stimulate personal and group excellence. They seek to transform something strong into something superb.

6. Self-Assurance (Influencing): People exceptionally talented in the Self-Assurance theme feel confident in their ability to manage their own lives.
They possess an inner compass that gives them confidence that their
decisions are right.

7. Significance (Influencing): People exceptionally talented in the
Significance theme want to be very important in others’ eyes. They are
independent and want to be recognized.

8. Woo (Influencing): People exceptionally talented in the Woo theme love
the challenge of meeting new people and winning them over. They derive
satisfaction from breaking the ice and making a connection with someone.

9. Analytical (Strategic Thinking): People exceptionally talented in the
Analytical theme search for reasons and causes. They have the ability to
think about all the factors that might affect a situation.

10. Context (Strategic Thinking): People exceptionally talented in the
Context theme enjoy thinking about the past. They understand the present
by researching its history.

11. Futuristic (Strategic Thinking): People exceptionally talented in the
Futuristic theme are inspired by the future and what could be. They
energize others with their visions of the future.

12. Ideation (Strategic Thinking): People exceptionally talented in the
Ideation theme are fascinated by ideas. They are able to find connections
between seemingly disparate phenomena.
13. Input (Strategic Thinking): People exceptionally talented in the Input theme have a craving to know more. Often they like to collect and archive all kinds of information.

14. Intellection (Strategic Thinking): People exceptionally talented in the Intellection theme are characterized by their intellectual activity. They are introspective and appreciate intellectual discussions.

15. Learner (Strategic Thinking): People exceptionally talented in the Learner theme have a great desire to learn and want to continuously improve. The process of learning, rather than the outcome, excites them.

16. Strategic (Strategic Thinking): People exceptionally talented in the Strategic theme create alternative ways to proceed. Faced with any given scenario, they can quickly spot the relevant patterns and issues.

17. Adaptability (Relationship Building): People exceptionally talented in the Adaptability theme prefer to go with the flow. They tend to be “now” people who take things as they come and discover the future one day at a time.

18. Connectedness (Relationship Building): People exceptionally talented in the Connectedness theme have faith in the links among all things. They believe there are few coincidences and that almost every event has meaning.

19. Developer (Relationship Building): People exceptionally talented in the Developer theme recognize and cultivate the potential in others. They spot
the signs of each small improvement and derive satisfaction from evidence of progress.

20. Empathy (Relationship Building): People exceptionally talented in the Empathy theme can sense other people’s feelings by imagining themselves in others’ lives or situations.

21. Harmony (Relationship Building): People exceptionally talented in the Harmony theme look for consensus. They don’t enjoy conflict; rather, they seek areas of agreement.

22. Includer (Relationship Building): People exceptionally talented in the Includer theme accept others. They show awareness of those who feel left out and make an effort to include them.

23. Individualization (Relationship Building): People exceptionally talented in the Individualization theme are intrigued with the unique qualities of each person. They have a gift for figuring out how different people can work together productively.

24. Positivity (Relationship Building): People especially talented in the Positivity theme have contagious enthusiasm. They are upbeat and can get others excited about what they are going to do.

25. Relator (Relationship Building): People exceptionally talented in the Relator theme enjoy close relationships with others. They find deep satisfaction in working hard with friends to achieve a goal.
26. Achiever (Executing): People exceptionally talented in the Achiever theme work hard and possess a great deal of stamina. They take immense satisfaction in being busy and productive.

27. Arranger (Executing): People exceptionally talented in the Arranger theme can organize, but they also have a flexibility that complements this ability. They like to determine how all of the pieces and resources can be arranged for maximum productivity.

28. Belief (Executing): People exceptionally talented in the Belief theme have certain core values that are unchanging. Out of these values emerges a defined purpose for their lives.

29. Consistency (Executing): People exceptionally talented in the Consistency theme are keenly aware of the need to treat people the same. They try to treat everyone with equality by setting up clear rules and adhering to them.

30. Deliberative (Executing): People exceptionally talented in the Deliberative theme are best described by the serious care they take in making decisions or choices. They anticipate obstacles.

31. Discipline (Executing): People exceptionally talented in the Discipline theme enjoy routine and structure. Their world is best described by the order they create.
32. Focus (Executing): People exceptionally talented in the Focus theme can take a direction, follow through, and make the corrections necessary to stay on track. They prioritize, then action.

33. Responsibility (Executing): People exceptionally talented in the Responsibility theme take psychological ownership of what they say they will do. They are committed to stable values such as honesty and loyalty.

34. Restorative (Executing): People exceptionally talented in the Restorative theme are adept at dealing with problems. They are good at figuring out what is wrong and resolving it.

*Research Statement and Hypotheses*

This study uses the CSF assessment to examine if patterns exist among the top five signature themes and associated domains in students who attend a selective, liberal arts, women’s college, as compared to the general population who have taken the CSF assessment. Understanding whether certain patterns of themes exist, particularly for undergraduates attending a women’s college, could help to inform a customized strength-based development curriculum in relation to internship preparation. This study examines the research question through multiple hypotheses.

My experience working with college students across multiple colleges, led me to hypothesize that sample C has more dominant strengths in the Strategic Thinking domain area, than people from the general population. This study allowed me to explore this idea in more detail. Data from a previous study supported the structure of examining the most and least frequent themes (Janke, Farris, Kelley, Marshall, Plake, Scott, Sorensen, & Yee,
2015). This study of pharmacy students, as well as the data from the Gallup samples, informed the development of hypotheses around specific themes and domain areas. The hypotheses for this study provide the scaffolding necessary to explore a multidimensional problem with many variables.

- **Hypothesis 1 (H1):** A pattern of themes and domain areas exists in the five most frequent themes in sample C.
  - Hypothesis 1A (H1A): The top five themes in sample C fall predominantly in the Strategic Thinking domain area.
  - Hypothesis 1B (H1B): The most frequent theme in sample C is Learner.
  - Hypothesis 1C (H1C): The five most frequent themes in sample C are different from the five most frequent themes in sample G.
  - Hypothesis 1D (H1D): The five most frequent themes in sample C are different from the five most frequent themes in sample GW.

- **Hypothesis 2 (H2):** A pattern of themes and domain areas exists in the five least frequent themes in sample C.
  - Hypothesis 2A (H2A): The five least frequent themes in sample C fall predominantly in the Influencing domain.
  - Hypothesis 2B (H2B): The least frequent theme in sample C is Self-Assurance.
  - Hypothesis 2C (H2C): The five least frequent themes in sample C are different from the five least frequent themes in sample G.
- Hypothesis 2D (H2D): The five least frequent themes in sample C are different from the five least frequent themes in sample GW.

- Hypothesis 3 (H3): The order of domain area frequency in sample C is different from the order of domain area frequency in sample G.

- Hypothesis 4 (H4): The order of domain area frequency in sample C is different from the order of domain area frequency in sample GW.

Chapter Summary

This chapter provides an overview of the information relevant to this study. The first paragraph discusses the environment of a women’s college, followed by a brief paragraph on liberal arts institutions. Next, the paragraphs highlight some of the personal development challenges that women face, followed by a paragraph on how strength-based development as a framework could be beneficial to women. The last two paragraphs provide an overview of the terminology, research question, and hypotheses that provide the foundation of this research study. The glossary of terms provides clarifying definitions around the many categorical variables central to this study. These terms are critical to outline at the start of this paper.
CHAPTER 2: LITERATURE REVIEW

This chapter reviews the research in the literature in the areas relevant to the research question. This chapter starts by providing information on some of the hallmarks and challenges of liberal arts colleges and women’s colleges. Next is an exploration of leadership development theories, followed by specific sections on strengths development theory and applications. The chapter concludes by providing literature on how internships are an experiential way to develop self-awareness. Internships experiences serve as a forum for students to test their strengths and leadership styles.

Liberal Arts Colleges

There are 4,000 colleges and universities in the United States, less than 200 are private liberal arts colleges (LiberalArtsColleges.com, 2016). A liberal arts college is a four-year institution that tends to be small (1,000-2,500 students), places value on personal relationships between students and faculty members, and encourages students to take courses in a broad range of areas including the humanities, arts, sciences, and social sciences (Grove, 2015). Community is often a quintessential aspect of liberal arts schools and most students tend to live on campus. Counter to this experience is the environment of larger universities where there are more commuter students, large classes, and less direct contact or personal relationships with faculty members.

Students at liberal arts colleges explore multiple interest areas as part of their overall planned program of study rather than specializing in a specific area throughout their degree. For example, a student at a liberal arts college interested in nursing might
decide to major in biology or chemistry, psychology or English, or even art history. The student would not need to take nursing courses or follow stringent requirements for how they spend their summers. The student would most likely need to enroll in a graduate program to be able to enter the nursing career field, yet this can also be true for advancement for those with an undergraduate degree in nursing. That said, if that student decides in two years that nursing is not the career area of preference, then the student could shift into another career area based on the broad undergraduate educational experience.

The press and policy makers tend to scrutinize liberal arts colleges, challenging the relevance of the educational experiences. Recruiters, unless they have attended a liberal arts college often have a hard time understanding how a student could go into business, communications, or marketing if those specific majors do not exist. A recent call with an organization started with the question, does the college have business majors or communication majors? The answer was no, but there are a number of students interested in these fields and many graduates work in these fields. The second part of this conversation is critical to communicate and translate to recruiters situated in a very traditional mindset of recruiting. As the overall cost to attend college mounts, these colleges, as well as others, continue to face pressure to articulate the value of what students are receiving in return for their large financial investment.

In July 2016, over 200 liberal arts college presidents and professors met to discuss the future of the liberal arts in undergraduate institutions. *The Liberal Arts Colleges Illuminated* conference provided a platform for college leaders to describe changing
conditions that challenge the traditions of liberal arts colleges. The value of the education and the risks are very real (Jaschik, 2016). Poskanzer of Carleton College said that liberal arts colleges should be able to show that their graduates are “more engaged citizens, are more involved, and are more intellectually curious. And those, he said, would be powerful arguments” (Jaschik, 2016, n.p.). Anecdotally, a professor teaching entrepreneurship at a business school and at a women’s liberal arts college shared that the students from the liberal arts college are able to grasp concepts more quickly and at a deeper level than their business school counterparts who get so focused on the specific business concepts. A variety of constituents interested in higher education continue to debate the value of a liberal arts education, challenging whether students receiving this type of education are prepared to enter the world (Pyle 2013; Smith 2012). The following paragraphs provide some additional information on the different perspectives related to the purpose and value of the liberal arts model.

An aspect of the College Scorecard, developed by the United States Department of Education, uses success in relation to job outcomes and salary levels after graduating as one measurement of the effectiveness of colleges. This type of measurement adds pressure to colleges to advise students to apply their educations to future work choices, when in fact, the connections are much broader. Relying solely on outcome-based measures to evaluate college success may undermine the full value of an education and the associated learning. Additionally, this type of approach seems to discount the diversity of backgrounds that exists among students attending colleges and universities. The following three examples highlight this point, but does not in any way convey the vast
diversity of backgrounds and situations that exists. First is the student who decides to take a job as an Administrative Assistant position at a college or university in order to take advantage of tuition benefits for his or her graduate education. The pay may be average, the job title basic or entry-level, but the student has the potential to graduate debt free. Second is the student who has a sick family member and takes a part-time job after graduating that allows them more flexibility to spend time with his or her family. The final example is the student who has the dream of owning a restaurant one day and sees the best path to that goal as continuing to serve as a restaurant server. Assuming that every student’s primary goal upon graduating is to obtain the highest paying job possible is a risky approach. That said, intentionally connecting work and learning is logical and rational, especially when the price tag for education is so high. Teaching students how to discover what meaningful work is for them is one way institutions can prepare students to make connections and decisions throughout their lifetime, recognizing their values and life circumstances will continually evolve. Educators should focus on spending time teaching students how to work through these decision points in an effective manner.

Extending these challenges past salaries and post-graduate outcomes data, the Liberal Education and America’s Promise (LEAP) report, commissioned in 2005 by the Association of American Colleges and Universities (AAC&U), analyzed what skills employers are looking for in students as they enter the workforce (Heart Research Associates, 2013). The key findings from surveys and focus groups promote the development of educational practices that best prepare students for future work. The LEAP report found that innovation is an important skill and a student’s chosen major is
less important than the student’s capacity to learn, think critically, communicate, and problem solve. Another finding supports the importance of a broad, liberal arts education. Specifically, “80 percent of employers agree that, regardless of their major, all college students should acquire broad knowledge in the liberal arts and sciences” (Heart Research Associates, 2013, n.p.). Finally, the report found that students’ abilities to acquire and apply knowledge is critical and employers desire an electronic format for capturing student experiences.

A counter perspective to the LEAP report is a study published by the National Association of College’s and Employers (NACE) that highlights the criteria that employers look for when recruiting at schools (NACE, 2017). The NACE report asked employers to respond to a series of statements using a scale of not-important to extremely important. Majors offered is the statement that had the highest percentage of employers indicating extremely important at 61.5%. In order of importance, the next statement with the highest percentage of employers indicating extremely important is the quality of programs and following that is a statement about past recruiting experience at the school. The list continues with 11 other items, but the argument from this data provides an alternative or opposite perspective on the importance of major. The LEAP report did not directly say that a student’s major was not important, but rather focused more on comparing the major’s importance to other skills that students were acquiring. The report from NACE shows that employers still play close attention to the majors offered when deciding where to recruit. This is a true testament to the need for the pendulum to be
somewhere in the middle versus on the extremes. Both the values from the LEAP report and NACE study need considered.

Another perspective to examine is the gap that exists in how students perceive their own skill level or preparedness to enter the workforce versus the employers’ perceptions of students in these areas. A study done by the Association of American Colleges and Universities (AACU) surveyed students at 613 public and private two and four-year colleges (Jaschik, 2015). The study compared student results with results from a survey of employers yielding 400 responses from organizations with at least 25 employees and at least a quarter of their new hires coming from two or four-year degree programs (Jaschik, 2015). The bottom line from the study is that students consistently rank themselves higher than employers do. For example, 64% of students said they are well prepared to work in teams, while only 37% of employers thought this was the case. This trend in students over predicting their preparedness held true in 16 other areas. A more positive outcome of this study for educators was the feedback from 60% of responding employers that both a range of knowledge and specific skills were important to have when entering the workforce. Only 15% said only specific skills were important.

In summary, liberal arts institutions are facing challenges in the 21st century, yet also present strengths in educating students broadly and pushing students to develop skills critical to successful post-graduation opportunities. Depending on the audience, the perspectives on the value of a liberal arts education can vary greatly. Creating opportunities for dialogue is important to keeping the hallmarks of a liberal arts education relevant to today’s world.
Women's Colleges

Adding another dimension to a liberal arts educational experience is learning in a single sex environment. There are 44 women’s colleges in the United States making women’s college graduates a very small percentage of all college graduates (Women’s College Coalition, 2014). Providing educational opportunities for women that were not always accessible is the basis for why women’s colleges exist. Women’s levels of access to a college education have increased dramatically since the early 1900’s. The niche women’s colleges still fill today is providing access to a learning environment that pushes students attending to excel and find their voice in a different way than they would in a co-educational learning space. The next few paragraphs highlight certain characteristics of both women’s colleges and the students who choose to attend these schools.

Carrie Wofford, a Democratic strategist who served as a senior counsel in the Senate, as a policy aide in the Clinton White House, and in the Labor Department under Robert Reich, shared some reasons why women should consider this type of educational environment (2013). Studies show that women participate more actively in the classroom when they are in a mainly single sex space and are challenged more academically (Women’s College Coalition, 2014). Additionally, connecting back to employers as an important constituent, a study by Day (2012) showed that 81% of women reported that their women’s college prepared them for their first job, compared to 65% of women responding from public universities. Day also found that 51% of women attending women colleges attend graduate school compared to 27% of women who attend public
institutions (Day, 2012). Women’s colleges also allow students to take leadership roles in all sorts of clubs and activities that happen outside the classroom. Similar to the relational aspect offered by liberal arts colleges, the campus environment tends to be supportive in terms of peer, staff, and faculty relationships (Wofford, 2013).

Another important area to understand is the demographics of students who chose to attend women’s colleges. Sax, Lozano, & Vandenboom (2015) explored the unique characteristics and patterns of change at women’s colleges from 1977-2011. Students who attend women’s colleges tend to be more racially and ethnically diverse with only about half of women identifying as White. In recent years, students also tend to come more from low-income family backgrounds, indicating a shift over the last thirty years. Students have a high view of their academic confidence and tend to have strong and regular connections with faculty members. Often, the women who attend do so in lieu of the college being a women’s college, but upon graduating, look back and clearly see the benefits offered in the single-sex educational environment.

Sax, Lozano, & Vandenboom’s study also identified five reasons that respondents deemed very important in a survey regarding why women attend a women’s college. These include, “that the college has a very good academic reputation (78.4%), the graduates get good jobs (66.8%), they were offered financial assistance (64.2%), they wanted to attend a school of this size (58.9%), and having visited the campus (56.8%)” (Sax, Lozano, & Vandenboom, 2015, p ix). While these findings are interesting, it is important to note that these reasons are the same as those listed by students from coeducational schools in terms of why they attend college. However, Sax, Lozano, and
Vandenboom (2015) did find that high school guidance counselors, college counselors, and others are more likely to play a role in influencing women to attend. Students entering women’s colleges also seem to be more civic minded, described as being more likely than coeducational students “to value helping others who are in difficulty (81.7%), influencing social values (53.8%), helping to promote racial understanding (50.7%), becoming a community leader (45.5%), participating in a community action plan (43.9%), and becoming involved in programs to clean up the environment (33.8%)” (Sax, Lozano, & Vandenboom, 2015, p. x).

In summary, “the educational climate at women’s colleges may benefit from the fact that these institutions tend to attract students who are especially ambitious, intellectually curious, creative, and social change-oriented” (Sax, Lozano, & Vandenboom, 2015, p. xii). Women’s colleges provide students with an environment that is both intellectually stimulating and civically minded. Coupling that experience with a liberal arts orientation creates a robust learning experience for the students.

Leadership Development

Developing women as leaders throughout their college experiences equips them with valuable opportunities as they enter the workforce and make decisions about their career paths. As aforementioned, a women’s college provides numerous leadership roles for students. Designed effectively, leadership programs can offer a holistic approach to education that emphasizes the development of skills that employers and educators are
seeking (Klimoski & Amos, 2012). Relevant to this study are the aspects of these leadership theories that focus on understanding oneself and how one interacts with others.

Many similar, though in the literature, somewhat disconnected ideas of leadership exist. For example, Kouzes and Posner define five broad dimensions of leadership, which include “model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart” (2002, p. 13). On the other hand, Sadler defines leadership learning as a process that involves the social process, influence, interactions, and outcomes (2003). Sadler’s main point is that leaders do not operate in a vacuum, but rather are representative of their group and the community or setting; in order to determine what makes a good leader, one cannot just look at the person. The Center for Creative Leadership’s model of leadership, draws from multiple theories and frameworks, but holds some key assumptions (Velsor, McCauley, Moxley, 1998). First, they assume leadership development is the growth of a person’s effectiveness dealing with different roles and processes. Second, they assume that leadership development is synonymous with personal development. Finally, development occurs over time. The future of leadership is about how people work together, not on how authoritative leaders provide directives to followers (Drath, 1998).

A commonly used leadership framework in many undergraduate leadership programs is the social change model of leadership development (Higher Education Research Institute, 1996). Similarities exist within this model and those previously mentioned, but this approach is frequently used with undergraduate students. The social change model frames leadership in terms of seven C’s: conscious of self, congruence,
commitment, collaboration, common purpose, controversy with civility, citizenship, and change. These seven components fall into the three categories of individual values, group values, and community values. These ideas all build on similar ideas of self-awareness, social context, and ability to grow and develop.

Despite many theories, examples, and personal cases in the literature, the lack of a universal or agreed upon theory has made studying the effectiveness of leadership development a challenge. Not only is there a lack of agreement on a common theory, but the varying levels of programs and resources across college campuses is also markedly different. Recently, a study in 2012 examined the design and delivery of collegiate leadership programs (Owen, 2012). This study looked at numerous aspects of leadership and evaluated various components of leadership programs based on responses from 89 different colleges. Fifty percent of respondents said that they do not have a dedicated space for a leadership center on campus. Second, the range for annual budget size for leadership programs was $0-$300,000, with the mean being $43,845. This number indicates a wide range in size and scale of programs, but is difficult to generalize. Third, the number of faculty and staff devoted to the programs ranges as well, though this number would also be more useful if tied to the size of the school in the form of a ratio of student to faculty/staff. In terms of strategic planning, the data shows that, “few leadership programs engage in regular strategic planning (14%, n=12)” (Owen, 2012, p. 17). Finally, “despite the illusion that most universities now have sophisticated collegiate leadership development programs, many campuses identify themselves in the early stages of building critical mass (48%, n=42) or working to enhance quality (35%, n=30)”
(Owen, 2012, p. 10). Only a handful of the reporting programs stated that the programs were institutionalized (Owen, 2012). This study demonstrates that there is a long way to go in terms of colleges offering leadership training in a consistent and impactful manner. Colleges are still struggling with where and how to integrate leadership development into both curricular and co-curricular programs.

Leadership is a complex topic that often is a catch all for a number of different developmental areas. The theories provide frameworks around personal development and adapting to situational contexts. If done strategically and intentionally, leadership development can happen in many ways during a student’s college experience. However, recent studies show that the level of commitment to integrating leadership varies across institutions. The next section outlines the specific framework for this study, providing an anchor to a certain model of leadership development.

**Strength Development Theory**

As demonstrated by the leadership theory examples noted above, a starting point to developing strong, effective leaders is to assist them in better understanding themselves and others. Self-awareness is a critical quality for students to understand as it relates to their personal leadership styles in an ever-changing world (Astin & Astin, 2000). Donald Clifton, founding father of strength-based psychology, believed that leading with strengths or what is right with people, as opposed to trying to fix weaknesses, creates leaders that are more effective. This theory originated in the mid-1950s, when Clifton, an educational psychologist, started exploring positive and negative
attitudes, relationships, and rapport between students and teachers (Clifton & Anderson, 2002; Clifton, Hollingsworth, & Hall, 1952; Dodge & Clifton, 1956; Hodges & Harter, 2005).

Over the last half of the century, studies in multiple environments, with multiple audiences have tested the strength development theory. While a strength-based approach may seem intuitive, it is not the norm for people or managers to lead with strengths. A global Gallup poll demonstrated that across multiple countries the majority of managers would choose to try to improve weaknesses instead of focus on strengths. For example, in the United States, only 41% of respondents thought knowing their strengths would help them improve the most (Hodges & Clifton, 2004, p. 4). Some business firms are slowly starting to move to this model for their performance reviews, but this is still the minority of organizations. The body of literature examining the effectiveness of the strength-based approach is rich with data and evidence; the next paragraphs explore some of the studies.

