KNOWING STYLES OF AFRICAN AMERICAN COLLEGE STUDENTS: PERSONALITY TYPE OR GENDER CONDITIONING?

A Thesis

Presented in Partial Fulfillment of the Requirements for
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By

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ABSTRACT

Little research has been conducted to examine the learning styles and personality type preferences among African American college students. This descriptive correlational study examined the relationship between knowing style, gender conditioning and personality type preferences of African American college students ages 18-25. Initially, 148 students completed the Myers-Briggs Type Indicator (MBTI) instrument-Form M, of which 129 provided usable data. The 129 students who completed the study were invited for the interview and 66 participated. The Mansfield and Clinchy protocol was used for the interview section of this study. The results of the interview and the MBTI indicated that, regardless of gender, 84% of Thinking types respondents were rated as Separate knowers while 77% of the feeling types were rated as Connected knowers. Thinking types males, 85% were more likely to prefer Separate knowing while 83% of Thinking women preferred the Separate knowing style; 88% of Feeling type females preferred the Connected knowing style while 64% of Feeling type males preferred the Connected knowing style. Generalized Linear Model for Binomial Models (GLM) was used to analyze the quantitative data for this study. In this study the effect of type is significant with knowing style at the significant level \( p \leq 0.00 \) whereas the effect of gender is not at the \( p \geq 0.0799 \) with the knowing style. It was concluded that personality type is more associated with the Separate and Connected knowing styles than gender.
Dedicated to my mother, Ms. Mary H. Haithcock. Mom, I appreciate your love and support.
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CHAPTER 1

INTRODUCTION

The purpose of this study was to investigate whether Separate and Connected ways of knowing as conceptualized in Women’s Ways of Knowing according to Belenky, Clinchy, Goldberger, & Tarule (1986) is more associated with gender conditioning or psychological type for African American college students. Belenky et al hypothesized that these knowing styles result from gender conditioned by the society. This type of conditioning may include but is not limited to influences from family, religion, education, and the general constructs of society. They propose, based upon their research and the research of Perry, that most men and women have different learning or knowing styles. Perry conducted a study with only men who were in college while Belenky et al. (1986) study was conducted with only women but is not limited to college students. Most men prefer Separate knowing and most women prefer Connected knowing. Both men and women can do both, but prefer one above the other. The Separate knower will generally demonstrate attributes such as the following:

- Emphasizes criticism of views
- Evaluation is prominent
- Stands back from the context and attempts to be objective.
• Emphasizes mastery of the topic
• Prefers to quantify the object of learning
• Considers others as "I" would want to be considered in that situation
• Separates criticism of ideas from criticism of self
• Questions and doubts other's views in order to improve self's views or correct the other's views
• Puts ideas "on trial"
• Suspects ideas that only feel right
• Uses reasoned, critical discourse
• Experiences a sense of comradeship with the authority when adversarial methods are used
• Likes and uses competitive methods
• Uses adversarial methods
• Debate is the paradigm for learning

The Connected knower will generally demonstrate attributes such as the following:
• Relationships are and need to be established between knower and object to be learned
• Emphasizes finding common ground when views differ and is slow to judge views
• The goal of learning is understanding
• Enters other's frame of reference
• Wants to respond to others in other's terms, not one's own
• Has difficulty separating self from views and prefers to keep knowledge linked to experience

• Embraces ideas to understand how one would or could come up with particular ideas

• Believes most trustworthy knowledge comes from personal experience

• Builds trust, then explores

• May delay closure in order to understand

• Uses conversation and story telling rather than debate

• Is not directly critical because criticism endangers relationship

• Understands and draws inferences

• Take a point of view and sees where it will lead

• Collaborative and empathetic

• Authority rests in understanding various points of view

• Uses personality as apart of perception and judgment of ideas

• Criticism is best when it comes from shared experiences of an insider

• Counseling is the paradigm for learning
Note. From Procedural “Knowledge: Separate and Connected Knowing”
In Women’s Ways of Knowing (pp.100-130) by Belenky, Clinchy, Goldberger, & Tarule, (1986). New York, NY: Basic Books.