A study examining the text of college students’ reflection papers identified three stages of strength development (Clifton & Harter, 2003; Hodges & Harter, 2005). Identifying and understanding talents is the first step. This can come from an awareness of activities or work that comes naturally or provides satisfaction, such as planning an event or speaking in public. The second stage is for students to practice and integrate the identified talents into one’s self-view. This is an important area where educators can provide opportunities for students to test and reflect on their talents. This could be in courses or in activities like clubs, sports, or in professional spaces like internships.
externships, or jobs on campus. The third stage is for students to use the information and data they receive to shift from practicing to altering their behavior. This third area is also a space where educators can help students interpret the feedback they get from testing their strengths so they can effectively adjust their behaviors. Educators must find simple ways for students to recognize they are using a talent, intentionally allow them to seek out ways to practice and hone their talents within the context of different social situations.

Neuroscience also supports the strength-based approach, finding that between the ages of three and 15 the brain strengthens frequently used synaptic connections and weakens those used less frequently. This provides evidence to support the idea that using a talent is something that a person is conditioned to do. Another key concept of this theory is the premise that individuals must acknowledge the benefit of working from a place of strengths, focus on communicating those strengths to others and explore opportunities that build on the strengths (Hodges & Harter, 2005).

Clifton and his team of researchers identified specific terms and definitions important to understanding the strength development theory. The Introduction Chapter includes a glossary with a full list of the critical terms and definitions relevant to this study. This paragraph outlines a few of the key terms as defined by the Gallup Press (2016). First, a talent is a naturally recurring pattern of thought, feeling and behavior. A strength is a combination of a talent enhanced with the necessary knowledge and skills to achieve excellence; it is the ability to provide consistent, near-perfect performance in a given activity (Gallup Press, 2016, p. 89). To support the theory, Gallup created the
Clifton StrengthsFinder (CSF) assessment as a standardized way for people to learn about their particular strengths. Despite the name of Clifton StrengthsFinder, the nomenclature that Gallup uses for the results of the assessment is Signature theme, not strength. The theme is theoretically a measure of a combination of talents. This study refers to the outputs generated from the assessment tool simply as themes, not the more formal term of Signature themes.

The CSF assessment measures 34 different themes which include: Achiever, Arranger, Belief, Consistency, Deliberative, Discipline, Focus, Responsibility, Restorative, Activator, Command, Communication, Competition, Maximizer, Self-Assurance, Significance, Woo, Adaptability, Connectedness, Developer, Empathy, Harmony, Include, Individualization, Positivity, Relator, Analytical, Context, Futuristic, Ideation, Input, Intellelction, Learner, and Strategic. Each of these 34 themes has a full definition derived from many years of research. The glossary in the Introduction Chapter includes brief definitions of each theme. The shorter definitions do not compare to the breadth of information provided to respondents in their personalized reports, which is the same information as can be found in the StrengthsFinder 2.0 book (Rath, 2007).

The 34 signature themes cluster around four leadership domain areas including Relationship Building, Executing, Influencing, and Strategic Thinking (Rath & Conchie, 2009, n.p.; Rath & Conchie, 2008). The domains connect the themes with leadership development, but overtime also became a way to categorize the themes in larger categories. People with Relationship Building themes connect people to one another. People with Executing themes translate ideas into action. Those with Influencing themes
sell ideas to larger audiences. Finally, people with Strategic Thinking themes gather data and information to make informed decisions. Table 1 illustrates which of the 34 themes are associated with each of the four domains.

<table>
<thead>
<tr>
<th>Relationship Building</th>
<th>Influencing</th>
<th>Executing</th>
<th>Strategic Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability</td>
<td>Activator</td>
<td>Achiever</td>
<td>Analytical</td>
</tr>
<tr>
<td>Connectedness</td>
<td>Command</td>
<td>Arranger</td>
<td>Context</td>
</tr>
<tr>
<td>Developer</td>
<td>Communication</td>
<td>Belief</td>
<td>Futuristic</td>
</tr>
<tr>
<td>Empathy</td>
<td>Competition</td>
<td>Consistency</td>
<td>Ideation</td>
</tr>
<tr>
<td>Harmony</td>
<td>Maximizer</td>
<td>Deliberative</td>
<td>Input</td>
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<td>Includer</td>
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<td>Individualization</td>
<td>Significance</td>
<td>Focus</td>
<td>Learner</td>
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<td>Positivity</td>
<td>Woo</td>
<td>Responsibility</td>
<td>Strategic</td>
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<td>Relator</td>
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<td>Restorative</td>
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</table>

No particular domain area is valued more than another in the research literature and a person does not need themes in all four domains to be an effective leader. Each of the domain areas represent a type of leadership style and as highlighted in the overview of leadership theories, the effectiveness of each style can vary greatly depending on the situational context. Teams that have representation of multiple themes and multiple domain areas have more diversity of thoughts and styles in how they approach work.

One of the central elements of strength based development theory is the ability to use the CSF assessment created in the late 1990s as a way to help respondents identify their talents and learn how to use them to their advantage. This makes the theory and ideas very tangible. Identifying an individual’s greatest areas for building on their
strengths is the primary purpose of the online tool (Asplund, Lopez, Hodges, & Harter, 2009). Applying the results of the assessment is the start of a strength-based development process in both work and academic settings (Asplund, et al., 2009). When developing the tool, researchers used data from more than two million individuals. Research on the tool indicates high reliability, validity and utility of the tool; the Research Design and Methods Chapter goes into more detail on these aspects of the assessment.

Over 14 million individuals across the world have taken the CSF assessment, which is available in over 20 languages (Gallup Strength Center, n.d.). The purpose and design of the tool is oriented toward personal development, not for selection or placement in a job. The tool itself includes 177 item pairs, reduced from over 5,000 items. Respondents have 20 seconds per pair to answer. Ideally, the short time limit forces gut responses, with the entire assessment taking approximately 45 minutes to complete. Once completed, respondents receive a report (See Appendix A) that provides detailed information on their top five themes, of which there are 278,256 unique combinations (Asplund, Agarwal, Hodges, Harter & Lopez, 2014; The Gallup Organization, 2000-2005). This basic report costs approximately $15. Individuals can pay an additional cost to receive a more detailed report that lists either their top ten or all 34 of their themes. The results serve as a preliminary hypothesis that students or professionals can test and affirm through experiences (Schreiner, 2006).

Strength development theory is a positively oriented model of leadership development. The theory has a very practical tool in the CSF assessment that brings the
theory to life. The next section of the literature review specifically looks at the application of strength development theory and some of the research of relevant studies.

Applications of Strength Development Theory

Multiple settings from business, to healthcare, to education and varying levels within organizations from CEOs to customer service representatives use the CSF tool. The tool is a very reliable instrument, providing data to individuals about their top themes that helps build self-awareness and helps teams work together. The “themes help individuals form a language of success upon which they are able to articulate what they do well. Specific developmental programs are tailored to meet the unique needs of clients” (Hodges & Clifton, 2004, p. 8). Another benefit of providing individuals with a language to share their talents is the confidence that builds, particularly if the results validate feelings or skills that they already thought they had. This is particularly helpful to younger students or graduates just entering the workforce.

Understanding whether certain patterns of themes exist, particularly for women undergraduates, could help to inform a customized strength-based development curriculum. “Knowing where your top themes fall within these domains can shed light on how you contribute to groups or teams by describing how you make things happen, influence others, build relationships, and process information” (Gallup Press, 2016, p. 283). Louis (2009), in reviewing and critiquing existing research on strengths development theory, suggests further studies explore which components of educational approaches are the best at producing desired outcomes.
Many studies over the past decade look at the impacts of StrengthsFinder in both academic and professional settings. Hodges and Harter (2005) reviewed several studies indicating that, “strengths development has a positive impact on student productivity, life choices, self-confidence, goal-directed thinking, interpersonal relations, and academic success” (p. 190). Harter (1998) took a longitudinal approach, looking at high school students across four years. Those who took the CSF assessment and then participated in talent-based interviews with their teachers had statistical differences in their absenteeism, tardiness, and grades as compared to the control group who received no strength based intervention. In another study, Hodges (2003) specifically found that after taking the CSF assessment, receiving results and reading a selected book relevant to CSF, 59% of respondents felt strongly they were able to make better life choices, 60% felt more focus on their strengths made them feel more productive, and 63% reported an increase in self-confidence. While this last study is not a student specific population, the behavioral outcomes are promising indicators of the power of the CSF assessment and the behavioral changes that can occur with some educational framing in addition to receiving the report.

A more recent study explored first year college students’ strength awareness and their perceived leadership development. “The results of this study suggest that systemic strength-based approaches and programs on college campuses may result in extended benefits for students’ leadership development” (Soria, Roberts, & Reinhard, 2015, p. 101). The authors recommend additional research to understand how a strength-based approach can help prepare students to contribute to society. At a more micro level, they
suggest, “practioners should proactively structure opportunities for students to receive frequent affirmations regarding their use of strengths” (Soria, et al., 2015, p. 100). Working with students based on their unique combination of strengths is important, however, administrators and faculty could benefit if they understand whether particular patterns exist in the strengths of their student populations. Furthermore, if the student population does exhibit certain patterns or domain areas, then administrators and faculty could spend additional time learning more about the more frequent themes and domain areas. Ideally, faculty or administrators should understand the details of all 34 themes, but to be well versed in all the areas is difficult. Even understanding and remembering the details of one’s own top five themes and the definitions is a detailed task. For the language to become second nature, it often takes a lot of reinforcement and opportunities to verbalize one’s top themes. Narrowing the focus by encouraging educators to understand common themes in a population can help prepare educators to work more effectively with students.

Another recent study focused on using the CSF assessment with a sample of student pharmacists attending five Midwestern pharmacy schools in order to understand if specific patterns exist within this population of students. Specifically, the study looked to “describe student pharmacists’ Signature Themes from the Clifton StrengthsFinder across five Midwestern pharmacy intuitions and to compare themes by gender, institution, and undergraduate population” (Janke, et al., 2015, p. 1). All students took the CSF assessment and received their top five themes. The four domain areas of Relationship Building, Influencing, Strategic Thinking, and Executing categorized the
results and provided another lens for reviewing the data. The study found that the top five themes among their sample size of 1,244 students were Achiever, Harmony, Learner, Responsibility, and Empathy. In terms of gender, women were more likely to have themes in the domains of Executing and Relationship Building and males were more likely to have themes in the domains of Influencing and Strategic Thinking. These findings were statistically significant. Overall, they found pharmacy students had more strengths in the Executing domain and less in the Influencing domain. The structure of the pharmacy study helped define the parameters this study, which compares a specific college population to the larger population samples from Gallup. The reporting of the data happened differently in the study of pharmacy students, which led to a different method of statistical analysis than this study.

Finally, strength development theory directly links with the discipline of positive psychology. Data from the CSF assessment intersects with two areas of positive psychology that are particularly interesting to examine in relation to a sample of women. Evidence exists that engaging with the CSF assessment and becoming more self-aware, leads to higher levels of hope, subjective well-being, and confidence. These areas could directly improve student outlooks and, in particular, enable women, who tend to have more psychological distress during their college experiences, to have an opportunity to connect with others (Sax, Lozano, & Vandenboom, 2015). Measuring the impact of the CSF tool in relation to these particular psychological constructs are outside of the scope of this study; however, women who are able to develop confidence and have a better state of well-being may be more likely to succeed in their internships or post-graduation
experiences. They also might be more likely to find work that is meaningful to them.

While the research question in this study does not focused on measuring these areas, if the ideas holds true, there are further benefits to using the CSF tool at a selective, liberal arts, women’s institution that could be explored in future research.

*College Internship Experiences and Student Development*

One way to offer experiential learning opportunities where students have a chance to develop their self-awareness, explore how they relate to others within a social context, and grow and develop is through internship experiences. These practical work experiences during a student’s college years have increasingly become a hallmark of higher education as a way for students to learn while on the job. The experiential learning component allows students to explore their talents and apply what they are learning in the classroom to a real-world environment, which naturally comes with more ambiguity. Ideally, the internships take place early in a students’ academic preparation so the practical experience can inform the classroom conversation and vice versa.

A number of different types of internships or on the job training programs exist and every institution provides varying levels of student support in terms of procuring funding and educational programming. There are paid and unpaid summer experiences, academic year internships, and co-ops where students take time off from school to do work that relates to graduation or academic requirements. NACE defines an internship as:

A form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional
setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths; and give employers the opportunity to guide and evaluate talent. (NACE, 2011, n.p.)

Internships can vary in length, but a common time period is anywhere from eight to 12 weeks at approximately 30 hours per week at a minimum. Numerous studies have explored how internships relate to a student’s job prospects, though there seem to be few studies that consider the difference between paid and unpaid opportunities. Many schools have developed robust unpaid internship programs to provide students with access to opportunities to learn. Ultimately, internships provide a very rich opportunity to learn in the field. The following paragraphs discuss some of the research in areas related to women, the benefits of internship participation, and the benefits of paid versus unpaid internships.

Kim and Alvarez (1995) constructed a study, Women-Only Colleges: Some Unanticipated Consequences, with slightly over 10,000 potential respondents of which a little over 1,000 came from 34 women’s only colleges. The total usable respondents determined by who completed two surveys was 3,249 from co-educational institutions and 387 from women’s colleges. The study sought to highlight the organizational effectiveness of women’s colleges using three dimensions: academic development, social skill development, and career preparation. One key finding was that “participation in college internship programs, leadership programs, having peers who work off campus, and receiving emotional support from faculty were positively associated with self-reported job-related skills” (Kim & Alvarez, 1995, p. 658).
More recently, Gallup conducted a study of 30,000 undergraduate students attending a variety of institutions, both public and private, to examine the key factors that led to engagement in the work place post-graduation (Gallup, Inc., 2014). Gallup did not breakdown the findings based on responses from men and women. “Overall, the Gallup-Purdue Index shows that 39% of college graduates who are employed full time for an employer (excluding the self-employed) are engaged in the workplace, the plurality (49%) are not engaged, and 12% are actively disengaged” (Gallup, Inc., 2014, p. 8). This data should concern employers. The type of college did not play much of a factor when determining engagement. Instead, the study found that for those engaged in work, the important contributing factors are deep learning, experiential learning, and feeling supported while in college. Specifically, the study found that “just 6% of graduates strongly agree they had a meaningful internship or job, worked on a long-term project, and were actively involved in extra-curricular activities” (Gallup, Inc., 2014, p. 6). This small percentage refers to the students who experienced all three of these areas, whereas the percentage who experienced each of the individual areas is higher. Another important finding from the study is that “if employed graduates feel their college prepared them well for life outside of it, the odds that they are engaged at work increase nearly three times” (Gallup, Inc., 2014, p 7). This supports the finding from Kim and Alvarez’s (1995) work, which showed a positive association with these areas in terms of self-reported job related skills. This has implications for the perception of an institutions effectiveness and the ability of an institution to develop students who will be active contributors to the workforce.
Based on the literature review thus far, the three areas that Gallup has connected to engagement in the workforce are not surprising. However, the percentages of students reporting that they have had these opportunities in college is notable. For example, only three percent of students responded strongly agree to all six statements measuring levels of support, deep learning, and experiential learning. Twenty-nine percent of students strongly agreed with the statement, “I had an internship or job that allowed me to apply what I was learning in the classroom” (Gallup, Inc., 2014, p.10). If recent graduates strongly agree that they had any of three experiential learning opportunities — an internship related to their studies, active involvement in extracurricular activities or a project that took a semester or more to complete — their odds that they strongly agree that their education was worth the cost increase by 1.5 (Gallup, Inc., 2015, p. 14). This suggests even broader implications for institutions related to the value proposition of a college experience and could lend support to the argument presented earlier in this chapter of why liberal arts educations are valuable. This study does not break down the data by specific type of school other than public or private, or analyze the results based on sex. Filtering the data based on liberal arts colleges or women’s colleges might show interesting results since providing these supportive, deep and experiential learning opportunities are hallmarks of the education at these types of colleges.

Aside from how participation in internships affects preparedness, there is also a question about how unpaid and paid internships differ in terms of student outcomes. According to Jeff Selingo (2016), the role of the internship, particularly paid internships, is one of the massive shifts in how college graduates launch into post-graduation roles.
Many organizations supply their talent pipelines through internships. Some organizations fill 50-75% of their full-time open positions from interns (Selingo, 2016; Collegiate Employment Research Institute at Michigan State University, n.d.). A mixed-method study by the University of Georgia Career Center examined the benefits of unpaid internships (Crain, 2016). Three-hundred-forty-eight alumni from UGA were included in the survey, with a subset of that group selected for interviews, limiting the generalizability of the findings to other college environments. During the interviews, Crain found “positive outcomes in the areas of confirming or rejecting career interests, setting and attaining career goals, quality of supervision, and networking” existed for those doing unpaid internships (2016, p. 18). He also found that connecting unpaid internships more directly to the curriculum might lead to better educational outcomes, leading to greater benefits for students. A clear disadvantage to unpaid internships is the lack of direct transitions to full time job opportunities as often happens with paid internships. However, the benefit of learning about career interests might be equally valuable as students strive to figure out what kind of work is meaningful to them. Participating in these experiences might actually lead to more engaged employees as suggested by Gallup, Inc. (2014), thus the immediate benefit of a full-time offer might not exist, but a longer-term effect linked to more engaged graduates might.

Teaching students how to reflect and learn from an internship experiences, or explore their strengths is a shift in how they normally learn. Typical classes have a syllabus and a teacher either leading or facilitating conversations with a goal of educating students in a specific subject area. Learning how to discover your own interests and
reflect on experiences is more of an individual journey without an authorized external
director. A student may have mentors or advisors providing input, but ultimately they are
the ones in the position of power to make decisions. Selingo highlights this difference in
learning process stating, “learning in the workplace, however, is mostly self-directed”
(2016, p. 124). This type of self-directed learning or transfer of knowledge is very
challenging for students who have mainly participated in very structured learning
experiences, led by others. Internship pre-and post-programming can help guide this
transfer of knowledge or provide some scaffolding to make the work seem a little easier.
Students who spend some time learning about themselves prior to starting an internship
can gain valuable anchor points that they can explore further while interning at an
organization. Students can continue to develop these personal insights when they return
to the classroom. Three things students should come away with during their college
experience include learning a job, learning social skills, and finding a network (Selingo,
2016). Arguably, having a better understanding of one’s own strengths would make
attaining any of these three goals more likely.

Chapter Summary

The literature review provides evidence as to why this study is important. This
chapter examines liberal arts colleges and women’s colleges to provide context around
the population identified as the target sample for this study. The liberal arts tradition is
under constant pressure. Women’s colleges provide a unique type of educational
experience and attract a particular type of student. Many leadership development
theories exist. This chapter specifically examines the literature around strength development theory and the CSF assessment, a tool that makes this theory come to life. To understand more about how students can develop their strengths and talents, the theory of strength development, a well-studied framework with a well-constructed assessment tool provides a strong base for this study. The final section looks at the literature around internship experiences, as this is one of many platforms for students to learn about themselves and test their strengths and leadership styles in a real-world environment.
CHAPTER 3: RESEARCH DESIGN & METHODOLOGY

Design Overview & Hypotheses

This study used the Clifton StrengthsFinder assessment to explore the five most and least frequent themes and domain areas of the nearly 1,000 individuals (sample C) from a small, selective, liberal arts, women’s college as compared to individuals who have taken the assessment as part of the general population. The comparison samples included one from Gallup organization of 14.7 million respondents (sample G) and one from Gallup of 6.1 million women (sample GW). The study statistically tested the data in order to identify differences in the patterns of themes and domain areas. A previous study looking at the strengths of pharmacology students, referenced in the Literature Review chapter, provided a model in the literature for comparing the five most frequent and five least frequent themes (Janke et al., 2015).

The study tested the research question by using multiple hypotheses in order to establish clear parameters. There are four main hypotheses, with hypotheses one and two having a series of related sub-hypotheses. Due to the multiple samples and variables in this study, sharing both the hypotheses and null hypotheses in this section provides clarity around the hypothesized outcomes.

- H1: A pattern of themes and domain areas exists in the five most frequent themes in sample C. H10: There is no pattern of themes and domain areas in the five most frequent themes in sample C.
H1A: The top five themes in sample C fall predominantly in the Strategic Thinking domain area. H1A₀: The top five themes in sample C do not fall predominantly in the Strategic Thinking domain.

H1B: The most frequent theme in sample C is Learner. H1B₀: Learner is not the most frequent theme in sample C.

H1C: The five most frequent themes in sample C are different from the five most frequent themes in sample G. H1C₀: No differences in the five most frequent themes exist between samples C and sample G.

H1D: The five most frequent themes in sample C are different from the five most frequent themes in sample GW. H1D₀: No differences in the five most frequent themes exist between the samples C and sample GW.

H2: A pattern of themes and domain areas exists in the five least frequent themes in sample C. H2₀: There is no pattern of themes and domain areas in the least frequent themes in sample C.

H2A: The five least frequent themes in sample C fall predominantly in the Influencing domain. H2A₀: The five least frequent themes in sample C do not fall predominantly in the Influencing domain.

H2B: The least frequent theme in sample C is Self-Assurance. H2B₀: Self-Assurance is not the least frequent theme in sample C.

H2C: The five least frequent themes in sample C are different from the five least frequent themes in sample G. H2C₀: No differences in the five least frequent themes exist between samples C and sample G.
○ H2D: The five least frequent themes in sample C are different from the five least frequent themes in sample GW. H2D₀: No differences in the five least frequent themes exist between samples C and sample GW.

- H3: The order of domain area frequency in sample C is different from the order of domain area frequency in sample G. H3₀: The order of domain area frequency in sample C is not different from the order of domain area frequency in sample G.

- H4: The order of domain area frequency in sample C is different from the order of domain area frequency in sample GW. H4₀: The order of domain frequency in sample C is not different from the order of domain area in sample GW.

Samples

As mentioned in the previous section, there are three samples in this study. All of the samples came from pre-existing data sets and all of the respondents are anonymous. This section examines the details of each sample, starting with the college sample, followed by the Gallup samples. Sample C is a nonprobability, convenience sampling of students at a selective, liberal arts, women’s college. Participants either elected to take the CSF assessment or were required to take the assessment as part of a class or program offered by the college. The institution covered all costs for the assessment. Respondents included students in all four class years who took the CSF assessment online over a period of three years from 2013 to 2016. The StrengthsFinder online portal, available to administrators, tracks all responses according to a specific college identification number. Utilizing this system to pull the data for sample C reduces any errors that could occur by receiving results from participating students and transferring the results into a database.
The Gallup website published data regarding the distribution of themes for over 14 million respondents, but in 2016 a revision of the website occurred and that data was no longer accessible. A contact at the Gallup Organization provided the data for the Gallup sample (G) of 14,703,479 participants (both men and women) and Gallup women sample (GW) of 6,127,604, sharing multiple documents outlining the frequencies of each of the 34 themes for both samples. These samples include participants in all countries. The contact at the Gallup Organization also shared a specific sample of only U.S. participants, but since the population of the college sample has approximately 25% international students, this study did not utilize this additional data from Gallup. The sample of 14.7 million is everyone who has ever taken the assessment from 1999 through September 2016. Both samples include a range of ages and ethnicities, but Gallup Organization could not provide any more specifics on demographic information. The next section of this chapter provides more information about the CSF assessment tool.

*CSF Assessment Reliability and Validity*

This next section outlines more details about the reliability and validity of the CSF assessment tool. The CSF “instrument has been examined in a number of confirmatory, reliability, validity, and utility studies both within Gallup and externally, which adds to a growing body of evidence regarding its content, construct, and criterion-related validity, as well as its reliability (Janke, et al., 2015, p. 2; Asplund, et al., 2009).

The main purpose of the CSF assessment is to measure and assess the participants’ talents, resulting in a specific report that provides the participant with more
information about their results. There is strong evidence of the effectiveness of the CSF
assessment in terms of the tool measuring what it proposes to measure. A national study
took place in 2004-2005 to determine the psychometric properties of the CSF assessment
when used with college students (Schreiner, 2006). This study tested the measure in
terms of reliability, validity and the appropriateness the tool’s use. The sample included
438 students from 14 different colleges and was a representative sample of sex, race, and
class level, with a specific sex breakdown of 54% women and 46% men. The sample
included all four college class years. The next three paragraphs discuss the findings of
this study.

Two measures of reliability are test-retest and internal consistency. The standard
for a strong test-retest measurement is a score of .70 (AERA/APA/NCME, 1999;
Shreiner, 2006). The mean reliability estimate across all 34 themes was 0.70, with
Discipline, Deliberative, Intellection, Positivity, and Competition having the highest
reliability estimates of 0.80 or greater (Schreiner, 2006). Due to the hundreds of
thousands of top five theme combinations, the likelihood that students will get the exact
same results in the same order if they take the CSF assessment multiple times is very
small. However, in Schreiner’s sample, 52% of the students had at least three themes that
remained in their top five during the second test. Additionally, 35% had two themes,
11% had only one, and 2% did not retain any of the five themes. Another analysis
indicated that even when the themes did not remain in the top five, they still showed up in
the top ten. The measure for internal consistency is a coefficient alpha, which looks at
“whether all items on a theme are related to one another rather than to items on another
theme” (Schreiner, 2006, p. 6). Some of the items in the CSF assessment intentionally relate to more than one theme. Despite that, Schreiner (2006) found a mean alpha of 0.61 with a median alpha of 0.63. This range is comparable to other reputable psychological assessments.

The validity of an instrument refers to whether the tool measures what it purports to measure. In particular, “construct validity is an indication of what the scores on an instrument mean and whether they can be used to understand people accurately” (Schreiner, 2006, p.7). Schreiner (2006) took the CSF results and correlated them with items on two other reputable psychological assessments, the California Psychological Inventory-260 and the 16 Personality Factor Questionnaire. Schreiner’s study examined 137 different relationships between the psychological assessments and 93.4% had significant correlation coefficients, indicating a strong construct validity. His study also looked at construct validity by examining how items clustered around certain themes, finding an “average item clustering percentage across all possible theme pairs was 90%” (Schreiner, 2006, p. 8). These findings suggest that the CSF assessment provides a strong and accurate measurement of individuals’ talents.

Finally, Schreiner’s (2006) study explored gender and racial differences in college students, comparing the data to information available from adults. Despite few gender and racial differences in the adult population, the college population in Schreiner’s (2006) sample has two notable findings. First, women scored significantly higher in the themes of Achiever, Belief, Consistency, Developer, Discipline, Empathy, Harmony, Input, and Responsibility and men scored higher than women did in Ideation. Second,
there were few statistical differences based on race, but ethnic minorities scored higher than Whites did in Significance, Harmony, and Analytical themes and Whites scored higher than ethnic minorities on Adaptability, Self-Assurance, and Strategic themes.

Overall, evidence from Schreiner’s study focused on college students “indicates that the psychometric properties of the CSF are sufficient to support the use of the instrument in initiating strengths development programs on college campuses” (Schreiner, 2006, p. 9). The CSF assessment provides a consistent measurement that allows research studies to test different aspects of the data from impact in educational settings, application to management settings, pre-and post-growth in individuals, or, as this study does, testing for patterns in particular populations.

Methods

The CSF assessment combines the answers to 177 items in order to identify the participants’ top five themes; the 34 themes are a result of the sum of 177 designated items. In terms of the actual CSF assessment questions, the summed theme scores are derived from multiple items that evaluate the same construct; therefore, if participants do not understand one item, they may understand another item that is measuring the same thing. The result of the CSF assessment is a list of five themes for each individual taking the assessment in rank order. The methods for analyzing the data sets for this study included descriptive statistics such as mode, frequencies, contingency tables, visual illustrations such as tables, barographs and cluster graphs, and statistical analysis of chi-
square tests, phi coefficients, and relative risk ratios. The next section provides further details on how the study used these methods to test the hypotheses.

This study used quantitative methods to analyze and test the hypotheses in regard to several categorical variables across three samples. This paragraph summarizes some of the information found in the glossary of terms and associated abbreviations for the themes and domain areas in the Introduction Chapter. For more details on any of the terms, please refer to the Glossary of Terms in Chapter 1. The three sample populations, C, G, and GW have assigned colors used to represent the samples in figures. C is color coded as blue, G is color coded as grey, and GW is color coded as red. Particularly for sample C, formulas in excel helped to calculate the overall frequencies for each theme. The themes for the individual respondents were color coded by domain area to determine the domain area frequencies. The results for the 34 available outcomes appear as theme names (i.e. Input, Positivity, etc.), each of which has a specific definition, and both the initials of R, I, S, and E and colors to identify the four domain areas (Relationship Building, Influencing, Strategic Thinking, and Executing). Each of the domain areas also has a specific definition. Color-coding the domain areas allowed for easier visualization of the data: Relationship Building themes are blue, Influencing themes are yellow, Strategic Thinking themes are red and Executing themes are purple.

An important difference exists in the level of detail available across the three data sets. The data set for sample C has the specific positions of themes for each respondent. For example, for sample C, hypothetically respondent 964 has Positivity, Arranger, Woo, Achiever, and Maximizer as the top five themes. For this case, Positivity has a higher
rank than Maximizer and those differences in rank order are available across all 964 respondents. The data sets available for samples G and GW did not include the specific positions of themes for each individual; thus, making the comparison of the data sets based on the positions of themes in the top five impossible. For example, the data sets for samples G and GW provided information at a level of the total number of respondents who have Positivity as a theme in their top five. The number of respondents who had Positivity as their first ranked theme is not available. While a direct comparison across the three samples was not possible, the Results Chapter provides descriptive statistics for the sample C data set related to the specific positioning of themes. The rank order of one through five provided a code for the position of themes for the respondents in sample C. Across all three samples, the frequencies of all 34 themes, absent of any weighting due to the position rankings, provided a common point of analysis. An example of this calculation is the number of times Positivity shows up divide by the total number of available themes for the entire sample, in other words the sample size multiplied by five.

H1 and H2 have sub-hypotheses tested through different statistical analyses in order to either support or reject the overall hypothesis. In terms of H1, H1A, H1B, H2, H2A, and H2B, the methods for testing involved examining the counts and percentages of the themes and domains to determine if patterns exist for sample C. A few base line indicators for the samples were to examine which themes fell below 1% of the total sample for the least frequent themes and which themes were above 5% for the most frequent themes. For the domain areas, the indicators were the number of the five most and five least frequent themes that fell into the specific domain areas for sample C and
for all three samples, the overall percentages of domain areas represented within the samples.

H1C, H1D, H2C and H2D refer to testing whether the five most frequent and five least frequent themes that occur in the sample C differ from those in samples G and GW. The methods to test these differences included using 20 contingency tables and chi-square tests to examine whether the differences were statistically significant. The five most and five least frequent themes for sample C defined which variables to use when conducting the chi-square tests. A chi-square test of independence statistically compares sample C’s most and least frequent themes to the corresponding themes in samples G and GW (Creswell, 2012). This particular statistic compares the “entire set of observed counts to the set of expected counts” (Moore & McCabe, 1996, p. 594). In this study the contingency tables were set up with columns indicating yes, the theme occurs in the sample or no, the theme did not occur in the sample and the rows were sample C and either sample G or sample GW depending on which hypothesis was tested. The chi-square test does not tell anything about the strength of the relationship, but instead is a “comparison of the proportions of “successes” in two populations” which is a sound method for testing the null hypotheses (Moore & McCabe, 2006, p. 598). Due to the large sample sizes, the alpha for the chi-square test was set to $p < .001$, meaning the error rate is 1 out of 1,000. This conservative alpha was set to attempt to reduce the Type 1 error that could occur by rejecting the null hypothesis given that it was true.

H3 and H4, which test the order of the domain areas across all three samples to determine if the patterns are different also used contingency tables and chi-square tests.
The test examined whether the domain areas for sample C were different. Related to
H1A and H2A these tests sought to answer whether the Strategic Thinking and
Influencing domain areas were different as compared to the representation of those
domain areas in samples G and GW. Since there are five dependent variables for each
individual and each individual can have themes in multiple domain areas, the total sample
size for each of these domain contingency tables is equal to the number of respondents
multiplied by five.

After applying the chi-square test across the samples, the next step was to
measure the strength of association. This analysis provides a level of depth for social
science research. The American Psychological Association (APA) and American
Educational Research Association (AERA) strongly suggest and in some cases, require
this analysis for publications (Peng, Chen, Chiang, & Chiang, 2013). “Measures of
association provide a means of summarizing the size of the association between two
variables” (Gingrich, 2004, p. 768). This study used two methods to measure the level of
association: phi coefficient, a common measure and relative risk (RR) ratios, a less
common measure in education, but one that is increasingly gaining more attention.
Stacey and Steinle (2005) suggest that RR is a statistic used in other fields such as
epidemiology or medicine, but less so in education.

The phi coefficient is a “measure of the degree of association between two binary
variables” (Simon, 2008, n.p.; Moore & McCabe, 2006) and similar to a correlation
coefficient, the actual phi coefficient number does not have meaning. Phi is an analysis
that “adjusts the chi square statistic by sample size” with a value between zero and one
indicating the strength of the association (Gingrich, 2004, p. 774). The closer the phi coefficient is to one, the stronger the relationship. A general guide is that -1.0 to -0.70 is a strong negative association, -0.70 to -0.30 is a weak negative association, -0.30 to + 0.30 is little or no association, 0.30 to 0.70 is a weak positive association, and 0.70 to 1.0 is a strong positive association. Despite these standards, the definition of association and number levels vary by study, thus phi coefficient values are not comparable across studies. Due to the extremely large sample sizes for the two Gallup samples, this study calculated phi based on the original sample sizes and calculated phi by proportionally cutting the Gallup sample sizes so that they mirrored the size of sample C.

The last two paragraphs of this section provide an overview of RR ratios, the second statistical measure of association, and arguably the more relevant test in terms of the utility of the results. Relative risk provides some distinct advantages as a statistical measure. For educational studies, Stacey and Steinle (2005) suggest adjusting the language from risk to chance since the word risk may not apply in the same way it would in medical or scientific settings. Advantages of using RR include ease of interpretation, a clear and meaningful presentation of data, and presentation of real differences (Stacey & Steinle, 2005). Similar to the sample sizes in the multi-millions for this study, many scientific studies are working with data sets that have much larger numbers than typically seen in some types of educational research, thus RR becomes an important test for understanding the strength of association. Lecoutre and Poitevineau (2014) question using standardized effect size measures across studies. They specifically highlight an epidemiological study where the sample sizes were between 18,000 and 30,000 and show
both the calculation of RR and phi. The phi coefficient, due to the very small (.00009) proportion of variance, does not accurately reflect the real effect of treatment. The number of cases in this study’s sample is in the millions, not thousands, thus the RR ratio seems like a more accurate measure.

Dividing the proportions of each population, that have the associated condition, is how the RR ratio is calculated. A key difference between the relative risk ratio and the odds ratio is that the RR ratio divides the number of those with the associated condition by the total number in the sample, not the number who do not have the condition. The RR ratio, as the test applies to this study, shows how much more or less of a chance an individual in sample C has of having a particular theme in their top five themes as compared to those in either sample G or GW. If the RR score is equal to one then the two proportions are equal, indicating no association. To determine significance for RR ratios, a 95% confidence interval is calculated. Statistically significant RR ratios do not include one in the interval.

Limitations

As with any study, there are both benefits and drawbacks to the research design and methods. One benefit to this study is the large sample sizes. The existing data set of students at a small, selective, women’s liberal arts college is close to 1,000. The multi-million-person sample sizes from the Gallup samples provide two additional large data sets for comparison. Numerous studies reference the strong validity and reliability of the CSF assessment, indicating that the selected instrument is strong. The study by Schreiner
(2006) specifically provides evidence supporting the use of this tool in a college population. Researchers are also calling for the use of RR ratios in an educational setting supporting the use of that method to supplement the findings from the chi-square analysis in this study.

A few drawbacks to this study also exist. First, correlation research methods, such as chi-square tests, do not show causation, but only indicate that a relationship exists. However, with categorical data as the independent and dependent variables, coupled with multiple dependent variables, chi-square testing is the best method to use from the available options for this type of data. The procedure for survey administration for sample C was not consistent. Data collection for sample C took place across a span of three years, participants had a variety of reasons for taking the assessment (course work, individual interest, required trainings), and students completed the assessment in various uncontrolled settings since students receive the online code to take the assessment. Sample C is also a nonprobability, convenience sample, not a probability sample. The Gallup samples have the same limitations in terms of the lack of a consistent procedure for all respondents and the variation across such large samples is most likely even greater. The large sample sizes make the data challenging to interpret using standard effect size measures such as the phi coefficient.

Chapter Summary

The research question looks at whether different patterns exist among the five most and least frequent themes and associated domain areas in students who attend a
selective, liberal arts, women’s college (sample C), as compared to individuals in the general population who have taken the CSF assessment. The chapter starts with an overview of design and hypotheses, the characteristics across the samples, and analysis of CSF as the selected assessment tool. The next section discusses the methods applied to the data to test the hypotheses, including descriptive statistics, graphs, contingency tables, chi-square tests, phi coefficient and RR ratios. Finally, the chapter concludes with an overview of the strengths and limitations of the selected research design.
CHAPTER 4: RESULTS

This chapter outlines the results in four sections: sample descriptive characteristics, frequency statistics, chi-square analysis, and RR ratios. To contextualize the data, the chapter starts with a broad view of the theme and domain area frequencies for each sample. The lens then narrows, focusing on the five most frequent themes, five least frequent themes, and domain areas specifically related to sample C. The chapter reports the results for each hypothesis, concluding with the results from the chi-square analyses and relative risk ratios. A number of tables and figures throughout the chapter help to organize the results into more digestible formats.

Sample Descriptive Characteristics

This section describes the descriptive characteristics for the three samples. The independent variables for this study are samples: C, G, and GW. The dependent variables are the 34 themes and 4 domain areas. Nine-hundred and sixty-four respondents make up sample C. Respondents took the CSF assessment between January 2013 and November of 2016, with over 40% of the responses recorded after October 1, 2016. The sample includes respondents from all class years: freshmen, sophomores, juniors, and seniors. The vast majority of the sample consists of women or students who, upon enrolling at the college, identified on their college applications as women. A number of students who attend this particular institution, similar to other women’s institutions or other institutions of higher education, may not identify on the gender binary and a select few may not identify as women. The college does not receive formal
reports on this type of demographic information, so determining the specific numbers is not feasible for this study. The sample C data set was preexisting, so demographic information is limited. A data source from the college provides broad data for the class years represented in the sample, presenting a picture of the group. Approximately thirty-percent of students are international students, 8-10% of students are Pennsylvania residents, students come from 35 of the 50 states, and students have the option of majoring in over 30 areas. The most popular majors for the class years in the sample are Biology, Psychology, Mathematics, and English. Identifying information is not linked to individual responses in the data set. As mentioned earlier, some of the respondents took the assessment voluntarily, others were required to take it as part of a training program, and others were required to take it as part of a course.

The data set for sample C includes the top five strengths of each respondent, as well as the rank order, one through five. Each respondent for sample C has five dependent variables listed in rank order and each of those five variables fall into the four domain areas. Each of the five dependent variables are out of 34 possibilities. The total number of possible themes for sample C is 4,820. No duplicates exist among themes per respondent, but the themes do show up multiple times throughout the sample across respondents.

Tables 2-5 represent a detailed breakdown of the data from sample C. The table organizes the data from most to least in terms of the number of times the theme shows up in the top five themes. The domain area is another key criterion for breaking down the tables. For example, Table 2 shows eight of the 34 themes that are in the Influencing
domain area, identifies the designated number (1-34) for each variable, highlights the count of how many times each particular theme appears in a respondents’ top five themes, as well as how many times each theme appears in a respondents’ top two themes. The themes in bold, with an asterisk, represent the five most frequent themes in sample C and the themes in italics represent the five least frequent themes in sample C. Table 2 shows that there were no Influencing themes in the five most frequent themes for sample C. For example, 7 out of 964 respondents had Self-Assurance show up in the top two. Three of the eight themes in this domain show up in the least frequent themes for sample C, as indicated in italics.

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</tbody>
</table>

Table 3 represents eight of the 34 themes that are in the Strategic Thinking domain area. Three Strategic Thinking themes appeared in the five most frequent themes for sample C as indicated in bold and with an asterisk. Nearly 1/3 of the sample had input in the top five themes.
Table 3. *Strategic Thinking Themes (9-16)*

<table>
<thead>
<tr>
<th>S Themes</th>
<th>Variable # (1-34)</th>
<th>Top 5.S</th>
<th>Top 2.S</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td>13</td>
<td>350</td>
<td>182</td>
</tr>
<tr>
<td><strong>Learner</strong></td>
<td>15</td>
<td>290</td>
<td>115</td>
</tr>
<tr>
<td><strong>Intellection</strong></td>
<td>14</td>
<td>262</td>
<td>91</td>
</tr>
<tr>
<td>Strategic</td>
<td>16</td>
<td>163</td>
<td>76</td>
</tr>
<tr>
<td>Ideation</td>
<td>12</td>
<td>150</td>
<td>54</td>
</tr>
<tr>
<td>Futuristic</td>
<td>11</td>
<td>136</td>
<td>53</td>
</tr>
<tr>
<td>Context</td>
<td>10</td>
<td>121</td>
<td>68</td>
</tr>
<tr>
<td>Analytical</td>
<td>9</td>
<td>108</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 4 represents nine out of the 34 themes that are in the Relationship Building domain area. Empathy shows up in the five most frequent themes for sample C. Similar to the Strategic Thinking domain area, many of these variables had counts over 100 in the top five.

Table 4. *Relationship Building Themes (17-25)*

<table>
<thead>
<tr>
<th>R Themes</th>
<th>Variable # (1-34)</th>
<th>Top 5.R</th>
<th>Top 2.R</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Empathy</strong></td>
<td>20</td>
<td>314</td>
<td>162</td>
</tr>
<tr>
<td>Individualization</td>
<td>23</td>
<td>229</td>
<td>94</td>
</tr>
<tr>
<td>Developer</td>
<td>19</td>
<td>191</td>
<td>68</td>
</tr>
<tr>
<td>Relator</td>
<td>25</td>
<td>181</td>
<td>61</td>
</tr>
<tr>
<td>Harmony</td>
<td>21</td>
<td>168</td>
<td>92</td>
</tr>
<tr>
<td>Adaptability</td>
<td>17</td>
<td>164</td>
<td>73</td>
</tr>
<tr>
<td>Connectedness</td>
<td>18</td>
<td>133</td>
<td>45</td>
</tr>
<tr>
<td>Positivity</td>
<td>24</td>
<td>123</td>
<td>32</td>
</tr>
<tr>
<td>Includer</td>
<td>22</td>
<td>80</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 5 represents nine of the 34 themes that are in the Executing domain. Restorative showed up in the five most frequent themes for sample C. Belief and Arranger, indicated in italics, both showed up in the least frequent themes for sample C. Both of these themes showed up in the top two for eight and four respondents respectively.
These tables provide a basic understanding of the counts for sample C by domain area. This level of data based on position rank is not available for samples G and GW.

The next paragraphs provide descriptive statistics for samples G and GW. The data obtained from Gallup, despite fewer details regarding position ranks, still provides the information necessary to compare the data across the samples.

Sample G consists of 14,703,479 million respondents who took the CSF assessment starting in the early 2000s through early September of 2016. Sample GW consists of 6,127,604 respondents who are a subgroup of the 14.7 million in the G sample. The data from samples G and GW is also anonymous. According to Gallup, approximately 70% of sample G includes respondents from the United States. Both the G and GW samples are made up of all ages, domestic and international respondents, various educational levels, ethnicities, and professions. Similar to sample C, the possibility exists that some of the respondents in either the G or GW samples may not identify on the gender binary or may identify as a gender that is different from their gender at birth. Neither the G or GW samples include specific information or themes for

<table>
<thead>
<tr>
<th>E Themes</th>
<th>Variable # (1-34)</th>
<th>Top 5.E</th>
<th>Top 2.E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Restorative</strong></td>
<td>34</td>
<td>274</td>
<td>130</td>
</tr>
<tr>
<td>Achiever</td>
<td>26</td>
<td>236</td>
<td>115</td>
</tr>
<tr>
<td>Deliberative</td>
<td>30</td>
<td>143</td>
<td>66</td>
</tr>
<tr>
<td>Responsibility</td>
<td>33</td>
<td>130</td>
<td>31</td>
</tr>
<tr>
<td>Discipline</td>
<td>31</td>
<td>114</td>
<td>43</td>
</tr>
<tr>
<td>Consistency</td>
<td>29</td>
<td>92</td>
<td>21</td>
</tr>
<tr>
<td>Focus</td>
<td>32</td>
<td>66</td>
<td>13</td>
</tr>
<tr>
<td><strong>Belief</strong></td>
<td>28</td>
<td>39</td>
<td>8</td>
</tr>
<tr>
<td><strong>Arranger</strong></td>
<td>27</td>
<td>38</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 5. Executing Themes (26-34)

62
individual respondents; instead, the frequency tables summarize the data sets provided by an education consultant who works for the Gallup Organization in Omaha, Nebraska. Similar to sample C, the samples include individuals who took the assessment as required by their employers or institutions and those who elected to take the assessment voluntarily. The total number of themes for sample G is 73,517,395. The total number of themes for the GW sample is 30,638,020. As with sample C, no duplicates exist among themes per respondent, but the themes do show up multiple times throughout each of the overall samples.

*Frequency Statistics for All Themes*

This section delves further into the data across the samples starting with three detailed tables, one for each sample, that include the percentages for each theme and domain area. Numerous combinations of data are available for each respondent and the frequency statistics demonstrate how the individual combinations look at a macro level for all themes and domain areas. The section concludes with tables and figures that provide visual representations of the data across the three samples.

Table 6 is a frequency table summarizing the 4,820 themes for sample C. The table organizes the data by color-coded domain areas, and then lists the themes within each domain alphabetically. Bolded themes with an asterisk indicate the five most frequent themes and italicized themes indicate the five least frequent themes in the sample. The Influencing domain area is 10.89%, Strategic Thinking is 32.78%, Relationship Building is 32.84%, and Executing is 23.49% of sample C, as indicated in
the fifth column of the table under the header Domain %. Four of the five most frequent themes come in at over 6% of the sample, ranging from Restorative at 5.68% to Input at 7.26%. The five least frequent themes come in under 1.08% of the sample, ranging from Self-Assurance at 0.54% to Command at 1.08%.