These attributes are logically similar to the characteristics of persons preferring Thinking and Feeling in Jung’s (1921) theory of psychological types. Jung’s (1921) and Myer’s (1980) theory has four polar dimensions: Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Perception-Judgment. The Thinking-Feeling dimension has to do with the kind of rationale one prefers to use in organizing data and making judgment of the information. Both Thinking and Feeling are rational processes, however, the basis of the rationale are different, categorically different. Everyone can do both forms of judgment but prefers one above the other. If one prefers Thinking, then the following characterizes this preference (Myers, 1980):

**Analyze**- Thinkers will usually analyze data into logical categories.

**Objective**-Thinkers try to be as objective as possible in processing data.

**Logical**-Thinkers will use logic to weigh their judgments.

**Criticism**-Thinkers will be critical in making judgments.

**Onlooker**- Thinkers will look at a situation as an objective, not as a subjective.

**Decides upon logic**-Thinkers prefer logic above feelings.

**Long-term view**-Thinkers look for what is good in the long run in making decisions and judgments.

**Competition Oriented**- Competitive and Adversarial methods are used.

A person who prefers to be guided more by a Feeling preference will more likely demonstrate characteristics such as the following:
Decides using value priorities- Feelers use their personal values and the values of others when making judgments.

Empathy- Feelers will tend to use empathy when processing any given situation.

Subjectivity- Feelers get into situations as participants in order to make decisions.

Feeling- Feelings of self and others are factored into decisions.

Appreciation- Feelers express appreciation for the thoughts and contributions of others.

The Other- Feelers focus on what the others want in their situation, not what they would want in that situation.

Immediate view- Feelers tend to focus on short-term outcomes in making decisions.

Harmony- Decisions should maintain or restore harmonious relationships.

Thinking and male conditioning are both similar to the ways in which a separate person usually behaves. Feeling and female conditioning also are both similar to how a Connected person comes to know. Hence, what accounts for Separate or Connected knowing? Is gender or type preferences more associated with Separate or Connected knowing?

Belenky et al. believe Connected is women’s way of knowing and found that about 70% of women in their research preferred Connected knowing, while approximately 30% of the women preferred Separate knowing. Therefore, gender conditioning may influence Separate and Connected style preference. However, the database for the personality types in U.S. reveals that approximately 70% of the women in the country prefer Feeling and 70% of the men prefer Thinking. Hence, a random selection of women will yield a 70% Feeling preference and a 30% Thinking preference.
Further, 70% of randomly selected men will prefer Thinking and 30% Feeling. Type preference could be hidden with gender. Therefore, no one can be sure if type or gender conditioning is the greater indicator of how men and women learn and reflect. Hence, if an equal number of males and females who prefer Thinking and who prefer Feeling are also measured for Separate or Connected knowing styles, then the relative association of gender versus personality preference can be assessed.

Purpose of Study

The purpose of this study was to investigate whether being a Separate or Connected knower is more associated with gender or psychological type preference with African American college students. Rodgers (1998) study of 120 U.S. college students age 18-25 found that psychological type was more associated with Separate or Connected styles than gender. Men and women who preferred Thinking favored Separate knowing styles, and men and women who preferred Feeling types favored Connected knowing. However, a few Thinking type females preferred Connected and vice versa for males (Rodgers, 1998). Thus, in Rodgers’ sample of students, type preferences appear to take precedence over gender conditioning except in a few instances. It was noted, however, that among the instances where gender conditioning took preference, African Americans were over represented. Hence, there is a need to repeat this study with only African Americans college students in order to see if type or gender is more associated with Separate and Connected knowers within this group. There is a possibility that African American culture could have stronger gender conditioning influence than the broader culture.
In addition, it is important to know more about African American college students in order to help them learn. Rodgers (1992) found that, although a naturally Connected knower can learn in a Separate knowing style environment, the student might be less comfortable, learn less, and never “identify” with the discipline or profession that is being taught in the Separate style. The same would be true for a Separate knower in a Connected learning environment. Higher education should be equipped to serve everyone, no matter the race or culture. This study will assist with understanding of whether gender or type is more associated with the learning styles of these students. The more we understand about African American college students, the better institutions of higher education and student affairs professionals will be able to serve this constituency.
CHAPTER 2

REVIEW OF THE LITERATURE

Knowing Styles, Personality Type, and Gender

Belenky, Clinchy, Goldberger, & Tarule (1986) first introduced the concept of procedural knowledge of Separate and Connected knowing styles. Their study was a follow up to Perry’s (1970) study of Harvard University men. Belenky and her colleagues studied only women; however, they did not limit their study to college students. The women in their study varied in race, socio-economic status, and educational backgrounds. They came from the Northeast region of the United States of America. In both studies, in-depth interviews assessed the ways men and women understood events in the world around them and how they reasoned and made decisions about issues when presented with various situations and dilemmas.