Table 6. *Sample C Frequencies of Themes*
(N = 964) (X = 4,820 (Total occurrences of theme in top 5))

<table>
<thead>
<tr>
<th>Variable # (1-34)</th>
<th>Theme</th>
<th>% of N</th>
<th>% of X</th>
<th>Domain %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activator</td>
<td>7.26%</td>
<td>1.45%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Command</td>
<td>5.39%</td>
<td>1.08%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Communication</td>
<td>11.10%</td>
<td>2.22%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Competition</td>
<td>8.09%</td>
<td>1.62%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Maximizer</td>
<td>6.33%</td>
<td>1.27%</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Self-Assurance</td>
<td>2.70%</td>
<td>0.54%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Significance</td>
<td>5.08%</td>
<td>1.02%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Woo</td>
<td>8.51%</td>
<td>1.70%</td>
<td>10.89%</td>
</tr>
<tr>
<td>9</td>
<td>Analytical</td>
<td>11.20%</td>
<td>2.24%</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Context</td>
<td>12.55%</td>
<td>2.51%</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Futuristic</td>
<td>14.11%</td>
<td>2.82%</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ideation</td>
<td>15.56%</td>
<td>3.11%</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Input*</td>
<td>36.31%</td>
<td>7.26%</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Intellection*</td>
<td>27.18%</td>
<td>5.44%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Learner*</td>
<td>30.08%</td>
<td>6.02%</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Strategic</td>
<td>16.91%</td>
<td>3.38%</td>
<td>32.78%</td>
</tr>
<tr>
<td>17</td>
<td>Adaptability</td>
<td>17.01%</td>
<td>3.40%</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Connectedness</td>
<td>13.80%</td>
<td>2.76%</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Developer</td>
<td>19.81%</td>
<td>3.96%</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Empathy*</td>
<td>32.57%</td>
<td>6.51%</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Harmony</td>
<td>17.43%</td>
<td>3.49%</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Includer</td>
<td>8.30%</td>
<td>1.66%</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Individualization</td>
<td>23.76%</td>
<td>4.75%</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Positivity</td>
<td>12.76%</td>
<td>2.55%</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Relator</td>
<td>18.78%</td>
<td>3.76%</td>
<td>32.84%</td>
</tr>
<tr>
<td>26</td>
<td>Achiever</td>
<td>24.48%</td>
<td>4.90%</td>
<td></td>
</tr>
</tbody>
</table>
Table 7 is a frequency table summarizing over 73 million themes from sample G, with bolded themes with asterisks indicating the five most frequent themes for sample G and the italicized themes indicating the five least frequent themes occurring for sample G. The Influencing domain area is 15.07%, Strategic Thinking is 25.95%, Relationship Building is 30.69%, and Executing is 28.29% of sample G. Four of the five most frequent themes come in at over 5% of the sample, ranging from Strategic Thinking at 4.45% to Achiever at 6.30%. The five least frequent themes come in at under 1.75% of the sample, ranging from Command at .93% to Context at 1.75%. Similar to Table 6, the table organizes the data by color-coded domain area, and then alphabetical by theme within each domain. Table 7 also includes column X, which provides the counts for each theme. Tables 2-5 capture the specific count data for sample C.

Table 7. Sample G Frequencies of Themes
(N=14,703,479) (X = 73,517,395 (Total occurrences of themes in top 5))

<table>
<thead>
<tr>
<th>Variable # (1-34)</th>
<th>Theme</th>
<th>X</th>
<th>% of N</th>
<th>% of X</th>
<th>Domain %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activator</td>
<td>1,448,063</td>
<td>9.85%</td>
<td>1.97%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Command</td>
<td>682,488</td>
<td>4.64%</td>
<td>0.93%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Communication</td>
<td>1,913,761</td>
<td>13.02%</td>
<td>2.60%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Competition</td>
<td>1,589,606</td>
<td>10.81%</td>
<td>2.16%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Maximizer</td>
<td>2,038,313</td>
<td>13.86%</td>
<td>2.77%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theme</td>
<td>Count</td>
<td>Percentage</td>
<td>Shared %</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
<td>-----------</td>
<td>------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Self-Assurance</td>
<td>698,932</td>
<td>4.75%</td>
<td>0.95%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Significance</td>
<td>918,769</td>
<td>6.25%</td>
<td>1.25%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Woo</td>
<td>1,791,737</td>
<td>12.19%</td>
<td>2.44%</td>
<td>15.07%</td>
</tr>
<tr>
<td>9</td>
<td>Analytical</td>
<td>1,891,742</td>
<td>12.87%</td>
<td>2.57%</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Context</td>
<td>1,289,220</td>
<td>8.77%</td>
<td>1.75%</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Futuristic</td>
<td>1,822,347</td>
<td>12.39%</td>
<td>2.48%</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ideation</td>
<td>1,993,960</td>
<td>13.56%</td>
<td>2.71%</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Input</td>
<td>2,892,724</td>
<td>19.67%</td>
<td>3.93%</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Intellection</td>
<td>1,772,901</td>
<td>12.06%</td>
<td>2.41%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Learner*</td>
<td>4,139,806</td>
<td>28.16%</td>
<td>5.63%</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Strategic*</td>
<td>3,273,839</td>
<td>22.27%</td>
<td>4.45%</td>
<td>25.95%</td>
</tr>
<tr>
<td>17</td>
<td>Adaptability</td>
<td>2,482,729</td>
<td>16.89%</td>
<td>3.38%</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Connectedness</td>
<td>1,751,311</td>
<td>11.91%</td>
<td>2.38%</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Developer</td>
<td>2,333,591</td>
<td>15.87%</td>
<td>3.17%</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Empathy</td>
<td>2,725,468</td>
<td>18.54%</td>
<td>3.71%</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Harmony</td>
<td>2,852,769</td>
<td>19.40%</td>
<td>3.88%</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Includer</td>
<td>1,757,953</td>
<td>11.96%</td>
<td>2.39%</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Individualization</td>
<td>2,234,998</td>
<td>15.20%</td>
<td>3.04%</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Positivity</td>
<td>2,399,380</td>
<td>16.32%</td>
<td>3.26%</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Relator*</td>
<td>4,021,218</td>
<td>27.35%</td>
<td>5.47%</td>
<td>30.69%</td>
</tr>
<tr>
<td>26</td>
<td>Achiever*</td>
<td>4,630,510</td>
<td>31.49%</td>
<td>6.30%</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Arranger</td>
<td>1,932,567</td>
<td>13.14%</td>
<td>2.63%</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Belief</td>
<td>1,647,777</td>
<td>11.21%</td>
<td>2.24%</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Consistency</td>
<td>1,687,707</td>
<td>11.48%</td>
<td>2.30%</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Deliberative</td>
<td>1,612,460</td>
<td>10.97%</td>
<td>2.19%</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Discipline</td>
<td>1,054,576</td>
<td>7.17%</td>
<td>1.43%</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Focus</td>
<td>1,477,372</td>
<td>10.05%</td>
<td>2.01%</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Responsibility*</td>
<td>4,160,581</td>
<td>28.30%</td>
<td>5.66%</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Restorative</td>
<td>2,596,220</td>
<td>17.66%</td>
<td>3.53%</td>
<td>28.29%</td>
</tr>
</tbody>
</table>

Table 8 is a frequency table summarizing over 30 million themes in sample GW, with bolded themes with an asterisk indicating the five most frequent themes for GW and themes in italics indicating the five least frequent themes in the sample. The Influencing domain area is 13.08%, Strategic Thinking is 23.06%, Relationship Building is 35.10%, and Executing is 28.76% of sample GW. The five most frequent themes are all over 5% of the sample, ranging from Empathy at 5.15% to Achiever at 6.22%. The five least
frequent themes come in at under 1.29% of the sample, ranging from Self-Assurance at 0.51% to Competition at 1.29%.

<table>
<thead>
<tr>
<th>Variable # (1-34)</th>
<th>Theme</th>
<th>X</th>
<th>% of N</th>
<th>% of X</th>
<th>Domain %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activator</td>
<td>559,107</td>
<td>9.12%</td>
<td>1.82%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Command</td>
<td>196,606</td>
<td>3.21%</td>
<td>0.64%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Communication</td>
<td>891,255</td>
<td>14.54%</td>
<td>2.91%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Competition</td>
<td>396,264</td>
<td>6.47%</td>
<td>1.29%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Maximizer</td>
<td>712,120</td>
<td>11.62%</td>
<td>2.32%</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Self-Assurance</td>
<td>157,359</td>
<td>2.57%</td>
<td>0.51%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Significance</td>
<td>303,438</td>
<td>4.95%</td>
<td>0.99%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Woo</td>
<td>791,013</td>
<td>12.91%</td>
<td>2.58%</td>
<td>13.08%</td>
</tr>
<tr>
<td>9</td>
<td>Analytical</td>
<td>451,118</td>
<td>7.36%</td>
<td>1.47%</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Context</td>
<td>357,567</td>
<td>5.84%</td>
<td>1.17%</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Futuristic</td>
<td>734,027</td>
<td>11.98%</td>
<td>2.40%</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ideation</td>
<td>594,536</td>
<td>9.70%</td>
<td>1.94%</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Input</td>
<td>1,373,410</td>
<td>22.41%</td>
<td>4.48%</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Intellection</td>
<td>767,936</td>
<td>12.53%</td>
<td>2.51%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Learner*</td>
<td>1,636,220</td>
<td>26.70%</td>
<td>5.34%</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Strategic</td>
<td>1,150,725</td>
<td>18.78%</td>
<td>3.76%</td>
<td>23.06%</td>
</tr>
<tr>
<td>17</td>
<td>Adaptability</td>
<td>1,068,240</td>
<td>17.43%</td>
<td>3.49%</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Connectedness</td>
<td>808,644</td>
<td>13.20%</td>
<td>2.64%</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Developer</td>
<td>1,294,143</td>
<td>21.12%</td>
<td>4.22%</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Empathy*</td>
<td>1,578,655</td>
<td>25.76%</td>
<td>5.15%</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Harmony</td>
<td>1,343,044</td>
<td>21.92%</td>
<td>4.38%</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Includer</td>
<td>788,641</td>
<td>12.87%</td>
<td>2.57%</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Individualization</td>
<td>1,025,706</td>
<td>16.74%</td>
<td>3.35%</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Positivity</td>
<td>1,226,696</td>
<td>20.02%</td>
<td>4.00%</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Relator*</td>
<td>1,618,823</td>
<td>26.42%</td>
<td>5.28%</td>
<td>35.10%</td>
</tr>
<tr>
<td>26</td>
<td>Achiever*</td>
<td>1,906,092</td>
<td>31.11%</td>
<td>6.22%</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Arranger</td>
<td>740,162</td>
<td>12.08%</td>
<td>2.42%</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Belief</td>
<td>726,954</td>
<td>11.86%</td>
<td>2.37%</td>
<td></td>
</tr>
</tbody>
</table>
These frequency tables provide many results across all the themes and domain areas and help to identify the most and least frequent themes and domain areas while presenting the whole picture for each sample. The frequency statistics for all three samples are relevant to understanding the full extent of the data provided by the CSF assessment. Before looking at the results by specific hypotheses, a few more figures illustrate comparisons of the frequency data across samples.

Figure 1 combines the data from tables 6, 7 and 8 to illustrate the frequencies for all 34 themes across the three samples. The following paragraphs specifically report on the results from sample C.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Consistency</td>
<td>805,212</td>
<td>13.14%</td>
<td>2.63%</td>
</tr>
<tr>
<td>30</td>
<td>Deliberative</td>
<td>577,884</td>
<td>9.43%</td>
<td>1.89%</td>
</tr>
<tr>
<td>31</td>
<td>Discipline</td>
<td>587,204</td>
<td>9.58%</td>
<td>1.92%</td>
</tr>
<tr>
<td>32</td>
<td>Focus</td>
<td>446,909</td>
<td>7.29%</td>
<td>1.46%</td>
</tr>
<tr>
<td>33</td>
<td><strong>Responsibility</strong>*</td>
<td>1,872,025</td>
<td>30.55%</td>
<td>6.11%</td>
</tr>
<tr>
<td>34</td>
<td>Restorative</td>
<td>1,150,285</td>
<td>18.77%</td>
<td>3.75%</td>
</tr>
</tbody>
</table>
Figure 1. Frequencies of All 34 Themes for Each Sample Population
Sample C Most and Least Frequent Themes

The premise of this study is to identify and explore the five most frequent and five least frequent themes that exist in the sample of students attending a selective, liberal arts women’s college. Hypotheses H1, H1a, and H1b relate to what sample C looks like in terms of the top themes. H1 states that a pattern of themes and domain areas will exist in the five most frequent themes in sample C. A pattern does exist allowing for the rejection of H1\textsubscript{0}. The top seven themes represented in sample C all have counts over 200 and the percentage of the five most frequent themes are all greater than 5% of the total sample, ranging from 5.44% to 7.26%. The other 29 themes range from 0.54% - 4.90% of the total sample, calculated using $X (4,820)$ as the denominator, which is the total number of possible themes.

Within the five most frequent themes in sample C, three themes are in the Strategic Thinking domain, one in Relationship Building and one in Executing. The most frequent themes for the sample C cluster around the Relationship Building and Strategic Thinking domains, with some themes in the Executing domain intermixed. When analyzed by rank order, there are zero themes in the Strategic Thinking domain and only one theme in the Relationship Building domain in the bottom 13 themes. There are three themes in the top five that fall in the Strategic Thinking domain area. This supports H1a, which states that the top five themes in sample C will fall predominantly in the Strategic Thinking domain.

Table 9 shows more details about the proportions of the domain areas and the distribution of the themes in sample C within the rank positions per respondent. Strategic
Thinking and Relationship Building themes are highly represented in the sample at 83% and 82% respectively; parallel to those numbers, these two domain areas also have very high percentages of respondents who have three, four, or five themes that fall into these domain areas. Themes in the Strategic Thinking domain represent the largest percent of top themes at 83%.

Table 9. Domain Representation in 1-5 Rank Positions

<table>
<thead>
<tr>
<th>% respondents with themes in domain in top 5</th>
<th>Strategic Thinking</th>
<th>Executing</th>
<th>Influencing</th>
<th>Relationship Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of respondents with 3, 4, or 5 themes in domain</td>
<td>83%</td>
<td>70%</td>
<td>36%</td>
<td>82%</td>
</tr>
<tr>
<td>% of respondents with 2 themes in domain</td>
<td>23%</td>
<td>12%</td>
<td>3%</td>
<td>24%</td>
</tr>
<tr>
<td>% of respondents with 1 theme in domain</td>
<td>29%</td>
<td>23%</td>
<td>11%</td>
<td>26%</td>
</tr>
<tr>
<td>% of respondents with 0 themes in domain</td>
<td>31%</td>
<td>36%</td>
<td>22%</td>
<td>32%</td>
</tr>
<tr>
<td>% of respondents with 0 themes in domain</td>
<td>17%</td>
<td>30%</td>
<td>64%</td>
<td>18%</td>
</tr>
</tbody>
</table>

H1b states that the most frequent theme in sample C is leaner. The most frequent theme is not learner so, in fact the null hypothesis, H1b0 is true. To summarize, the results provide evidence to reject the null hypotheses for H1 and H1a, but for H1b the null hypothesis is true.

Before moving on to look at the least frequent themes represented in sample C, Figure 2 shows how the five most frequent themes in sample C of Input, Empathy,
Learner, Restorative and Intellection, in order of frequency from most to least, as they compare to the same themes in samples G and GW.

![Five Most Frequent Themes of Sample C vs. G & GW Samples](image)

**Figure 2.** Five Most Frequent Themes of Sample C vs. Samples G & GW

The next paragraphs focus on the five least frequent themes, which connect specifically to hypotheses H2, H2A, and H2B. After sharing the results for these hypotheses, the focus shifts to providing the results from the chi-square tests and relative risk ratios, which directly relate to hypotheses H1C, H1D, H2C, H2D, H3 and H4.

Hypotheses H2, H2A, and H2B relate to what sample C looks like in terms of the least frequent themes and domain areas. H2 states that a pattern of themes and domain areas exist in the five least frequent themes of sample C. A pattern does exist allowing
the rejection of H2o. When reviewing the themes in order of frequency, the bottom 12 themes in sample C all have counts under 100. The percentages of the five least frequent themes are almost all less than 1% of the sample, ranging from 0.54% to 1.08%. The other 29 themes represent from 1.27% - 7.26% of the total sample. The least frequent themes in sample C mainly cluster around the Influencing and Executing domain areas. All eight of the themes in the Influencing domain and six out of the nine themes in the Executing domain are in the bottom 15 of the 34 themes. Three themes in the Influencing and two in the Executing domain area make up the five least frequent themes. The first time a theme from the Influencing domain appears in sample C is at rank 22 out of 34. This supports H2A, which states that the five least frequent themes in sample C will fall predominantly in the Influencing domain area. Table 9 on page 67 shows more details about the proportions of the domain areas and the distribution of the themes. The themes in the Influencing domain area have the lowest representation in the sample, with only 36% of respondents having one of these themes in their top five. Sixty-four percent of respondents do not have any themes representing this domain in the top five and only 3% of respondents have more than three themes in this domain area. Thirty percent of the sample does not have any themes in the Executing domain area; however, 36%, of the sample has one theme in this domain area. Finally, H2B states that the least frequent theme in sample C will be Self-Assurance. The study provides evidence to reject H2B0, the null hypothesis, since the least frequent theme for sample C is Self-Assurance. Self-Assurance showed up in the sample 26 times. To summarize, the data from this study provides evidence to reject the null hypotheses for H2, H2A, and H2B.
Figure 3 illustrates how the least frequent themes in sample C, Self-Assurance, Belief, Arranger, Significance, and Command, listed in order of frequency from least to most, compare to the same themes in samples G and GW.

Figure 3. *Five Least Frequent Themes of Sample C vs. Samples G & GW*

As with the patterns of themes, in relation to H3 and H4, the order of domain areas is different for each sample, providing evidence to reject the null hypotheses. Sample C has three themes in Strategic Thinking including the most frequent theme, Input, one in Relationship Building, and one in Executing. Sample G has two themes in Executing including the two most frequent, Achiever and Responsibility, two in Strategic Thinking, and one in Relationship Building. Finally, sample GW has two in Executing.
including the two most frequent, Achiever and Responsibility, one in Strategic Thinking, and two in Relationship Building. Samples G and GW have the same order of domains in terms of percentages – Relationship Building, Executing, Strategic Thinking, and Influencing. Sample C is different from both samples G and GW with the order of domains in terms of percentages – Relationship Building, Strategic Thinking, Executing, and Influencing. Figure 4 illustrates the frequencies for the domain areas across the samples. Sample C has 32.84% of the top five themes in the Relationship Building domain area, 32.78% of themes in Strategic Thinking domain, 23.49% of themes in the Executing domain, and 10.89% of themes in the Influencing domain.

Figure 4. Domain Comparison by Sample
Before moving into the chi-square test results, a series of figures following this paragraph summarize the data related to the 34 themes and the 4 domain areas across all of the samples. Figures 5-7 show the data categorized by the domain areas, indicated as the space between the dotted lines, and the horizontal axis represents themes 1-34 as coded in tables 2-5 in this chapter. *Figure 5* has three lines, one for each of the samples. The themes in the callout boxes represent sample C’s most and least frequent themes. *Figure 6* has two lines comparing sample C with sample G and *Figure 7* compares sample C with sample GW.
Figure 5. Three Sample Comparison (C, G, GW)
Figure 6. Sample C vs. G
Figure 7. Sample C vs. GW
Chi-Square Analyses

A review of the frequencies and counts show that patterns and differences exist across the samples. Hypotheses H1C, H1D, H2C, H2D, H3 and H4 focus on whether or not these differences in themes and domain areas are statistically significant or not. A chi-square analysis tested whether the differences in the most and least frequent themes were statistically significant. The results indicate whether the observed differences are due to chance.

While the hypotheses in this study do not particularly focus on the strength of association between the variables, the association test is important to demonstrate a depth to the statistical analysis. The chi-square result tables indicate two phi coefficients, one as calculated in comparison with the actual Gallup sample sizes and another calculated with a reduced sample size for the Gallup groups as described in the Research Design and Methods Chapter. The analyses included twenty-eight chi-square tests of independence. The 28 contingency tables connect to the following hypotheses:

- H1C and H1D refer to whether the five most and least frequent themes in sample C are the same themes and frequencies as those in sample G.
- H2C and H2D refer to whether the five most and least frequent themes in sample C are the same themes and frequencies as those in sample GW.
- H3 and H4 refer to whether the order of domain areas in sample C are different from the order of domain areas in samples G and GW.

The structure of the following paragraphs is around comparisons of the most and least frequent themes and domain areas between sample C and G, so H1C, H2C, and H3, then
the comparison of most and least frequent themes and domain areas between sample C and GW, so H1D, H2D, and H4.

H1C states that the five most frequently represented themes in sample C are different from the five most frequently represented themes in sample G. Learner is the only theme that is the same across samples C and G. The other four themes in sample C are different. Table 10 shows the results of the chi-square tests, comparing the five most frequent themes and five least frequent themes in sample C to the same variables in sample G.

Table 10. Results of Chi Square Tests for Sample C Compared to Sample G Themes

<table>
<thead>
<tr>
<th>Most Frequent Dependent Variables</th>
<th>$X^2$</th>
<th>$p$-value</th>
<th>$\varphi$</th>
<th>$\varphi^e$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input$^a$</td>
<td>168.75</td>
<td>***</td>
<td>.0034</td>
<td>.19</td>
</tr>
<tr>
<td>Empathy$^a$</td>
<td>125.76</td>
<td>***</td>
<td>.0029</td>
<td>.20</td>
</tr>
<tr>
<td>Learner$^a$</td>
<td>1.77</td>
<td>.18</td>
<td>.0003</td>
<td>.09</td>
</tr>
<tr>
<td>Restorative$^a$</td>
<td>76.84</td>
<td>***</td>
<td>.0023</td>
<td>.16</td>
</tr>
<tr>
<td>Intellection$^a$</td>
<td>207.83</td>
<td>***</td>
<td>.0038</td>
<td>.21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least Frequent Dependent Variables</th>
<th>$X^2$</th>
<th>$p$-value</th>
<th>$\varphi$</th>
<th>$\varphi^e$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command$^a$</td>
<td>1.23</td>
<td>.27</td>
<td>.0003</td>
<td>.02</td>
</tr>
<tr>
<td>Significance$^a$</td>
<td>2.24</td>
<td>.13</td>
<td>-.0004</td>
<td>-.02</td>
</tr>
<tr>
<td>Belief$^a$</td>
<td>49.68</td>
<td>***</td>
<td>-.0018</td>
<td>-.11</td>
</tr>
<tr>
<td>Arranger$^a$</td>
<td>71.5</td>
<td>***</td>
<td>-.0022</td>
<td>-.13</td>
</tr>
<tr>
<td>Self-Assurance$^a$</td>
<td>9</td>
<td>.0027</td>
<td>-.0008</td>
<td>-.05</td>
</tr>
</tbody>
</table>

$^a$ N = 14,704,443, $^b$ N = G sample size/10,000, df (degrees of freedom) = 1, ***p < .001

The chi-square test provides evidence that Learner is not statistically different across the samples, but the differences in Input, Empathy, Restorative, and Intellection are significant at the $p < .001$ level. For the themes that are different between sample C and
G, the chi-square statistics show that the differences are not due to chance, thus providing evidence to reject \( H_{1C} \).

\( H_{2C} \) states that the five least frequent themes in sample C are different from the five least frequent themes found in sample G. Table 10, on page 76, shows the results of the chi-square tests comparing the five least frequent themes in sample C to the same variables in sample G. Command, Significance and Self-Assurance are common in both samples C and G, though the rank order within the bottom five differs slightly for each variable. Belief and Arranger are not in the bottom five for sample G and the tests for those two themes are statistically significant at the \( p < .001 \) level. The chi-square statistics show that the differences are not due to chance, thus providing evidence to reject \( H_{2C} \).

The effect size or strength of association as measured by the phi coefficient is very small or non-existent if looking at the \( \phi \) values listed in Table 10. Phi coefficients are all relative and since the sample sizes are so large, phi is also calculated at a proportionally reduced sample size by dividing the Gallup samples by 10,000 to make the counts more similar to those in sample C. These values indicate that phi is greater than zero, but the measure of association, while positive for the most frequent variables, is still relatively weak or non-existent according to the phi parameters. For the least frequent variables, the same holds true, but the direction is negative for all variables except Command.

\( H_{3} \) refers to the domain areas in sample C compared to sample G. Table 11 shows the results of the chi-square analysis and the phi coefficients for the domain areas.
The differences for each domain area were statistically significant, but there is relatively no association between the C and G variables according to the phi coefficient.

Table 11. Results of Chi Square Tests for Sample C Compared to Sample G Domains

<table>
<thead>
<tr>
<th>Domain Areas</th>
<th>$X^2$</th>
<th>p-value</th>
<th>$\phi$</th>
<th>$\phi^*$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executing$^c$</td>
<td>54.89</td>
<td>***</td>
<td>-.0009</td>
<td>-.05</td>
</tr>
<tr>
<td>Relationship Building$^c$</td>
<td>10.54</td>
<td>***</td>
<td>.0227</td>
<td>.02</td>
</tr>
<tr>
<td>Influencing$^c$</td>
<td>65.83</td>
<td>***</td>
<td>-.0009</td>
<td>-.06</td>
</tr>
<tr>
<td>Strategic Thinking$^c$</td>
<td>117.07</td>
<td>***</td>
<td>.0739</td>
<td>.07</td>
</tr>
</tbody>
</table>

$^c$ N = 73,522,215, $^e$ N = G sample size/10,000, df (degrees of freedom) = 1, *** $p < .001$

The next two paragraphs examine the same comparisons using sample GW as the comparison instead of sample G. H2C states that the five most frequently represented themes in sample C will be different from the five most frequently represented themes found in sample GW. Learner and Empathy are the two themes that overlap between samples C and GW, though the rank order of empathy is higher in sample C. The other three themes in sample C are different.

Table 12 shows the results of the chi-square tests comparing the five most frequent themes in sample C to the same themes in sample GW.
While Learner and Empathy are the same across the samples, the rank differences in
Empathy between two and five makes the difference in the samples statistically
significant. The differences between Input, Restorative, and Intellection are also
significant at the $p < .001$ level. The chi-square tests show that the differences are not
due to chance, thus providing evidence to reject $H_{2C}$.

$H_{2D}$ states that the five least frequent themes in sample C are different from the
five least frequent themes found in sample GW. Table 12, on page 78, also shows the
results of the chi-square tests comparing the five least frequent themes in sample C to the
same themes in sample GW. Command, Significance and Self-Assurance are common
themes across samples C and GW, though the rank order within the bottom five differs
for Command and differs slightly for Significance. There is a difference statistically with
Command at the $p < .001$ level. Belief and Arranger are not in the bottom five for sample

Table 12. *Results of Chi Square Tests for Sample C Compared to Sample GW Themes*

<table>
<thead>
<tr>
<th>Most Frequent Dependent Variables</th>
<th>$X^2$</th>
<th>$p$-value</th>
<th>$\phi$</th>
<th>$\phi^e$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input$^b$</td>
<td>106.98</td>
<td>***</td>
<td>.0042</td>
<td>.20</td>
</tr>
<tr>
<td>Empathy$^b$</td>
<td>23.37</td>
<td>***</td>
<td>.0020</td>
<td>.13</td>
</tr>
<tr>
<td>Learner$^b$</td>
<td>5.63</td>
<td>.02</td>
<td>.0010</td>
<td>.10</td>
</tr>
<tr>
<td>Restorative$^b$</td>
<td>56.37</td>
<td>***</td>
<td>.0030</td>
<td>.15</td>
</tr>
<tr>
<td>Intellection$^b$</td>
<td>188.58</td>
<td>***</td>
<td>.0055</td>
<td>.20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least Frequent Dependent Variables</th>
<th>$X^2$</th>
<th>$p$-value</th>
<th>$\phi$</th>
<th>$\phi^e$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command$^b$</td>
<td>14.83</td>
<td>***</td>
<td>.0016</td>
<td>.05</td>
</tr>
<tr>
<td>Significance$^b$</td>
<td>0.04</td>
<td>.85</td>
<td>.0001</td>
<td>.01</td>
</tr>
<tr>
<td>Belief$^b$</td>
<td>56.35</td>
<td>***</td>
<td>-.0030</td>
<td>-.13</td>
</tr>
<tr>
<td>Arranger$^b$</td>
<td>60.1</td>
<td>***</td>
<td>-.0031</td>
<td>-.13</td>
</tr>
<tr>
<td>Self-Assurance$^b$</td>
<td>0.06</td>
<td>.80</td>
<td>-.0001</td>
<td>.01</td>
</tr>
</tbody>
</table>

$^bN = 6,128,568$, e= GW sample size/10,000, df (degrees of freedom) = 1, ***$p < .001$
GW and those two values are statistically significant at the $p < .001$ level. The chi-square test shows that the differences are not due to chance, thus providing evidence to reject H2D0.

Again, the effect size or association as measured by the phi coefficient is very small or non-existent, if looking at the $\phi$ values listed in Table 12. Even at the reduced sample size, these values indicate that phi is greater than zero, but the measure of association, while positive for the most frequent variables, is still relatively weak or non-existent. For the least frequent variables, the same holds true, but the direction is negative for Belief and Arranger and positive for Command, Significance and Self-Assurance.

H4 refers to the order of domain areas in sample C compared to the order in sample GW. Table 13 shows the results of the chi-square analysis and the phi coefficients. The differences for each domain area are statistically significant, but there is relatively no association between the C and GW variables.

Table 13. Results of Chi Square Tests for Sample C Compared to Sample GW Domains

<table>
<thead>
<tr>
<th>Domain Areas</th>
<th>$X^2$</th>
<th>$p$ -value</th>
<th>$\phi$</th>
<th>$\phi^e$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executing</td>
<td>65.53</td>
<td>***</td>
<td>-.0015</td>
<td>-.06</td>
</tr>
<tr>
<td>Relationship Building</td>
<td>10.74</td>
<td>***</td>
<td>.0006</td>
<td>-.02</td>
</tr>
<tr>
<td>Influencing</td>
<td>20.75</td>
<td>***</td>
<td>-.0008</td>
<td>-.03</td>
</tr>
<tr>
<td>Strategic Thinking</td>
<td>256.54</td>
<td>***</td>
<td>.0029</td>
<td>.10</td>
</tr>
</tbody>
</table>

$^d$N = 30,642,840, $^e$N = GW sample size/10,000, df (degrees of freedom) = 1, *** $p < .001$
Relative Risk (RR) Ratios

The final statistical method applied to the data in this study was the calculation of RR ratios. This calculation is a very applicable and easily interpreted measure of association that provides results in a functional format. As a reminder, RR, as applicable to this study, shows how much more or less of a chance an individual in sample C has of having a particular theme in their top five themes as compared to someone in either the G or GW samples. If the RR score equals one, then the two proportions are equal. A 95% confidence interval is calculated to determine the significance of the RR ratios. The interval should not include one. A series of three tables and two figures illustrate the RR ratios for the themes and domain areas for sample C as compared to samples G and GW. An asterisk next to confidence interval indicates statistical significance. These calculations provide additional evidence to support the hypotheses and the chi-square analyses.

Table 14 shows the calculated RR ratios for the most and least frequent themes in sample C compared to the corresponding themes in sample G.
Table 14. *Relative Risk Tests for Sample C Compared to Sample G Themes*

<table>
<thead>
<tr>
<th>Most Frequent Dependent Variables</th>
<th>RR</th>
<th>95% CI</th>
<th>% more or less (+/-) chance of having theme in top five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>1.85</td>
<td>2.01 - 1.70*</td>
<td>84.55% +</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.76</td>
<td>1.92 - 1.60*</td>
<td>75.72% +</td>
</tr>
<tr>
<td>Learner</td>
<td>1.07</td>
<td>1.18 - 0.97</td>
<td>6.85% +</td>
</tr>
<tr>
<td>Restorative</td>
<td>1.62</td>
<td>1.79 - 1.46*</td>
<td>61.56% +</td>
</tr>
<tr>
<td>Intellection</td>
<td>2.25</td>
<td>2.50 - 2.03*</td>
<td>125.4% +</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least Frequent Dependent Variables</th>
<th>RR</th>
<th>95% CI</th>
<th>% more or less (+/-) chance of having theme in top five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command</td>
<td>1.16</td>
<td>1.51 - 0.89</td>
<td>16.21% +</td>
</tr>
<tr>
<td>Significance</td>
<td>0.81</td>
<td>1.07 - 0.62</td>
<td>18.65% -</td>
</tr>
<tr>
<td>Belief</td>
<td>0.36</td>
<td>0.49 - 0.27*</td>
<td>63.90% -</td>
</tr>
<tr>
<td>Arranger</td>
<td>0.3</td>
<td>0.41 - 0.22*</td>
<td>70.01% -</td>
</tr>
<tr>
<td>Self-Assurance</td>
<td>0.57</td>
<td>0.83 - 0.39*</td>
<td>43.26% -</td>
</tr>
</tbody>
</table>

Note: RR of 1 is equal to no risk.

Supporting the findings in the previous section of this chapter, Learner, Command and Significance are the three variables where the confidence interval includes one, indicating that the proportions have a chance of being equal and thus are not statistically significant.

The far-right column of Table 14 indicates the calculated percent at which respondents in sample C have either a more (+) or less (-) likely chance of having the particular theme in the top five. For example, respondents in sample C have 125.4% more of a chance of having the theme of Intellection than respondents in sample G. Under the least frequent themes, a respondent in sample C is 70.01% less likely than someone in sample G to have Arranger as a theme.

Table 15 shows the calculated RR ratios for the most and least frequent themes in sample C compared to the corresponding themes in sample GW. An asterisk next to the confidence interval indicates statistical significance.
Table 15. *Relative Risk Tests for Sample C Compared to Sample GW Themes*

<table>
<thead>
<tr>
<th>Most Frequent Dependent Variables</th>
<th>RR</th>
<th>95% CI</th>
<th>% more or less (+/-) chance of having theme in top five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>1.62</td>
<td>1.76 - 1.49*</td>
<td>61.99% +</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.26</td>
<td>1.38 - 1.15*</td>
<td>26.43% +</td>
</tr>
<tr>
<td>Learner</td>
<td>1.13</td>
<td>1.24 - 1.02*</td>
<td>12.66% +</td>
</tr>
<tr>
<td>Restorative</td>
<td>1.52</td>
<td>1.68 - 1.37*</td>
<td>51.96% +</td>
</tr>
<tr>
<td>Intellection</td>
<td>2.17</td>
<td>2.40 - 1.96*</td>
<td>116.87% +</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least Frequent Dependent Variables</th>
<th>RR</th>
<th>95% CI</th>
<th>% more or less (+/-) chance of having theme in top five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command</td>
<td>1.68</td>
<td>2.19 - 1.29*</td>
<td>68.12% +</td>
</tr>
<tr>
<td>Significance</td>
<td>1.03</td>
<td>1.35 - 0.78</td>
<td>2.65% +</td>
</tr>
<tr>
<td>Belief</td>
<td>0.34</td>
<td>0.47 - 0.25*</td>
<td>65.90% -</td>
</tr>
<tr>
<td>Arranger</td>
<td>0.33</td>
<td>0.45 - 0.24*</td>
<td>67.37% -</td>
</tr>
<tr>
<td>Self-Assurance</td>
<td>1.05</td>
<td>1.54 - 0.72</td>
<td>5.03% +</td>
</tr>
</tbody>
</table>

Note: RR of 1 is equal to no risk.

None of the most frequent themes in this comparison to sample GW have any reported confidence intervals that include one. The least frequent variables of Significance and Self-Assurance include one in the respective confidence intervals indicating that the proportions have a chance of being equal. Intellection, Input, Restorative, Empathy, Command, Belief, and Arranger all have statistically significant RR ratios.

Finally, Table 16 and Table 17 show the calculated RR ratios for the domain areas as compared to sample G and sample GW.

Table 16. *Relative Risk Tests for Sample C Compared to Sample G Domains*

<table>
<thead>
<tr>
<th>Domain Areas</th>
<th>RR</th>
<th>95% CI</th>
<th>% more or less (+/-) chance of having domain themes in top five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executing</td>
<td>0.82</td>
<td>0.87 - 0.78*</td>
<td>16.99% -</td>
</tr>
<tr>
<td>Relationship Building</td>
<td>1.07</td>
<td>1.13 - 1.02*</td>
<td>7.03% +</td>
</tr>
<tr>
<td>Influencing</td>
<td>0.72</td>
<td>0.79 - 0.66*</td>
<td>27.74% -</td>
</tr>
<tr>
<td>Strategic Thinking</td>
<td>1.26</td>
<td>1.34 - 1.19*</td>
<td>26.33% +</td>
</tr>
</tbody>
</table>

Note: RR of 1 is equal to no risk.
The domain comparisons to sample G do not include any confidence intervals that include one. Respondents in sample C have 7.03% more of a chance to have themes that fall into the Relationship Building domain, 26.33% more of a chance to have themes that fall in to the Strategic Thinking domain, 17.59% less of a chance to have themes that fall into the Executing domain and 27.74% less of a chance to have the themes fall into the Influencing domain area.

Table 17 summarizes the domain areas for respondents in sample C compared to sample GW. None of the confidence intervals in the four domains included one. Those in sample C have 6.42% less of a chance to have themes that fall into the Relationship Building domain, 42.14% more of a chance to have themes that fall in to the Strategic Thinking domain, 18.35% less of a chance to have themes fall into the Executing domain and 16.72% less of a chance to have the themes fall into the Influencing domain.

Table 17. Relative Risk Tests for Sample C Compared to Sample GW Domains

<table>
<thead>
<tr>
<th>Domain Areas</th>
<th>RR</th>
<th>95% CI</th>
<th>% more or less (+/-) chance of having domain themes in top five</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executing</td>
<td>0.82</td>
<td>0.86 - 0.78*</td>
<td>18.35% -</td>
</tr>
<tr>
<td>Relationship Building</td>
<td>0.94</td>
<td>0.97 - 0.90*</td>
<td>6.42% -</td>
</tr>
<tr>
<td>Influencing</td>
<td>0.84</td>
<td>0.92 - 0.77*</td>
<td>16.72% -</td>
</tr>
<tr>
<td>Strategic Thinking</td>
<td>1.42</td>
<td>1.48 - 1.37*</td>
<td>42.14% +</td>
</tr>
</tbody>
</table>

Note: RR of 1 is equal to no risk.

The figures below graphically illustrate the data from Table 16 and Table 17 with the information from both samples G and GW included in one figure. The color blue, associated with sample C, outlines all of the bars. Sample C is compared to the other two samples, indicated by the fill of the bar (grey for G, red for GW). Figure 8. Relative Risk
Ratios Most and Least Frequent Themes shows the RR ratios for the most and least frequent themes.

**Figure 8. Relative Risk Ratios Most and Least Frequent Themes**
The chart below the figure shows the percent chance that sample C respondents are more or less likely to have a theme represented in their top five, as compared to those in sample G or GW.

*Figure 9* shows the RR for the domain areas for sample C as compared to samples G and GW.

<table>
<thead>
<tr>
<th>Domain Areas</th>
<th>% Change C vs G</th>
<th>% Change C vs GW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executing</td>
<td>-16.99%</td>
<td>-18.35%</td>
</tr>
<tr>
<td>Relating</td>
<td>7.03%</td>
<td>-6.42%</td>
</tr>
<tr>
<td>Influencing</td>
<td>-27.74%</td>
<td>-16.72%</td>
</tr>
<tr>
<td>Strategic Thinking</td>
<td>26.33%</td>
<td>42.14%</td>
</tr>
</tbody>
</table>
Chapter Summary

To summarize, the sections in this chapter describe the sample descriptive characteristics, frequency statistics across all themes, the most and least frequent themes in sample C, chi-square analysis and relative risk ratios. The section began broadly looking at results for all themes and domains across the three samples, and then narrowed to focus more on the ten themes representing the more specific most and least frequent themes found in sample C. The Results Chapter provided results based on each specific hypothesis. The results provided evidence to accept all hypotheses except for H1B. The next chapter provides a detailed analyses and discussion of the hypotheses and results.
CHAPTER 5: DISCUSSION

The Results Chapter provides data indicating that certain patterns of themes exist for sample C that are different from the patterns of themes of those in the general population. This chapter discusses the results related to the patterns of most and least frequent themes as well as domain areas. The chapter concludes by exploring the implications for how students and staff can benefit from a strength-based curriculum in relation to internship preparation, specifically geared toward the patterns found in sample C.

Review of hypotheses

Hypothesis one and related hypotheses focus on the pattern of themes that exist among the five most frequent themes and how they differ from those in samples G and GW. The stated hypotheses are as follows. A pattern of themes and domain areas exists in the five most frequent themes in sample C (H1). The top five themes in sample C fall predominantly in the Strategic Thinking domain area (H1A). The most frequent theme in sample C is Learner (H1B). The five most frequent themes in sample C are different from the five most frequent themes in sample G (H1C). The five most frequent themes in sample C are different from the five most frequent themes in sample GW (H1D).

Hypothesis two and related hypotheses focus on the pattern of themes that exist among the five least frequent themes and how they differ from those in samples G and GW. The stated hypotheses are as follows. A pattern of themes and domain areas exists in the five least frequent themes in sample C (H2). The five least frequent themes in
sample C fall predominantly in the Influencing domain (H2A). The least frequent theme in sample C is Self-Assurance (H2B). The five least frequent themes in sample C are different from the five least frequent themes in sample G (H2C). The five least frequent themes in sample C are different from the five least frequent themes in sample GW (H2D).

Finally, H3 and H4 relate to the order of domain areas in sample C as compared to samples G and GW. The stated hypotheses are as follows. The order of domain area frequency in sample C is different from the order of domain area frequency in sample G (H3). The order of domain area frequency in sample C is different from the order of domain area frequency in sample GW (H4). Testing H1 and H2, also led to the identification of the most common domain areas within the five most and least frequent themes.

Hypothesis H1B is the only rejected hypothesis; all other hypotheses were accepted. Some of the accepted hypotheses referring to the five most or least frequent themes had some similarities in themes across the samples, but even when themes overlapped some of the proportions and orders of the themes were different. The meaning behind the original hypotheses was to look at the overall patterns, not simply to see whether the themes were exact matches.

For the most frequent themes, Learner was common across samples C, G, and GW. Empathy and Learner were common across samples C and GW. In terms of statistical significance, Learner is the only theme where the proportion is not statistically different between samples C, G and GW. The proportion of those with Empathy as a top
theme is statistically different between samples C and GW, even though the theme shows up in the most frequent five for both samples. Input, Restorative, and Intellection were unique to the most frequent strengths in sample C.

For the least frequent themes, the common themes across samples C, G and GW are Command, Self-Assurance, and Significance. Even though the order that these themes appear within the bottom five is slightly different across the samples, the statistical analysis shows that the proportions are not statistically different, with the exception of Command between sample C and GW. Belief and Arranger were unique to the least frequent themes in sample C. Ultimately, while there is less variance in the least frequent themes, there are still differences in the overall patterns.

Some notable differences exist in relation to where the five most frequent themes for sample C fell in the other two samples. Input, number one in sample C, ranked six for both G and GW, Empathy, number two in sample C, ranked 9 for G and 5 for GW, Restorative, number four in sample C, ranked 9 for G and 11 for GW, and Intellection, number five in sample C, ranked 21 for G and 19 for GW. In terms of the least frequent themes, Self-Assurance ranked 34 in sample C, 33 in sample G and 34 in sample GW. Belief, number 32 in sample C ranked 25 for G and 22 for GW and Arranger, number 33 in sample C ranked 16 for G and 20 for GW.

Despite the phi coefficient showing weak to no effect, indicating a reason to consider rejecting the hypotheses, the RR ratios demonstrate the likelihood of differences in the themes and domain areas based on a comparison across the three samples. The significance levels demonstrated by the chances that a respondent would have a certain
theme provide enough evidence to support the chi-square analyses that a true difference does exist. This chapter analyzes the descriptive statistics for sample C, discusses the patterns of the five most and least frequent themes and domain areas, and then connects this data with a strength-based curriculum for internship preparation.

Analysis of the descriptive statistics

The next paragraphs analyze the notable results related to H1, H1A, H1B, H2, H2A and H2B. Before delving deeper, Table 18 shows the rank order of the themes across all three samples, which helps anchor the discussion to follow. The bolded themes with asterisks are the five most frequent themes for sample C and the italicized themes are the least frequent themes for sample C.