Belenky and her colleagues (1986) introduced the concepts of Separate and Connected knowing styles as part of procedural knowing, one of the stages of Women’s Ways of Knowing. The Separate and Connected knowing styles describe how women pursue and acquire knowledge, with most women preferring a Connected knowing style and a few preferring a Separate knowing style and most of Perry’s men preferring a Separate style and a few preferring Connected. As indicated previously, the Separate style of knowing is marked by the paradigm of debate. When a person with this knowing
style hears a knowledge claim, this individual will tend to doubt and apply logical
criticism to those ideas, especially to ideas based upon emotions (Belenky et al., 1986).
Individuals having a Separate knowing style are critical, challenging, and adversarial.
The goal is to find the truth about the claimed knowledge. On the other hand, Connected
knowing style is characterized as the paradigm of non-judgmental empathy (Belenky et
al., 1986). Individuals with this style tend to be collaborative, encouraging,
accommodating, and believing (Belenky et al., 1986). The goal for this particular style is
to understand the other person’s points of views and the experiences that lead to it.
Belenky and her colleagues found that the Connected knowing was used mostly by
females and the Separate knowing mostly by males.

The authors of *Women’s Ways of Knowing* argued that knowing styles may
have their origin in differential gender conditioning. That is, the United States culture
encourages and conditions men to focus on independence, objectivity, and logical
reasoning (Belenky et al., 1986). Men are encouraged to be independent, assertive and
non-emotional. On the other hand, women are discouraged from being independent and
assertive, and are encouraged to focus on relationships, care, and empathetic feelings.

According to Clinchly (1989) the Separate knower keeps their distance from the
object being analyzed. The Separate knower takes an impersonal stance and follows
certain rules or procedures that will ensure that judgments are unbiased. It is believed that
most academic disciplines and professions use these impersonal procedures (Clinchly,
1989). Separate knowing allows one to criticize his or her own and other people’s
thinking. Without it, Clinchly (1998) believes one might be at the mercy of authorities
who try to tell others what to believe. Hence, Separate knowing is a powerful way of knowing, however; it is not the only way of knowing (Clinchy, 1989).

Clinchy (1989) found that Connected knowers are not dispassionate, unbiased observers. They deliberately bias themselves in favor of the thing they are examining. They try to get inside knowledge, to form an intimate attachment to it. The heart of Connected knowing is imaginative attachment. The Connected knower believes that in order to understand what a person is saying, one must adopt that person’s own terms and perspectives. One must refrain from judgment. In this sense, Connected knowing is uncritical; however, it is not unthinking (Clinchy, 1989). It is a personal way of thinking, and it involves feeling. The Connected knower takes a personal approach to even the seemingly impersonal. So, while the Separate knower takes nothing at face value, the Connected knower, in a sense, takes everything at face value (Clinchy, 1989). The Connected knower does not try to evaluate the perspective that is being examined but rather tries to understand it (Clinchy, 1989).

These styles are also logically similar to personality preferences for “Thinking” and “Feeling” judgments in Jung’s theory of psychological type (Jung, 1921; Myers, 1980; Myers & McCaulley, 1998). According to Isabel Briggs Myers (1980), an individual with a “Thinking” preference is “likely to question the conclusion of other people on principle” (p. 68). On the other hand an individual with a “Feeling” preference is likely to adopt the other person’s point of view in an attempt to understand what they are trying to convey. These tendencies are similar to Separate and Connected knowing as presented in chapter one. Myers (1980) & Jung (1921) believed that, although environmental conditioning can complement or oppose one’s natural inclination on a
preference such a Thinking and Feeling, personality preferences are determined by natural propensities and are not learned behaviors. Bourchard & McGue (1990) summarize studies that support this proposition and they studied identical twins that had been separated at birth and raised by different families. The authors found that these twins had the same personality characteristics, 50% of their traits associated with genetic heritage and 50% with environmental conditioning.

The relationship of Jung’s (1921) personality types of Thinking and Feeling preferences to Belenky et al.’s (1986) Separate and Connected knowing styles was first studied by Ullman-Petrash (1993;2000) & Rodgers (1992). Ullman-Petrash (2000) examined 21 college women whose ages ranged from 20-48 in Canada. She constructed her own assessment of Separate or Connected preferences using face validity logic and the Myer-Briggs Type Indicator (MBTI) to measure type. She found strong association between type and knowing style relationship, with 80% of Thinking type identifying with the Separate knowing style and 73% of the Feeling types with the Connected style.