<table>
<thead>
<tr>
<th>Rank Order</th>
<th>C</th>
<th>G</th>
<th>GW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Input*</td>
<td>Achiever</td>
<td>Achiever</td>
</tr>
<tr>
<td>2</td>
<td>Empathy*</td>
<td>Responsibility</td>
<td>Responsibility</td>
</tr>
<tr>
<td>3</td>
<td>Learner*</td>
<td>Learner*</td>
<td>Learner*</td>
</tr>
<tr>
<td>4</td>
<td>Restorative*</td>
<td>Relator</td>
<td>Relator</td>
</tr>
<tr>
<td>5</td>
<td>Intellec­tion*</td>
<td>Strategic</td>
<td>Empathy*</td>
</tr>
<tr>
<td>6</td>
<td>Achiever</td>
<td>Input*</td>
<td>Input*</td>
</tr>
<tr>
<td>7</td>
<td>Individualization</td>
<td>Harmony</td>
<td>Harmony</td>
</tr>
<tr>
<td>8</td>
<td>Developer</td>
<td>Empathy*</td>
<td>Developer</td>
</tr>
<tr>
<td>9</td>
<td>Relator</td>
<td>Restorative*</td>
<td>Positivity</td>
</tr>
<tr>
<td>10</td>
<td>Harmony</td>
<td>Adaptability</td>
<td>Strategic</td>
</tr>
<tr>
<td>11</td>
<td>Adaptability</td>
<td>Positivity</td>
<td>Restorative*</td>
</tr>
<tr>
<td>12</td>
<td>Strategic</td>
<td>Developer</td>
<td>Adaptability</td>
</tr>
<tr>
<td>13</td>
<td>Ideation</td>
<td>Individualization</td>
<td>Individualization</td>
</tr>
<tr>
<td>14</td>
<td>Deliberative</td>
<td>Individualization</td>
<td>Connectedness</td>
</tr>
<tr>
<td>15</td>
<td>Futuristic</td>
<td>Ideation</td>
<td>Connectedness</td>
</tr>
<tr>
<td>16</td>
<td>Connectedness</td>
<td>Arranger</td>
<td>Consistency</td>
</tr>
<tr>
<td>17</td>
<td>Responsibility</td>
<td>Communication</td>
<td>Woo</td>
</tr>
<tr>
<td>18</td>
<td>Positivity</td>
<td>Analytical</td>
<td>Includer</td>
</tr>
<tr>
<td></td>
<td>Domain</td>
<td>Element</td>
<td>Theme</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>19</td>
<td>Context</td>
<td>Futuritic</td>
<td>Intellection*</td>
</tr>
<tr>
<td>20</td>
<td>Discipline</td>
<td>Woo</td>
<td>Arranger</td>
</tr>
<tr>
<td>21</td>
<td>Analytical</td>
<td>Intellection*</td>
<td>Futuristic</td>
</tr>
<tr>
<td>22</td>
<td>Communication</td>
<td>Includer</td>
<td>Belief</td>
</tr>
<tr>
<td>23</td>
<td>Consistency</td>
<td>Connectedness</td>
<td>Maximizer</td>
</tr>
<tr>
<td>24</td>
<td>Woo</td>
<td>Consistency</td>
<td>Ideation</td>
</tr>
<tr>
<td>25</td>
<td>Includer</td>
<td>Belief</td>
<td>Discipline</td>
</tr>
<tr>
<td>26</td>
<td>Competition</td>
<td>Deliberative</td>
<td>Deliberative</td>
</tr>
<tr>
<td>27</td>
<td>Activator</td>
<td>Competition</td>
<td>Activator</td>
</tr>
<tr>
<td>28</td>
<td>Focus</td>
<td>Focus</td>
<td>Analytical</td>
</tr>
<tr>
<td>29</td>
<td>Maximizer</td>
<td>Activator</td>
<td>Focus</td>
</tr>
<tr>
<td>30</td>
<td>Command</td>
<td>Context</td>
<td>Competition</td>
</tr>
<tr>
<td>31</td>
<td>Significance</td>
<td>Discipline</td>
<td>Context</td>
</tr>
<tr>
<td>32</td>
<td>Belief</td>
<td>Significance</td>
<td>Significance</td>
</tr>
<tr>
<td>33</td>
<td>Arranger</td>
<td>Self-Assurance</td>
<td>Command</td>
</tr>
<tr>
<td>34</td>
<td>Self-Assurance</td>
<td>Command</td>
<td>Self-Assurance</td>
</tr>
</tbody>
</table>

H1A and H2A both refer to which domain areas the top five themes in sample C fall into; H1B and H2B refer to the most and least frequent theme for sample C. Related to H1A, for sample C, all eight themes in the Strategic Thinking domain showed up over 100 times. The Strategic Thinking themes represent 32.78% of the sample, compared to 25.95% for G and 23.06% for GW. Technically, Relationship Building at 32.84% was the most frequent domain area when looking at the percentage of themes. However, the method for testing H1A was to look at the domain areas represented in the five most frequent themes, which for sample C includes three in the Strategic Thinking domain. Only two themes fall in this domain area in the five most frequent themes for sample G and one theme for sample GW. The most frequent theme for sample C, Input, also falls in this domain area. This was the only domain area where all themes had counts over 100 (see Table 3). Looking at the mid-point of the 34 themes, rank 17, for sample C, five of the eight themes in the Strategic Thinking domain are between 1 and 17 and the rest
occur before rank 21. Contrarily, three and four themes, respectively, show up after the rank of 21 in samples G and GW. Both samples G and GW have Context, a Strategic Thinking theme, in the five least frequent themes. The rank for Context in sample C is 22 out of 34 and there are no other themes from this domain in the least frequent themes.

Related to H2A, sample C had very little representation of themes in the Influencing domain area at 10.89% of all themes, compared to 15.07% for G and 13.08% for GW. Three of the five themes in the least frequent themes for sample C fall into the Influencing domain area. Communication and Woo are the two themes in this domain that show up the most, but not until the respective ranks of 22 and 24. For samples G and GW, the first-time themes in the Influencing domain appear is at rank 14 out of 34 for both samples. While the Influencing domain area generally shows up less than other domain areas across all three samples, sample C has more themes in this domain clustered toward the bottom third of the rankings as exhibited in Table 18.

H1A and H2A do not specifically reference the Executing or Relationship Building domain areas, but a discussion of these two areas is relevant to understanding the pattern of themes and domain areas referred to in H1 and H2. Themes in the Executing domain area were less frequent in sample C at 23.49%, compared to 30.26% for G and 28.76% in GW. Two themes for sample C, Restorative and Achiever, showed up in the top five over 200 times. Achiever, the first ranked theme for samples G and GW, ranks 6 out of 34 in sample C, with 236 respondents or 4.9% of the sample who have this theme in their top five. One hundred and fifteen respondents have this theme represented in their top two themes. However, 236 occurrences of this theme were not
enough for the theme to earn a place in the five most frequent themes for sample C. Individualization at 4.75% of the sample was the only other theme from the Relationship Building domain area with a count over 200 that was not included in the five most frequent themes.

Similar to the Strategic Thinking domain area, the Relationship Building domain has strong representation in sample C with the highest percentage of the four domain areas by 0.06%, at 32.84%. Samples G and GW mirror this strong representation at 30.69% and 35.10% and hold the same position of highest percentage of the four domain areas. An interesting difference among the themes in the Relationship Building domain occurs with Individualization, mentioned in the previous paragraph. This theme is number two of nine themes in this domain with 229 occurrences in the top five and 94 occurrences in the top two for sample C. The rank for this theme in sample C is seven and in both G and GW, the rank is 13. People with this theme are intrigued by the unique qualities of individuals (Gallup Press, 2016). Individualization is not in the five most frequent themes, but falls right after Achiever. Notably, the next four themes after Individualization also fall in the Relationship Building domain area. Finally, Positivity comes in at rank 21 for sample C, 14 for G and 12 for GW. This theme is about getting other people excited about ideas. At rank 21, the theme appears to be less common than in the other two samples.

This discussion so far supports the acceptance of H1A, H1B, and provides evidence toward support for H1 and H2, as the patterns of domain areas in sample C are apparent. In regards to H1B and H2B, the most common theme for sample C is Input,
not Learner, providing evidence to reject H1B. Learner is the only theme represented across all three samples as part of the five most frequent themes and the only theme across all 34 that has the exact same rank of three. Interestingly, the definition of this theme is a desire for self-improvement and an interest in the process of learning more than the outcomes. A bias could be appearing since those with this theme may also be individuals who are more likely to take assessments such as the CSF. The least frequent theme for sample C is Self-Assurance, which is also true for sample GW, providing evidence to accept H2B. *Figure 6. Sample C vs. G and Figure 7. Sample C vs. GW* visually depict some of the pattern differences between samples C, G, and GW. The next two sections specifically look at the patterns of themes for sample C related to the most and least frequent themes.

*Patterns of most frequent themes*

This section shifts into a discussion around the findings related to the most frequent themes in sample C of Input, Empathy, Learner, Restorative, and Intellection. H1C and H2C, both accepted hypotheses, state that the five most frequent themes in sample C are different from the five most frequent themes in samples G and GW. Looking across the samples, the analyses provide evidence of statistical differences between the five most frequent themes in sample C as compared to those in G and GW. Despite the phi coefficient indicating a very weak or no relationship, the RR ratios arguably provide a better measure of association.
The percentages of the five most frequent themes for sample C, Input, Empathy, Learner, Restorative and Intellection range from 7.26% to 5.44%. These percentages are at a higher range than the five most frequent themes in the other two samples. Specifically, Input is 7.26%, Empathy is 6.51%, Learner is 6.02%, Restorative is 5.68%, and Intellection is 5.44%. Comparatively, the most frequent themes in sample G are Achiever, Responsibility, Learner, Relator, and Strategic, with the percentages ranging from 6.30% to 4.45%. The most frequent themes in sample GW are Achiever, Responsibility, Learner, Relator, and Empathy with the percentages ranging from 6.22% to 5.15%. The respective proportions for the five most frequent themes for samples G and GW are Achiever 6.30%, 6.22%, Responsibility 5.66%, 6.11%, Learner, 5.63%, 5.34%, Relator 5.47%, 5.28%, Strategic 4.45% (G only), and Empathy 5.15% (GW only). For sample C, the ranks and percentages of the most frequent themes in samples G and GW are Achiever at 4.90% (6/34), Responsibility at 2.70% (17/34), Learner at 6.02% (3/34), Relator at 3.76% (9/34), Strategic (G) as 3.38% (12/34) and Empathy (GW) at 6.51% (2/34). The primary focus of this study is to focus on the five most frequent themes in sample C, but this snapshot of the patterns in the other two samples provides a context for the comparison.

Samples G and GW have four of the five most frequent themes in common. Sample C only has one theme, Learner, in common with sample G and two themes, Learner and Empathy, in common with sample GW. The top theme of Achiever for G and GW shows up as the sixth most frequent theme in sample C. The top theme of Input for sample C shows up as the sixth most frequent theme in both the G and GW samples.
Another difference across the samples is that the first and second ranked themes for both G and GW, Achiever and Responsibility, fall into the Executing domain. Sample C only has the Restorative theme, ranked fourth, in the Executing domain area. Empathy ranks second for sample C, is not in sample G and ranks fifth in sample GW. The samples do not have any Influencing themes in the five most frequent themes.

The RR ratios for the most frequent themes in sample C compare the data across samples, presenting the results in a way that suggest the chance of someone in sample C having a theme as part of their top five. A person in sample C has 84.55% more of a chance of having Input, the most frequent theme in sample C, than those in sample G and 61.99% more of a chance when compared to other women in sample GW. A person in sample C has 125.4% more of a chance of having Intellection than those in sample G or 116.78% more of a chance when compared to other women in sample GW. The RR ratio for Learner, the only theme in common across the samples, is not significant for sample G at 6.85% more of a chance. Someone in sample C has 12.66% more of a chance of having this theme than those in sample GW and this finding is significant. For the other two most frequent themes, Empathy and Restorative, those in sample C have 75.72% more of a chance to have the theme compared to sample G and 26.43% more of a chance compared to sample GW. Those in sample C have 61.56% more of a chance of having Restorative than those in sample G and 51.96% more of a chance than those in sample GW.

The statistical significance of all the ratios aside from Learner in one comparison, provide strong evidence that the pattern of most frequent themes is different from the
pattern in other two samples. This information also supports the results from the chi-square analyses. The evidence also suggests that differences exist in the patterns even when comparing women to other women. Looking at the RR ratios across the samples, the differences in Empathy 75% for G and 26% or GW demonstrates that women have more of a chance of having Empathy. There is also a difference with Input between G and GW, though not as large as the difference with Empathy. The other RR ratios are similar whether compared to sample G or GW. Figure 8. *Relative Risk Ratios Most and Least Frequent Themes* depicts these trends visually.

Now that the pattern is identified and sample C has unique differences, a closer look at the definitions of the most frequent themes provides some insights on the common themes for this population. The definitions of these the five most frequent themes are:

People exceptionally talented in the Input theme have a craving to know more. Often they like to collect and archive all kinds of information. People exceptionally talented in the Empathy theme can sense other people’s feelings by imagining themselves in others’ lives or situations. People exceptionally talented in the Learner theme have a great desire to learn and want to improve continuously. The process of learning, rather than the outcome, excites them. People exceptionally talented in the Restorative theme are adept at dealing with problems. They are good at figuring out what is wrong and resolving it. People exceptionally talented in the Intellection theme are characterized by their intellectual activity. They are introspective and appreciate intellectual discussions. (Rath, 2007, p. 1; Gallup, Inc., 2000; Gallup Press, 2016)

These words highlight a strong desire to gather information and engage in intellectual interactions with others, while taking the feelings of others into account and using information to resolve problems or challenges. The three Strategic Thinking themes are more dominant in the top five for sample C, which can present challenges in terms of
taking action. The words that resonate from these definitions are learning, collecting, processing, thinking, feeling and problem solving. Absent from the definitions is how the desire for knowledge and learning is used to influence or persuade others. More discussion around these definitions takes place in the implications section.

Overuse of strengths or the themes that do not rank near the top tend not to be the focus of the strength development approach and in fact, that way of thinking is counterintuitive to the strengths development model. The question of what happens when the focus is on what people do well is the hallmark of the theory. That said another perspective on the data is to look at what the story sounds like from the frame of overusing one’s strengths. For sample C, the overuse sounds like this:

- **Input:** “Gets off track easily. Lack of output/productivity by spending too much time gathering data. Needs to be in the know” (Seaman, 2013).
- **Empathy:** “Consumed by others emotions. Over sensitive and takes things personally that aren’t intended to be” (Seaman, 2013).
- **Learner:** “Never feels prepared enough. Bored quickly with routine. Easily detoured by need to know more” (Seaman, 2013).
- **Restorative:** “Excessively self-critical. Tendency to rescue other people. Doesn’t know when it’s time to quit” (Seaman, 2013).
- **Intellection:** “Comes off as aloof/disengaged/unapproachable. Annoys others with seemingly academic questions/comments” (Seaman, 2013).

The counter story is about distraction, lack of constraint and action, perception of being aloof, being too focused on academic information, and being too sensitive to others. This
information is helpful to know in order to help curtail overuse or at a minimum understand what overuse might sound like.

*Patterns of least frequent themes*

This section shifts into a discussion around the findings related to the least frequent themes in sample C of Self-Assurance, Arranger, Belief, Significance, and Command. H1D and H2D, both accepted hypotheses, state that the five least frequent themes in sample C are different from the five least frequent themes in samples G and GW. Similar to the most frequent themes, across the samples, the analyses provided evidence of statistical differences between the five least frequent themes in sample C as compared to G and GW; though within the least frequent themes a few more of the themes overlap. The RR ratios provide a frame of reference for the identified differences. This section delves deeper into a discussion around the five least frequent themes in sample C.

The percentages of the five least frequent themes, Self-Assurance, Arranger, Belief, Significance, and Command range from 0.54% to 1.08%, listed in order of the lowest ranked theme first. Specifically, the percentages of the five least frequent themes are Self-Assurance at 0.54%, Arranger at 0.79%, Belief at 0.81%, Significance at 1.02%, and Command at 1.08%. The least frequent themes for sample G are Context, Discipline, Significance, Self-Assurance, and Command with the percentages ranging from 0.93% to 1.75%. The least frequent themes for sample GW are Self-Assurance, Command, Significance, Context and Competition with the percentages ranging from 0.51% to
1.29%. The range of percentages across the samples align more closely, particularly between samples C and GW, than the ranges for the most frequent themes where there is a little more variance. The specific proportions for the least frequent themes in samples G and GW are: Context 1.75%, 1.17%, Discipline (G only) 1.43%, Significance 1.25%, 0.99%, Self-Assurance 0.95%, 0.54%, Command 0.93%, 0.64%, and Competition (GW only) 1.29%. For sample C, the ranks and percentages for the common themes across all three samples are Self-Assurance at 0.54% (34/34), Significance at 1.02% (30/34) and Command at 1.08% (30/34). The G and GW themes that do not overlap with sample C have the following representation and ranks in sample C: Context at 2.51% (19/34), Discipline (only G) at 2.37% (20/34), and Competition (only GW) at 1.62% (26/34).

Similar to the snapshot of the most frequent themes, these data points provide context for comparison. The story of the least frequent themes looks slightly different as three of the five themes Significance, Self-Assurance, and Command, are the same across all three samples, though the rank orders differ slightly. Similar to the most frequent themes, four of the five least frequent themes are in common between samples G and GW. The commonalities here provide more evidence that there are distinct differences in the five most frequent themes, whereas the bottom end of the list of themes for sample C more closely mirrors the trends in the general population.

The results for sample C show that the rank order of the five least frequent themes is not consistent across samples, but predominantly the themes are in the Influencing domain area. The notable results for sample C are the two Executing themes in the least frequent themes. The themes of Belief and Arranger are unique to sample C. Sample G
has one Executing theme, Discipline, and sample GW does not any themes as part of the least frequent themes that fall in the Executing domain area.

The RR ratios for the least frequent themes help to explore the actual differences across the samples and support the results of the chi-square analyses. A few of the RR ratios for the least frequent themes are not significant. The non-significant RR ratios are Command and Significance for sample G and Self-Assurance and Significance for sample GW. The result of the chi-square analysis for Self-Assurance falls on the cusp of significance and the result would be significant if using $p < 0.01$. When comparing the RR ratios, the Self-Assurance ratio is significant. This makes sense since the percentage of those in G is 0.95% and 0.54% for sample C. Compared to those in sample G, respondents from sample C have 43.26% less of a chance of having Self-Assurance, 70.01% less of a chance of having Arranger, and 63.90% less of a chance of having Belief in their top five themes. Compared to those in sample GW, respondents in sample C have 67.37% less of a chance of having Arranger, 65.90% less of a chance of having Belief, and 68.12% more of a chance of having Command. Command for sample GW is different because the rank order is two for sample C and five for sample GW. Figure 8. *Relative Risk Ratios Most and Least Frequent Themes* depicts these trends visually. Despite some similar themes, the results still suggest that sample C has different patterns even when compared with other women.

The pattern of least frequent themes for sample C, while not as important as the most frequent themes, based on the focus on building strengths, is still worth defining.
The definitions of Self-Assurance, Arranger, Belief, Significance, and Command, the five least themes in sample C are:

People exceptionally talented in the Self-Assurance theme feel confident in their ability to manage their own lives. They possess an inner compass that gives them confidence that their decisions are right. People exceptionally talented in the Arranger theme can organize, but they also have a flexibility that complements this ability. They like to determine how all of the pieces and resources can be arranged for maximum productivity. People exceptionally talented in the Belief theme have certain core values that are unchanging. Out of these values emerges a defined purpose for their lives. People exceptionally talented in the Command theme have presence. They can take control of a situation and make decisions. People exceptionally talented in the Significance theme want to be very important in others’ eyes. They are independent and want to be recognized. (Rath, 2007, p. i; Gallup, Inc., 2000; Gallup Press, 2016)

The sounds of these themes are very different from the sounds of the most frequent themes. The tones of influence and action are predominant in this description. While the overall patterns are different, there seem to be more similarities in the least frequent themes than the most frequent themes.

*Patterns of domain areas*

H3 and H4, the final two accepted hypotheses, state that the positional order of the domain areas are different from the positional order for samples G and GW, based on the frequencies of the themes in each domain area. The analysis of the descriptive statistics touched on some of these results, but a few are worth restating. Sample C domains range from Influencing at 10.89%, to Executing at 23.49%, to Strategic Thinking at 32.78% and finally to Relationship Building at 32.84%. Sample G and GW range from Influencing, to Strategic Thinking to Executing to Relationship Building. All three samples had Influencing as the lowest domain areas, which makes sense based on
the similarities in the least frequent themes. The Relationship Building domain area is the highest in all three samples, despite barely being in that position for samples C and G. The notable differences are around the positions of the Strategic Thinking and Executing domain areas in sample C.

The RR ratios and chi-square tests show that those in sample C have more of a chance, 26.33% (G) and 42.14% (GW), of having themes in the Strategic Thinking domain and 17.59% (G) and 18.47 (GW) less of a chance of having themes in the Executing domain. Eighty-three percent of sample C has a theme that falls in the Strategic Thinking domain area. Despite similar ordinal positions for the Relationship Building domain and Influencing domain, differences still exist in terms of the frequencies. For the Relationship Building domain, sample C has a 7.03% greater chance of having themes in this domain than those in sample G and 6.42% less of a chance of having themes in this domain than those in sample GW. For the Influencing domain, sample C respondents have 27.74% less of a chance than sample G and 16.72% less of a chance than sample GW of having themes in this area as part of their top five. One of the differences is that 66% of sample C does not have any themes in the Influencing domain, which is almost triple the percent of any other of the domain areas. The RR ratios, while all significant in terms of the domain area, show a level of variance across the four domains for samples G and GW.

The last three sections highlighted some of the key aspects of the patterns discovered through the statistical analyses of sample C. More differences exist in the most frequent themes between sample C and the two Gallup samples, but difference still
exist among the least frequent themes. The domain areas of the Gallup samples appear in the same order, but for sample C, there are key differences in order and frequencies of the Executing and Strategic Thinking domain areas. The next section of this chapter shifts to application of the data from sample C in terms of educational programming oriented toward internship preparation and then concludes with a section on limitations.

*Comparison to Existing Studies*

Strength development theory focuses on building on the naturally occurring talents, knowledge, and skills. Even neurological research shows that the human brain develops in a way that reinforces focusing on what a person does well. The first step in this approach is to identify the talent, which is what the CSF assessment does for respondents. Next is testing out the talents in a variety of situations, of which this study identifies internship experiences as one way to do this. Finally, the last step is working to change behavior based on feedback from the testing phase, which is where educators can work with students to process what they are learning from phase two.

Strengths development theory supports the leadership development framework as well. The Center for Creative Leadership’s three assumptions hold true when thinking about how to integrate training around strengths development to better prepare students doing internships. First, a student participating in an internship can test their abilities dealing with different roles and processes in an organizational setting that provides context for learning. The second assumption is that leadership and personal development are one in the same and strength-based work is all about personal development. Finally,
the third assumption is that development takes place over time. Internship experiences
tend to be eight to 12 weeks, providing an extended learning opportunity, with reflection
extending well past the actual experience. The next paragraphs connect strengths
development theory to broader ideas related to this study. The last part of this section
specifically talks about how to incorporate strengths development into training for
internships.

The research on women’s colleges and liberal arts colleges provides evidence of
the need to understand the students that attend these specific types of schools. The
student populations at these colleges are small. Students attend with the desire to work
closely with faculty and staff. The pressure on liberal arts colleges to prepare students is
not diminishing. Utilizing a strength-based development approach with students could
add to the value provided by a liberal arts education. Helping students navigate and test
their strengths may provide them with a more accurate sense of themselves. Jaschik
(2015) reported on the study by the Association of American Colleges and Universities
that found large differences in students’ perceptions of their preparedness compared to
what employers thought. A new study might look at how students’ perceptions might be
more accurate if they have participated in some form of strength-based development
work. Publicizing and highlighting strengths training and preparation for students might
also be a draw for employers looking to recruit students. A cautionary note: I am not
suggesting that educators should ignore individual differences. Instead, I am suggesting
that understating the patterns and differences that exist could provide a foundation of
knowledge applicable to many members of a student population.
The reduction in the number of women’s only colleges means there is a constant need for research and evidence that supports why and how this type of educational environment prepares students. Looking at strengths data based on gender provides windows of possibilities to look at particular patterns. Data from Day (2012) indicates that women attending these particular schools attend graduate school at higher rates than women attending co-educational schools and they feel more prepared for their first jobs. Related to the findings of this study, the link to graduate school could be an area worth exploring more. Particularly, for sample C, the themes of Input, Learner, and Intellection are likely strong talents for students looking to further their education in a graduate program. In relation Empathy as the number two theme in sample C, Sax, Lozano and Vandenboom (2015) found that 81.7% of those students entering women’s colleges are more likely to value helping others in difficulty. The position of Empathy in sample C seems to provide additional evidence validating this statement. Empathy also showed up for college students in the study of strengths among pharmacology students. The next paragraph highlights some additional points from the pharmacy study, which mirrors the structure and research question of this study, examining patterns of strengths among pharmacy students rather than students attending a select, liberal arts, women’s college.

As discussed in the literature review, a study published in the *Journal of Pharmaceutical Education* in 2015 looked at the themes of students across five Midwestern Pharmacy Schools (Janke, et al. 2015). The study consisted of 1,244 respondents, made up of a combination of students across different programs and explored potential gender differences. Each of the five schools had the following three
themes as part of the five most frequent themes: Harmony, Achiever, and Learner. Responsibility showed up in the top five in four of the five schools and Relator showed up in three of the five schools, but did not make the top five in the data set that combined the data across the schools. The most frequent themes for the combined pharmacy sample are Achiever, Harmony, Learner, Responsibility, and Empathy and the most frequent themes in the undergraduate sample used as a comparison were Achiever, Adaptability, Responsibility, Restorative, and Relator.

When considering the five most frequent themes in sample C, the only two themes that overlap with the pharmacy sample are Learner and Empathy. In comparison to the undergraduate sample used in the pharmacy study, only one theme overlapped, Restorative. Interestingly, Learner again held the third position in the pharmacy sample. The women in the pharmacy sample had more themes in the Executing and Relationship Building domain areas, which was not true of the findings for Sample C. These differences further support that sample C has a different pattern of most frequent themes than other samples of students. Three of the bottom themes, Significance, Command, and Self-Assurance overlapped between the pharmacy population, the undergraduate sample, and sample C. This study does not statistically test the differences between sample C and the pharmacy students, but that could be another direction for future research. The pharmacy school study did not link the patterns to any program development, but used the data to understand what type of student attends pharmacology programs.
Lorimer and Elford presented a paper at a conference on a study similar to the one conducted by Janke, et al. (2015). They examined the strengths of two independent groups of first year engineering students in an effort to explore the signature themes for each engineering group longitudinally. The sample demographic information listed in the paper was limited, with the exception of first group being 168 students and the second group being 149 students. The sample size for the groups is relatively small compared to the current study and the pharmacy study. The most common themes for Group 2 were Adaptability, Competition, Analytical, Achiever, and Learner and for Group 1 the were Competition, Achiever, Adaptability, Analytical and Restorative. The least common themes for Group two were Communication, Belief, Woo, Connectedness, and Arranger and Connectedness, Arranger, Belief, Activator, and Self-Assurance for Group one. Similar to the analysis with the pharmacy students, only one theme from the five most frequent themes for sample C overlapped with each group, Learner and Restorative. The least frequent themes were more similar with two and three themes overlapping with Group 2 and Group 1. The comparison between the current study and the engineering study also provides evidence that the most frequent themes for sample C are unique.

Implications

The final part of this discussion draws connections between the patterns found in sample C to preparation programs for internships. A prerequisite for students participating in internship preparation programs would strongly benefit by having students take the CSF assessment and participate in a training session or class that
unpacks the results in the report. Ideally, this experience is validating for students based on their own experiences, serving to build their confidence. Over the course of the eight to 12-week internship, encouraging students to reflect on how they are using their strengths could provide another space where educators can help students interpret feedback and adjust behavior. Studying the impact of a strengths-based program would be a next step in the research, in particular, how strength-based programs enhance students’ abilities to move from simple identification of strengths to proactive, quality application (Louis, 2012; Louis, 2011).

This model of preparation has other implications for assisting students in finding work that is congruent with their strengths. Of course, in any job there are things that people do not like to do. That said, taking a self-assessment tool such as the CSF assessment, can build a person’s self-awareness and allows a person to make intentional decisions about the type of work they want to do. The Gallup Purdue Index Report does not discuss the process that leads students to finding meaningful internships or jobs, but surely, strengths awareness plays a key role (Gallup, Inc., 2014). An article exploring alternative ways to onboard employees by Cable, Gino, and Staats (2013) supports this idea. “By encouraging new employees to apply their personal strengths to the job, companies can help their new hires become more connected with their colleagues, more engaged in their work and more likely to stay” (Cable, Gino & Staats, 2013, n.p.). Allowing employees to be their authentic selves by helping them discuss their strengths at the start with an organization leads to positive outcomes. Students who are aware enough to understand their own strengths would essentially be able to better match their
strengths to the work they are doing and build on those strengths as they engage with the work (Cable, Gino, and Staats, 2013). Providing students with an opportunity to learn these strengths early in their lives can set them up to succeed later on, as they make career decisions.

Educators, whether faculty or staff members, providing internship preparation training for students may benefit from attending an orientation developed specifically for them in order to understand the CSF assessment tool and the more common themes and domain areas in the student population. They also might benefit by taking the CSF assessment themselves. The data set related to sample C or a comparable data set specific to another institution is particularly relevant, but so are the trends in the Gallup data. Educators must know their audiences, just as managers benefit knowing the strengths of their employees. Not making vast generalizations about individuals is important in relation to this specific work and life in general; however, systematically and statistically identifying commonalities or trends that arise across specific populations creates opportunities for more in depth knowledge about themes that may arise more often in a certain population. Staff and faculty members can use this information to help to connect students to opportunities where they apply their strengths or help challenge students who may be overusing a strength. The next paragraphs focus on how to use theme specific information provided by Gallup for the five most frequent themes in sample C as a way to inform internship-training programs. Developing theme specific training programs could help orient educators around the patterns of themes and domain areas found in sample C.
First, Input is about collecting interesting information, filing it and collecting more (Rath, 2007). This person is the amazing contestant on Jeopardy! who knows all the answers across all types of categories (Rath, 2007). A few ideas for action, of which the individual CSF reports provide 50 similar action items across the five themes, include (Rath, 2007):

- “Look for jobs in which you are charged with acquiring new information each day, such as teaching, research, or journalism” (Rath, 2007, p. 126).
- “Partner with someone with dominant Focus or Discipline talents. This person will help you stay on track when your inquisitiveness leads you down intriguing but distracting avenues” (Rath, 2007, p. 126).
- “Remember that you must be more than just a collector of information. At some point, you’ll need to leverage this knowledge and turn it into action” (Rath, 2007, p. 127).
- “Identify your areas of specialization, and actively seek more information about them” (Rath, 2007, p. 127).

Others can work with someone who has Input as a theme by looking for ways to ask this person for information in meetings, knowing that those with this theme have a wealth of knowledge (Rath, 2007). As the most frequent theme for sample C, educators should think about how to build strategically diverse groups pairing students with others who have themes in the Executing domain. This might allow students with Input as a theme to recognize that not everyone has the same desire for information as they do and create ways to build on this realization. Educators could also think about how to do an exercise
providing limited information for solving a problem with built in reflection space for the students to discuss how it felt to operate in that type of environment. These experiences could help students learn how to manage these situations prior to starting their internships.

Empathy, the second most frequent theme, is about individuals being able to feel the emotion of others around them, which in turn draws others in close as they feel heard and understood. This theme is about being able to put oneself in the shoes of someone else. A few ideas for action include (Rath, 2007):

- “Consider serving others as a confidant or mentor. Because trust is paramount to you, people are likely to feel comfortable approaching you with any need” (Rath, 2007, p. 98).
- “At times, your empathy for others may overwhelm you. Create some rituals that you can use at the end of your day to signal that work is over” (Rath, 2007, p. 99).
- “Because you are observant of how others are feeling, you are likely to intuit what is about to happen before it becomes common knowledge” (Rath, 2007, p. 99).

A way to work with someone who has Empathy as a top theme is to ask this person for help understanding how others feel about an issue or situation. Educators can arm themselves with this information and think about how to help students identify this deep feeling for others. They can also help establish boundaries so all those feelings do not lead to burnout. Preparing students to recognize how they can use this theme to help
them understand or read groups, particularly new groups they may be joining as part of an internship, might help them both test and trust their intuitions.

The third theme, Learner, common across all three samples, has tones similar to Input. The Learner theme is about the process of learning, whereas Input is arguably more about the content or information collected through the process. This theme is about moving from the unknown to the known. Trying and exploring new things and ideas is what this theme sounds like. A few ideas for action include (Rath, 2007):

- “Develop ways to track the progress of your learning” (Rath, 2007, p. 135).
- “As far as possible, shift your career toward a field with constantly changing technologies and regulations” (Rath, 2007, p. 135).
- “When people have the opportunity to learn and grow, they are more productive and loyal” (Rath, 2007, p. 135).

A way to energize people with this theme is to find new ways for them to learn. Educators could learn from this by framing the training sessions as a way for individuals to learn more about themselves. They could also simulate a task with small groups involving learning about something new, an organization, a picture, a concept, and reflect on the level of energy that different group members felt when engaging in the task. Another way to train around this theme might be to suggest tools for tracking learning so that students learn how to think about where their time is spent and how they can use this strength in a way that will also lead them to action.

The fourth most frequent theme and only theme in the Executing domain, Restorative, is about people who enjoy analyzing problems in order to find a solution.
This theme is about restoring something to a fully functional operating state. A very tangible example is to think about fixing or restoring an old piece of furniture or car to a new state through building and painting. A few ideas for action include (Rath, 2007):

- “Seek roles in which you are paid to solve problems or in which your success depends on your ability to restore and resolve” (Rath, 2007, p. 154).
- “Give yourself a break. Your Restorative talents might lead you to be overly self-critical” (Rath, 2007, p. 154).
- “Let other people solve their own problems” (Rath, 2007, p. 155).

Advice from Rath (2007) is to ask people who have this theme to help identify or solve challenges within an organization. To stimulate this talent area, educators may want to simulate a physical exercise of building or creating something and then introduce a problem for a group to solve. Another good developmental opportunity is to teach students how to set their own limits so they are not solving other people’s problems. For example, teaching students how to enter organizations in their temporary roles as interns, learn the values of the organization, recognize challenges, but at the same time recognize they are not always in positions to be able to solve identified problems. Teaching this nuance or even explicitly talking about it would benefit both those with Restorative as a theme and others who are participating in internships. This is also a powerful distinction to understand when entering a new job.

Finally, the fifth most frequent theme, Intellection, is about a desire to think about all different types of ideas. This is the third theme in the Strategic Thinking domain. The other two themes in this domain area are about collecting information and processing
new things. Intellection centers on the act of thinking. This theme is about the need to be present with oneself and let thoughts race. People with this theme might enjoy background noise as a way to keep their mind racing while also working on a task. A few ideas for action include (Rath, 2007):

- “Deliberately build relationships with people you consider to be “big thinkers.” Their examples will inspire you to focus your own thinking” (Rath, 2007, p. 130).
- “Find people who like to talk about the same issues you do. Organize a discussion group that addresses your subjects of interest” (Rath, 2007, p. 131).
- “Get involved on the front end of projects and initiatives, rather than jumping in at the execution stage. If you join in the latter stages, you may derail what has already been decided, and your insights may come too late” (Rath, 2007, p. 131).

People with this theme love to read and think through information and details. Educators trying to train students around this theme should provide space for students to think and write, as well as provide information or articles to read. Educating students how to shift from thinking to action and to recognize that those without Intellection as a top theme might perceive the time they spend thinking as less time available for doing are important lessons.

The dominance of the Strategic Thinking domains in sample C and less pervasive Executing and Influencing domain areas is something educators must acknowledge and work with students to share the broader context that not everybody thinks or acts the
same way they do. Teaching students how to identify others who have themes in
different areas is an important strategy for students to learn. An exercise that asks
students to find others with different themes and discuss the definitions of those other
themes might be beneficial.

These five most frequent themes and a focus on the Strategic Thinking domain
area provide many potential training exercises. There are even more action items
developed by Gallup that are not included here. While the least frequent themes were a
focus in the results and analysis, holding true to the foundation of strengths development
theory, the training should focus on the dominant strengths, not the themes that are rarely
showing up in the sample. Thus, this section does not explore the least frequent themes
at the same level of detail in terms of specific action items and educational opportunities.

Using internship experiences as a way for students to practice applying their
strengths is beneficial for both colleges and employers. Building intentional reflection
into internship programs keeps students focused on building their personal tool kits and
learning how to transfer knowledge from the classroom to the real world. Students also
learn how to be their own directors and how to understand themselves in a way that will
help them create their stories.

Data from a 2016 report from Gallup on “Women in America: Work and Life
Well-Lived,” shows a declining women’s labor force since the late1990s, particularly in
the cohort of 25 to 54 year olds. In order to keep women in the workforce, particularly
when they are facing challenges that also test their values such as staying home with
children, there must be an understanding and intentional plan to create environments
where women thrive (Gallup, Inc., 2016). This report found one thing that stood out despite many factors:

When women want to succeed in their jobs, when they can use their talents and strengths to do what they do best every day, and when they can find a synergy between career and life that suits them, they will propel their organization to new heights of success. (Gallup, Inc., 2016, p. 9)

Strength awareness not only helps individuals, but also helps productivity and success of organizations. Couching this idea in this way relates it to more constituents than simply educators and students. Unlocking the strengths of women can propel them into a world of limitless possibilities.

**Limitations**

All studies come with their share of limitations. The limitations for this study include the lack of available consistent data across samples, the measuring and collection of data, the possibility of Type I errors, and personal bias.

A limitation in the samples is that they are all non-probability samples, where the data sets for all three samples were already created and available. Construction of the three data sets all occurred in a consistent manner, but none of the samples in this study came from intentionally identifying and creating target populations to take the CSF assessment tool. Instead, this study utilized already existing data sets. The data collected from sample C had the details for each respondent, allowing a more in depth review of the descriptive statistics. The data acquired from Gallup did not include this level of detail; however, plenty of information was available to make the necessary comparisons outlined in the methods chapter. Having a similar level of detail for the positional data
would have added another dimension of analysis to this study. Another limitation of using an existing data set is that all three samples lacked demographic data since the data is anonymous. Specific analysis based on age, race, educational level, or other areas was not possible. This would be very interesting to examine for a future study, but did not detract from the essential goals set by the research questions in this study. Finally, there was not control over how respondents took the CSF tool across all three samples in this study, potentially leading to some variability.

The possibility exists that a Type I error, which means the null hypothesis is rejected when it is actually true, could possibly have occurred in this study. The extremely large sample sizes having the potential to make all the statistical comparisons appear significant. One way this study tried to mitigate the potential for this error was to set the $p$-value at 0.001, rather than 0.01.

Another limitation of this study was the use of the phi coefficient as a measure of association. Calculation of this statistic happens often with chi-square analyses, so not calculating it may have raised more questions. However, the RR ratio turned out to be a better measure. The lack of use of RR risk in educational research is another potential limitation in that those in educational fields may not fully understand the applicability of the statistic.

Lastly, as the author of the study, I engage in staff and student development on a daily basis and because of those direct ties to the topic area, I may introduce personal bias. To try to conquer this bias, I tried to examine multiple viewpoints on the topic.
However, much of the research around this topic comes from teams of researchers at Gallup, which can make the scope of research appear limited.
CHAPTER 6: CONCLUSION

This final chapter provides concluding statements, presents information for future research, and ends with a few final remarks. The multiple hypotheses laid out at the start of this study established the structure for answering the research question. The research question focused on understanding the prevalent patterns of strengths in a specific population of college students. Identifying and testing the data and understanding that statistical differences existed across samples meant the themes in sample C were in fact different from the more common themes in the general population and this held true when comparing sample C to an all women sample. The specific details, definitions, and action items for the most frequent themes in sample C provided information for educators to prepare students, particularly before they participate in internships, an important form of experiential learning. The results of this study also provide a way to narrow or prioritize information for educators so they can better serve their students.

Ultimately, the findings indicate more differences in the most frequent themes, with three of the top five themes falling in the Strategic Thinking domain. There was less overall variance with the least frequent themes, but patterns still exist. Identifying the prevalent patterns in the data can provide information to institutions that help them better understand their students’ talents. Understanding whether differences exists across samples and testing whether those results are significant can provide educators with an important lens when thinking about how to engage with and teach students. This data can also assist in identifying potential ways for students to go outside of their comfort areas.
“Strengths development has a positive impact on student productivity, life choices, self-confidence, goal-directed thinking, interpersonal relations, and academic success” (Hodges & Harter, 2005, p. 190). All of these areas of impact are relevant to student success, and in particular help to build the strengths of women.

**Future Research**

Future research studies can build on this initial study. One suggestion is to run the same study in another three years with additional data from sample C to see if the trends continue to hold true. Looking more broadly, another suggestion is to collect data, using the same methodology, from students attending similar liberal arts women’s colleges and explore if differences in the most frequent and least frequent strengths exists between similar colleges. An additional suggestion to build on this is to combine the samples from similar populations across colleges and see if the trends in the data hold true or if the sample starts to look more like samples G and GW. A fourth suggestion for future research is to examine a sample of students who identify as women from an institution that is very different from a selective, liberal arts women’s college, such as a public state institution to see if there are differences in the trends and to examine how that sample compares to the G and GW samples. Two final areas for future research are to test the impact of an internship-training curriculum based on the most frequent themes for the sample and to test how training in this way, with a more specialized focus for educators, benefits the educator. Setting up these two suggested research ideas with
control groups who receive less tailored information could help evaluate the
effectiveness of this approach.

**Final Remarks**

This research study provides educators in the field with concepts to help
understand students and people better. Daily, educators in all fields face constant
demands on their time. Taking time away from those demands to understand team
members or in the case of educators, students, in a deeper capacity provides for a more
powerful educational process. As someone who works very closely with a large team
and students, there are still times that I do not remember the order of my own top five,
despite a strong investment in the CSF assessment. Prioritizing the development of
training around strength development theory and specifically around understanding the
language of the CSF assessment provides students with continual moments for practice
and reinforcement.

Finally, as someone with Positivity in my top five, I find it very interesting that all
of my committee members have that theme in common. In reflecting on my own
strengths, I have no doubt that when building this committee, it is no coincidence that we
all share this theme. The strengths of women will continue to drive my work with
students and educators and provides a power platform for personal development.
Many years of research conducted by The Gallup Organization suggest that the most effective people are those who understand their strengths and behaviors. These people are best able to develop strategies to meet and exceed the demands of their daily lives, their careers, and their families.

A review of the knowledge and skills you have acquired can provide a basic sense of your abilities, but an awareness and understanding of your natural talents will provide true insight into the core reasons behind your consistent successes.

Your Signature Themes report presents your five most dominant themes of talent, in the rank order revealed by your responses to StrengthsFinder. Of the 34 themes measured, these are your "top five."

Your Signature Themes are very important in maximizing the talents that lead to your successes. By focusing on your Signature Themes, separately and in combination, you can identify your talents, build them into strengths, and enjoy personal and career success through consistent, near-perfect performance.

Positivity
You are generous with praise, quick to smile, and always on the lookout for the positive in the situation. Some call you lighthearted. Others just wish that their glass were as full as yours seems to be. But either way, people want to be around you. Their world looks better around you because your enthusiasm is contagious. Lacking your energy and optimism, some find their world drab with repetition or, worse, heavy with pressure.

You seem to find a way to lighten their spirit. You inject drama into every project. You celebrate every achievement. You find ways to make everything more exciting and more vital. Some cynics may reject your energy, but you are rarely dragged down. Your Positivity won’t allow it. Somehow you can’t quite escape your conviction that it is good to be alive, that work can be fun, and that no matter what the setbacks, one must never lose one’s sense of humor.

Arranger
You are a conductor. When faced with a complex situation involving many factors, you enjoy managing all of the variables, aligning and realigning them until you are sure you have arranged them in the most productive configuration possible. In your mind, there is nothing special about what you are doing. You are simply trying to figure out the best way to get things done. But others, lacking this theme, will be in awe of your ability.

“How can you keep so many things in your head at once?” they will ask. “How can you stay so flexible, so willing to shelve well-laid plans in favor of some brand-new configuration that has just occurred to you?” But you cannot imagine behaving in any other way. You are a shining example of effective flexibility, whether you are changing travel schedules at the last minute because a better fare has popped up or mulling over just the right combination of people and resources to accomplish a new project. From
the mundane to the complex, you are always looking for the perfect configuration. Of course, you are at your best in dynamic situations. Confronted with the unexpected, some complain that plans devised with such care cannot be changed, while others take refuge in the existing rules or procedures. You don’t do either. Instead, you jump into the confusion, devising new options, hunting for new paths of least resistance, and figuring out new partnerships—because, after all, there might just be a better way.

Woo
Woo stands for winning others over. You enjoy the challenge of meeting new people and getting them to like you. Strangers are rarely intimidating to you. On the contrary, strangers can be energizing. You are drawn to them. You want to learn their names, ask them questions, and find some area of common interest so that you can strike up a conversation and build rapport. Some people shy away from starting up conversations because they worry about running out of things to say. You don’t. Not only are you rarely at a loss for words; you actually enjoy initiating with strangers because you derive satisfaction from breaking the ice and making a connection. Once that connection is made, you are quite happy to wrap it up and move on. There are new people to meet, new rooms to work, new crowds to mingle in. In your world, there are no strangers, only friends you haven’t met yet—lots of them.

Achiever
Your Achiever theme helps explain your drive. Achiever describes a constant need for achievement. You feel as if every day starts at zero. By the end of the day you must achieve something tangible in order to feel good about yourself. And by “every day” you mean every single day—workdays, weekends, vacations. No matter how much you may feel you deserve a day of rest, if the day passes without some form of achievement, no matter how small, you will feel dissatisfied. You have an internal fire burning inside you. It pushes you to do more, to achieve more. After each accomplishment is reached, the fire dwindles for a moment, but very soon it rekindles itself, forcing you toward the next accomplishment. Your relentless need for achievement might not be logical. It might not even be focused. But it will always be with you. As an Achiever you must learn to live with this whisper of discontent. It does have its benefits. It brings you the energy you need to work long hours without burning out. It is the jolt you can always count on to get you started on new tasks, new challenges. It is the power supply that causes you to set the pace and define the levels of productivity for your work group. It is the theme that keeps you moving.