Rodgers, Wilson, & Stenta (1992; 1998) also reasoned that Separate and Connected knowing styles might be a function of both gender conditioning and personality type. Both influence behavior with male conditioning being similar to Thinking and female conditioning similar to Feeling.. They hypothesized that most men may tend to have Separate styles because the majority of males (70%) are Thinking types and/or because of the gender conditioning. Moreover, most women may tend to have Connected styles because 70% of females are Feeling types and / or because of gender conditioning from society. If a study of knowing styles used a random sample of men and women, then approximately 70% of the men will be Thinkers and 70% of the
women will be Feelers. Therefore, type may be the underlying reason of knowing style, not gender. Type and gender need to be known in order to determine, which is more associated with knowing styles.

A study done by Rodgers and colleagues (1992; 1998) used Clinchy's (Mansfield & Clinchy, 1992) interview to measure knowing style preferences and the MBTI (Form G) to measure Thinking-Feeling preference. They found that both men and women college students who were Thinking types (84%) preferred the Separate knowing style, and Feeling types (87%), regardless of gender, preferred the Connected knowing style. When 72 additional college students were added to the participants (Rodgers, 2000) found that the relationship between psychological type and knowing style remained consistent, with 88% of the Thinking types rated as Separate knowers, regardless of gender, and 80% of the Feeling types rated as Connected knowers regardless of gender. Therefore, type was associated with knowing style more strongly than gender.

In all three studies psychological type was associated with knowing style much more than with gender. Nevertheless, environmental conditioning appeared to override psychological type preference for a few individuals. Thus, experiential, cultural and environmental conditions may supersede the type preferences for some individuals. African American students were over represented in this group in Rodgers’ studies. Similarly, Ullman-Petrash (2000) found that participants who are not born in Canada (i.e. India, England, Malaysia, Italy, the Philippines, Czechoslovakia, and Denmark) also adhered to the gender hypothesis rather than the type hypothesis. Hence, these two
authors suggested that different cultural groups may have stronger gender conditioning than others, and research needs to be done on various cultural groups.

The qualitative focus of Rodgers’s (1998) study sought to understand how each style constructs and characterizes its own style and the other style. It also looked at the similarities and differences of how males and females of the same knowing style constructed their own and the other style. Rodgers’ (2000) found that women and men who were Connected knowers had very negative perceptions of Separate knowers and Separate learning environments. Connected learners can adapt to a Separate style, such as in courses where competitive and formal debate is expected; however, because the student is less comfortable with it, he or she perceives that he or she does not learn as well and has trouble identifying with the discipline or profession that favors the Separate style environment. Similarly, Rhoads (1997) found the same result for Separate learners in a Connected learning environment. In a class that emphasized feelings and collaborations among small group members, the Separate students in this particular learning environment also had difficulty relating to the material and the profession associated with it. The learning style used in a classroom can interfere with or aid students’ learning.

When men and women who preferred the same style were compared, the Connected women viewed the Separate style negatively and viewed the Connected style positively. The Connected men had some positive views of the Separate style, however, similar to the Connected women, viewed it mostly negatively. Both the Connected men and women described the Separate style as being “annoying” and “frustrating”. The
Connected men viewed the Connected style as positive and described it as being “respectful” and “open-minded”.

The Separate women in Rodgers (1998) study viewed the Separate knowing style positively but with caution. These women viewed this style as a way “to make people see the other side” but reported that one must be careful how they use this style. These women also viewed the Connected style as being positive, but reported that it was something they consciously had to strive to do. It did not come naturally. The Separate men also viewed the Separate knowing style as positive. These men viewed this style as a way to help others to think critically as well as help others to see errors. The Separate men in this study also viewed the Connected knowing style positively; however, they used the Connected knowing style for Separate reasons. That is, they tried to understand the other’s point of view in order to find its faults and then start a debate.

Overall Connected and Separate participants in Rodgers’ (1998) study viewed the Connected knowing style more positively than the Separate knowing style. The Connected participants viewed Separate negatively and only a few reported using it. The Separate participants had both positive and negative views of the Separate knowing style. The Separate participants were in favor of using this style but mentioned using caution in how they used it.