Maximizer
Excellence, not average, is your measure. Taking something from below average to slightly above average takes a great deal of effort and in your opinion, is not very rewarding. Transforming something strong into something superb takes just as much effort but is much more thrilling. Strengths, whether yours or someone else’s, fascinate you. Like a diver after pearls, you search them out, watching for the telltale signs of a strength. A glimpse of untutored excellence, rapid learning, a skill mastered without
recourse to steps—all these are clues that a strength may be in play. And having found a
strength, you feel compelled to nurture it, refine it, and stretch it toward excellence. You
polish the pearl until it shines. This natural sorting of strengths means that others see you
as discriminating. You choose to spend time with people who appreciate your particular
strengths. Likewise, you are attracted to others who seem to have found and cultivated
their own strengths. You tend to avoid those who want to fix you and make you well
rounded. You don’t want to spend your life bemoaning what you lack. Rather, you want
to capitalize on the gifts with which you are blessed. It’s more fun. It’s more productive.
And, counterintuitively, it is more demanding.
YOUR TOP 5 THEMES
1. Positivity
2. Arranger
3. Woo
4. Achiever
5. Maximizer
What's in This Guide?

SECTION I: AWARENESS
A brief Shared Theme Description for each of your top five themes
Your Personalized Strengths Insights, which describe what makes you stand out from others with the same theme in their top five
Questions for you to answer to increase your awareness of your talents

SECTION II: APPLICATION
10 Ideas for Action for each of your top five themes
Questions for you to answer to help you apply your talents

SECTION III: ACHIEVEMENT
Examples of what each of your top five themes "sounds like" -- real quotes from people who also have the theme in their top five
Steps for you to take to help you leverage your talents for achievement

Section I: Awareness

Positivity

SHARED THEME DESCRIPTION
People who are especially talented in the Positivity theme have an enthusiasm that is contagious. They are upbeat and can get others excited about what they are going to do.

YOUR PERSONALIZED STRENGTHS INSIGHTS
What makes you stand out?

By nature, you contend that knowing another human being as an individual is one of life’s finest gifts. You definitely enjoy deciphering how each person is different from everyone else. Because of your strengths, you sense there is something good in each person you meet. Your open approach to people makes you a very likeable individual. It’s very likely that you customarily take on additional duties or tasks when you feel optimistic about yourself and your life. Chances are good that you automatically trust your sense of what is right to guide your decision-making and govern your actions. Your core values and quality standards probably give you lots of reasons to feel very optimistic about the direction your life is taking. Driven by your talents, you normally feel much more upbeat about life when you unravel the mysteries of a person’s talents, motivations, ambitions, fears, shortcomings, work style, thinking processes, or academic preferences.

QUESTIONS
1. As you read your personalized strengths insights, what words, phrases, or lines stand out to you?
2. Out of all the talents in this insight, what would you like for others to see most in you?

Arranger

**SHARED THEME DESCRIPTION**

People who are especially talented in the Arranger theme can organize, but they also have a flexibility that complements this ability. They like to figure out how all of the pieces and resources can be arranged for maximum productivity.

**YOUR PERSONALIZED STRENGTHS INSIGHTS**

What makes you stand out?

By nature, you function very well as a member of a group or task force. Contributing your talents, skills, and knowledge to the team gives you great pleasure. You are less attracted to projects on which you are isolated from people and expected to work alone. Driven by your talents, you embrace life with more gusto when you can work or play alongside your teammates, classmates, coworkers, or peers. You normally figure out ways you can participate in a variety of group-oriented activities. It’s very likely that you may want people to regard you as trustworthy, dependable, or reliable. Perhaps this yearning motivates you to do whatever you said you would do. Because of your strengths, you are counted on to be the talkative and sociable member of the team. Your friendly disposition helps most people feel comfortable enough to join in group activities or discussions. Chances are good that you probably are recognized by your teammates as a person who slows down to hear what they are saying. You frequently know more about what is happening and about what people need than individuals who monopolize the conversation.

**QUESTIONS**

1. As you read your personalized strengths insights, what words, phrases, or lines stand out to you?
2. Out of all the talents in this insight, what would you like for others to see most in you?

Woo

**SHARED THEME DESCRIPTION**

People who are especially talented in the Woo theme love the challenge of meeting new people and winning them over. They derive satisfaction from breaking the ice and making a connection with another person.

**YOUR PERSONALIZED STRENGTHS INSIGHTS**

What makes you stand out?
Driven by your talents, you want to acquire additional knowledge. Your desire to study enables you to talk about a variety of topics with newcomers or outsiders. Knowing more increases the likelihood of your having something in common to talk about with a stranger. Instinctively, you often bare your soul to total strangers. Your openness understandably draws many newcomers or outsiders into casual conversations as well as serious discussions. In all likelihood, these individuals risk being totally ignored when you fail to introduce yourself to them. It’s very likely that you exude an exuberant outlook toward life. You embrace its many possibilities. Relaxed and open, you freely share yourself with others. Usually you are candid and willing to be completely understood. By nature, you realize many people think you live life with gusto. Your enthusiasm often makes individuals feel quite comfortable in your presence. They commonly want to relay to you bits and pieces of their life stories. They are eager to answer your questions about their interests, talents, or goals. A number of people admire your ability to find the good in almost every situation or human being. Because of your strengths, you often share your ideas, feelings, and experiences. Your openness makes it easy for people to figure out who you are. They can begin to understand what causes you to think and act the way you do.

QUESTIONS
1. As you read your personalized strengths insights, what words, phrases, or lines stand out to you?
2. Out of all the talents in this insight, what would you like for others to see most in you?

Achiever

SHARED THEME DESCRIPTION
People who are especially talented in the Achiever theme have a great deal of stamina and work hard. They take great satisfaction from being busy and productive.

YOUR PERSONALIZED STRENGTHS INSIGHTS
What makes you stand out?

Driven by your talents, you are quite determined to enhance your talents rather than waste time worrying about your limitations. You often experience bursts of rapid growth each time you can use your talents, knowledge, and/or skills. Instinctively, you do much more than just try to live up to your commitments. You persist working until you can deliver on your promises. This certainly enhances your reputation for being trustworthy, reliable, and dependable. It’s very likely that you channel your efforts into the task at hand. You persevere until you have gained the knowledge and skills needed to attain a goal. You can toil for many hours to secure your objective. You probably work hardest and most productively at a particular time of day. Chances are good that you typically
expend a lot of mental energy to produce precise and thoroughly documented facts or data. Various processes, issues, opportunities, proposals, historic records, questions, or solutions occupy your thoughts for extended periods of time. Because of your strengths, you typically immerse yourself in intense activities. Preferring a fast pace, you thrive on excitement. You appreciate being surrounded by likeminded individuals. They motivate you to expend even more energy accomplishing whatever needs to be done. You stay busy and work hard whenever it is necessary.

QUESTIONS
1. As you read your personalized strengths insights, what words, phrases, or lines stand out to you?
2. Out of all the talents in this insight, what would you like for others to see most in you?

Maximizer

SHARED THEME DESCRIPTION
People who are especially talented in the Maximizer theme focus on strengths as a way to stimulate personal and group excellence. They seek to transform something strong into something superb.

YOUR PERSONALIZED STRENGTHS INSIGHTS
What makes you stand out?

Chances are good that you may prefer to spend time with people who respect and approve of your talents. Perhaps you can sense when individuals belittle your abilities or discount your results. It’s very likely that you frequently notice what makes each person unique or special. Armed with these insights, you probably inspire many individuals to move into action. You realize life is more fulfilling for people who choose tasks and are given assignments that closely match their talents. You often notice the different moods, need for information, or preferred forms of recognition for the people in your life. Because of your strengths, you may surround yourself with people who notice what you do right and applaud what you do well. Maybe you avoid critics who dwell on your shortcomings. By nature, you intentionally become personally acquainted with people. You discover each person’s unique qualities, interests, or strengths. You can position the person for success once you know what drives him or her to produce outstanding results. You realize the techniques you use with one person are unlikely to inspire everyone. Instinctively, you take full advantage of your talents. This is how you move toward your goals.
QUESTIONS
1. As you read your personalized strengths insights, what words, phrases, or lines stand out to you?
2. Out of all the talents in this insight, what would you like for others to see most in you?

Questions
1. How does this information help you better understand your unique talents?
2. How can you use this understanding to add value to your role?
3. How can you apply this knowledge to add value to your team, workgroup, department, or division?
4. How will this understanding help you add value to your organization?
5. What will you do differently tomorrow as a result of this report?
Section II: Application

Positivity

**IDEAS FOR ACTION:**
You probably will excel in any role in which you are paid to highlight the positive. A teaching role, a sales role, an entrepreneurial role, or a leadership role will make the most of your ability to make things dramatic.

You tend to be more enthusiastic and energetic than most people. When others become discouraged or are reluctant to take risks, your attitude will provide the impetus to keep them moving. Over time, others will start to look to you for this “lift.”

Plan highlight activities for your friends and colleagues. For example, find ways to turn small achievements into events, plan regular celebrations that others can look forward to, or capitalize on the year’s holidays and festivals.

Explain that your enthusiasm is not simple naivety. You know that bad things can happen; you simply prefer to focus on the good things.

You may get your greatest joy by encouraging people. Freely show your appreciation of others, and make sure that the praise is not vague. Consistently seek to translate your feelings into specific, tangible, and personal expressions of gratitude and recognition.

As you share your Positivity talents, be sure to protect and nurture them. As necessary, insulate yourself from chronic whiners and complainers, and intentionally spend time in highly positive environments that will invigorate and feed your optimism.

Don’t pretend that difficulties don’t concern you. Other people need to know that while you find the good in virtually every situation, you are not naïve. Recognize challenges, and communicate the reasons for your optimism. Your positive approach will be most powerful when others realize it is grounded in reality.

Because people will rely on you to help them rise above their daily frustrations, arm yourself with good stories, jokes, and sayings. Never underestimate the effect that you can have on people.

Avoid negative people. They will bring you down. Instead, seek people who find the same kind of drama and humor in the world that you do. You will energize each other. Deliberately help others see the things that are going well for them. You can keep their eyes on the positive.
QUESTIONS
1. Which of these action items speak to you? Highlight the actions that you are most likely to take.
2. How will you commit to taking action? Write your own personalized action item that you will take in the next 30 days.

Arranger

IDEAS FOR ACTION:
Learn the goals of your coworkers and friends. Let them know that you are aware of their goals, and then help set them up for success.

If a team needs to be created, make sure you are involved. You recognize talents, skills, and knowledge in people, and that awareness will help you get the right people in the right spots.

You intuitively sense how very different people can work together. Take a close look at groups with divergent personalities and opinions, as they may have the greatest need for your Arranger talents.

Be sure to keep track of ongoing deadlines for your many tasks, projects, and obligations. Although you enjoy the chance to juggle lots of activities, others with less powerful Arranger talents may become anxious if they don’t see you working on their projects frequently. Inform them of your progress to ease their fears.

Seek complex, dynamic environments in which there are few routines. Take on the organization of a big event — a convention, a large party, or a company celebration.

Give people time to understand your way of doing things when you present it to them.

Your mental juggling is instinctive, but others might find it difficult to break with existing procedures. Take the time to clearly explain why your way can be more effective.

At work, focus your Arranger talents on the most dynamic areas of your organization. Divisions or departments that are static and routine in nature are likely to bore you. You will thrive when your Arranger talents are energized, and you will suffer when you are bored.
Help others see your far-reaching expertise by sharing your “what if” thinking with them. When they know you’ve identified and carefully considered all possible options and arrangements, they’ll feel more confident.

You are flexible in the way you organize people, as well as in how you configure space. Figure out how you can improve workflow by rearranging spaces and/or procedures to maximize efficiency and to free up time for you and for others.

QUESTIONS
1. Which of these action items speak to you? Highlight the actions that you are most likely to take.
2. How will you commit to taking action? Write your own personalized action item that you will take in the next 30 days.

Woo

IDEAS FOR ACTION:
Choose a job in which you can interact with many people over the course of a day.

Deliberately build the network of people who know you. Tend to it by checking in with each person at least once a month.

Join local organizations, volunteer for committees, and find out how to get on the social lists of the influential people where you live.

Learn the names of as many people as you can. Create a file of the people you know, and add names as you become acquainted. Include a snippet of personal information — such as their birthday, favorite color, hobby, or favorite sports team.

In social situations, take responsibility for helping put reserved people at ease.

Find the right words to explain that networking is part of your style. If you don’t claim this theme, others might mistake it for insincerity and wonder why you are being so friendly.

Partner with someone with dominant Relator or Empathy talents. This person can solidify the relationships that you begin.

Your Woo talents give you the ability to quicken the pulse of your surroundings.
Recognize the power of your presence and how you open doors for an exchange of ideas. By simply starting conversations that engage others and bring talented people together, you will take performance up a notch — or several.

The first moments of any social occasion are crucial to how comfortable people will be and how they will remember the event. Whenever possible, be one of the first people others meet. Your capacity for meeting and greeting new people will help to quickly put them at ease.

Practice ways to charm and engage others. For example, research people before you meet them so you can talk about your common interests.

QUESTIONS
1. Which of these action items speak to you? Highlight the actions that you are most likely to take.
2. How will you commit to taking action? Write your own personalized action item that you will take in the next 30 days.

Achiever

IDEAS FOR ACTION:
Select jobs that allow you to have the leeway to work as hard as you want and in which you are encouraged to measure your own productivity. You will feel challenged and alive in these environments.

As an achiever, you relish the feeling of being busy, yet you also need to know when you are “done.” Attach timelines and measurement to goals so that effort leads to defined progress and tangible outcomes.

Remember to build celebration and recognition into your life. Achievers tend to move on to the next challenge without acknowledging their successes. Counter this impulse by creating regular opportunities to enjoy your progress and accomplishments.

Your drive for action might cause you to find meetings a bit boring. If that’s the case, appeal to your Achiever talents by learning the objectives of each meeting ahead of time and by taking notes about progress toward those objectives during the meeting. You can help ensure that meetings are productive and efficient.

Continue your education by attaining certifications in your area or specialty in addition to attending conferences and other programs. This will give you even more goals to achieve and will push your existing boundaries of accomplishment.
You do not require much motivation from others. Take advantage of your self-motivation by setting challenging goals. Set a more demanding goal every time you finish a project. Partner with other hard workers. Share your goals with them so they can help you to get more done.

Count personal achievements in your scoring “system.” This will help you direct your Achiever talents toward family and friends as well as toward work.

More work excites you. The prospect of what lies ahead is infinitely more motivating than what has been completed. Launch initiatives and new projects. Your seemingly endless reserve of energy will create enthusiasm and momentum.

Make sure that in your eagerness to do more at work, you do not skimp on quality. Create measurable outcome standards to guarantee that increased productivity is matched by enhanced quality.

QUESTIONS
1. Which of these action items speak to you? Highlight the actions that you are most likely to take.
2. How will you commit to taking action? Write your own personalized action item that you will take in the next 30 days.

Maximizer

IDEAS FOR ACTION:
Once you have identified your own greatest talents, stay focused on them. Refine your skills. Acquire new knowledge. Practice. Keep working toward strength in a few areas.

Develop a plan to use your most powerful talents outside of work. In doing so, consider how your talents relate to the mission in your life and how they might benefit your family or the community.

Problem solving might drain your energy and enthusiasm. Look for a restorative partner who can be your chief troubleshooter and problem solver. Let that person know how important your partnership is to your success.

Study success. Deliberately spend time with people who have discovered their strengths. The more you understand how marshaling strengths leads to success, the more likely you will be to create success in your own life.
Explain to others why you spend more time building on great talent rather than fixing weaknesses. Initially, they might confuse what you are doing with complacency.

Don’t let your Maximizer talents be stifled by conventional wisdom, which says you should find what is broken and fix it. Identify and invest in the parts of your organization or community that are working. Make sure that most of your resources are spent in the build-up and build-out of these pockets of excellence.

Keep your focus on long-term relationships and goals. Many make a career out of picking the lowhanging fruit of short-term success, but your Maximizer talents will be most energized and effective as you turn top potential into true and lasting greatness.

See if you can make some of your weaknesses irrelevant. For example, find a partner, devise a support system, or use one of your stronger talents to compensate for one of your weaker ones.

Seek roles in which you are helping people succeed. In coaching, managing, mentoring, or teaching roles, your focus on strengths will prove particularly beneficial to others. Because most people find it difficult to describe what they do best, start by arming them with vivid descriptions.

Devise ways to measure your performance and the performance of others. These measures will help you spot strengths, because the best way to identify a strength is to look for sustained levels of excellent performance.

QUESTIONS
1. Which of these action items speak to you? Highlight the actions that you are most likely to take.
2. How will you commit to taking action? Write your own personalized action item that you will take in the next 30 days.

Section III: Achievement
Look for signs of achievement as you read these real quotes from people who share your top five themes.

POSITIVITY SOUNDS LIKE THIS:
Gerry L., flight attendant: “There are so many people on an airplane that I have made it a point over the years to single out one or two on a flight and make it something special for them. Certainly, I will be courteous to everybody and extend to them the kind of professionalism that I would like given to me, but over and above that, I try to make one
person or family or small group of people feel particularly special, with jokes and conversation and little games that I play.”

Andy B., Internet marketing executive: “I am one of those people who loves creating buzz. I read magazines all the time, and if I find something fun — some new store, new lip gloss, whatever — I will charge around telling everyone about it. ‘Oh, you just have to try this store. It is so-o-o cool. Look at these pictures. Check them out.’ I am so passionate when I talk about something that people just have to do what I say. It’s not that I am a great salesperson. I’m not. In fact, I hate asking for the close; I hate bothering people. It’s just that my passion about what I say makes people think, ‘Gosh, it must be true.’”

Sunny G., communications manager: “I think the world is plagued with enough negative people. We need more positive people — people who like to zero in on what is right with the world. Negative people just make me feel heavy. In my last job, there was a guy who came into my office every morning just to unload on me. I would purposely dodge him. I’d see him coming, and I’d run to the bathroom or go some other place. He made me feel as if the world was a miserable place, and I hated that.”

**ARRANGER SOUNDS LIKE THIS:**
Sarah P., finance executive: “I love really complicated challenges where I have to think on my feet and figure out how all the pieces fit together. Some people look at a situation, see thirty variables, and get hung up trying to balance all thirty. When I look at the same situation, I see about three options. And because I see only three, it’s easier for me to make a decision and then put everything into place.”

Grant D., operations manager: “I got a message the other day from our manufacturing facility saying that demand for one of our products had greatly exceeded the forecast. I thought about it for a moment, and then an idea popped into my head: Ship the product weekly, not monthly. So I said, ‘Let’s contact our European subsidiaries, ask them what their demand is, tell them the situation we are in, and then ask what their weekly demand is.’ That way we can meet requirements without building up our inventory. Sure, it’ll drive shipping costs up, but that’s better than having too much inventory in one place and not enough in another.”

Jane B., entrepreneur: “Sometimes, for instance, when we are all going to a movie or a football game, this Arranger theme drives me up the wall. My family and friends come to rely on me — ‘Jane will get the tickets, Jane will organize the transportation.’ Why should I always have to do it? But they just say, ‘Because you do it well. For us it would take half an hour. For you, it seems to go much faster. You just call up the ticket place, order the right tickets, and just like that, it’s done.’”
**WOO SOUNDS LIKE THIS:**
Deborah C., publishing executive: “I have made best friends out of people that I have met passing in the doorway. I mean, it’s awful, but wooing is part of who I am. All my taxi drivers propose to me.”

Marilyn K., college president: “I don’t believe I’m looking for friends, but people call me a friend. I call people and say, ‘I love you,’ and I mean it because I love people easily. But friends? I don’t have many friends. I don’t think I am looking for friends. I am looking for connections. And I am really good at that because I know how to achieve common ground with people.”

Anna G., nurse: “I think I am a little shy sometimes. Usually I won’t make the first step out. But I do know how to put people at ease. A lot of my job is just humor. If the patient is not very receptive, my role becomes that of a stand-up comedian. I’ll say to an eighty-year-old patient, ‘Hi, you handsome guy. Sit up. Let me get your shirt off. That’s good. Take your shirt off. Whoa, what a chest on this man!’ With kids, you have to start very slowly and say something like, ‘How old are you?’ If they say, ‘Ten,’ then I say, ‘Really? When I was your age, I was eleven’ — silly stuff like that to break the ice.”

**ACHIEVER SOUNDS LIKE THIS:**
Melanie K., ER nurse: “I have to rack up points every day to feel successful. Today I’ve been here only half an hour, but I’ve probably racked up thirty points already. I ordered equipment for the ER, I had equipment repaired, I had a meeting with my charge nurse, and I brainstormed with my secretary about improving our computerized logbook. So on my list of ninety things, I have thirty done already. I’m feeling pretty good about myself right now.”

Ted S., salesperson: “Last year I was salesperson of the year out of my company’s three hundred salespeople. It felt good for a day, but sure enough, later that week, it was as if it never happened. I was back at zero again. Sometimes I wish I wasn’t an achiever because it can lead me away from a balanced life and toward obsession. I used to think I could change myself, but now I know I am just wired this way. This theme is truly a double-edged sword. It helps me achieve my goals, but on the other hand, I wish I could just turn it off and on at will. But, hey, I can’t. I can manage it and avoid work obsession by focusing on achieving in all parts of my life, not just work.”

Sara L., writer: “This theme is a weird one. First, it’s good because you live in pursuit of the perpetual challenge. But in the second place, you never feel as though you’ve reached your goal. It can keep you running uphill at seventy miles an hour for your whole life. You never rest because there’s always more to do. But, on balance, I think I would rather have it than not. I call it my ‘divine restlessness,’ and if it makes me feel as if I owe the present everything I have, then so be it. I can live with that.”
MAXIMIZER SOUNDS LIKE THIS:
Gavin T., flight attendant: “I taught aerobics for ten years, and I made a point of asking people to focus on what they liked about themselves. We all have parts of our body that we would like to change or that we would like to see differently, but to focus on that can be so destructive. It becomes a vicious cycle. So I would say, ‘Look, you don’t need to be doing that. Instead, let’s focus on the attribute you like about yourself, and then we’ll all feel better about expending all of this energy.’”

Amy T., magazine editor: “There is nothing I hate more than having to fix a poorly written piece. If I have given the writer a clear focus and she comes back with a piece that is completely off the mark, I almost can’t bring myself to write comments on it. I’m more inclined to just hand it back to her and say, ‘Just please start again.’ On the other hand, what I love to do is take a piece that is so close and then refine it to make it perfect. You know, just the right word here, a little cut there, and suddenly it’s a brilliant piece.”

Marshall G., marketing executive: “I am really good at setting a focus for people and then building a sense of team spirit as we all march forward. But I am not so good at strategic thinking. Fortunately, I have a boss who understands that about me. We have been working together for quite a few years. He has found people who play the strategic role, and at the same time, stretches me to be even better at the focus and team-building role. I’m so lucky to have a boss who thinks this way. It’s made me more secure and made me charge ahead much faster, knowing that my boss knows what I am good at and what I’m not good at; he doesn’t bother me with the latter.”

QUESTIONS
1. Talk to friends or coworkers to hear how they have used their talents to achieve.
2. How will you use your talents to achieve?


Seaman, A. (2013). Ruts: Ways our talents can work against us if we do not manage them [Class handout]. Leadership, Innovation, and Liberal Arts Center. Bryn Mawr College, Bryn Mawr, PA.