Issues of Cultural Conditioning

Nichols (1988) compared and contrasted broad cultural differences that are part of the conditioned learning of its members. He examined European/American, African/African American, Hispanic, Asian, and Native American cultures. For this study his
comparisons of European/American and African/African American cultures are relevant. He compared values, epistemology, logic, and processes used in cultures (see Table 2.1). The highest cultural values for African Americans are interpersonal relationships and leading the people. For example, if achievement on a job or helping a person in distress were in conflict, Nichols believe that African Americans might leave work to help another and not put work as the first priority. African American students would want interpersonal relationships with their teachers as well. In short the values in their cultural conditioning were closer to Feeling and Connected knowing than Thinking and Separate knowing. For European/American culture, the individual and achievement are the highest value and not interpersonal relationships. These values maybe more like Separate knowing.

Epistemology or knowing is very cognitive in European/American culture and more affective in African American culture. Rationality is expressed in quantitative science and engineering. Affect is expressed through experiential learning, reflection and emotions. Hence, once again European/American culture is more Separate and African American culture more Connected using Nichols’ (1998) analysis.

Logic is expressed through values and feelings in the African American culture and through either/or dichotomies and in system analysis in European/American Culture. Hence, once again, African American culture is closer to Feeling and Connected knowing and European/America culture is closer to Thinking and Separate knowing. Finally, Nichols characterized African American culture as using of processes that emphasize human and spiritual networks as compared to the modern and postmodern debates in European/American culture. Both accommodate spirituality. Hence, broadly,
one might expect cultural conditioning of both genders towards Feeling or Connected knowing in the African American culture and Thinking or Separate knowing in the dominate European/American culture.
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<td>Member-Object&lt;br&gt;Member&lt;br&gt;The highest value lies in the individual being productive with creating things from, acquiring resources. More and bigger is better. The highest value is the individual developing his/her potential.</td>
<td>Cognitive&lt;br&gt;One knows through being rational, that is, through logic, traditional science and engineering, and then through post formal cognition.</td>
<td>Developmental Cognition&lt;br&gt;From either/or, to Continua, to Systems, to Metasystems, to Cross-paradigmatic</td>
<td>Modern and Postmodern&lt;br&gt;All sets are repeatable and reproducible for Modern Science and Technology. All sets are unique and contextual for radical postmodern.</td>
</tr>
<tr>
<td>African American</td>
<td>Member-Member&lt;br&gt;The highest value lies in the interpersonal relationship between persons and leading the people.</td>
<td>Affective&lt;br&gt;One knows through experiencing and reflecting on experience and through symbolic imagery, rhythm, and myth.</td>
<td>Value Priorities&lt;br&gt;Prioritized values and feelings of leaders and the people</td>
<td>Ntulogy&lt;br&gt;All sets are interrelated through human and spiritual networks.</td>
</tr>
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Table 2.1 Edwin Nichols’ Aspects of Cultural Difference
Gender Conditioning

According to West & Fenstermaker (1995) societal norms play an active part in shaping gender identity and roles. Gender refers to socially defined and learned behavior that shapes the opportunities that one is offered in life, the roles one may play and the kinds of relationships that one has. It is distinct from sexuality, which is a biologically determined and fixed set of characteristics for men and women (West & Fenstermaker, 1995). West & Fenstermaker found that gender conditioning affects masculinity and femininity roles, status, norms and values as well as responsibilities, needs and expectations. Gender also affects sexual behavior, the division of labor, power, and the distribution of resources and rewards (West & Fenstermaker, 1995).

Connell (1987) found that traditional male and female gender roles may lead to the acceptance of certain behaviors and the belief that these behaviors are ‘natural’ to that gender. For example, traditional gender characteristics would suggest that males are strong, aggressive, dominant, leaders, invulnerable, whereas females are nurturing, weak, passive, emotional and gentle. Given these characteristics it would be easy to see how the traditional male stereotype encourages a dominant/perpetrator role while the traditional female stereotypes encourage a submissive/victim role (West & Fenstermaker, 1995) and perhaps Belenky and her colleagues would hypothesize that gender conditioning accounted for males using Separate and females using Connected knowing styles.

Connell (1987) also found that there were unfortunate side effects of such stereotyping. Both genders accept limitations imposed upon them and let stereotypes direct behavior. As males are not traditionally viewed, nor often view themselves, as being emotional or intimate, many males experience a fear of intimacy or emotions as
weakness. Some men may also experience frustration in their failure to achieve ‘socially
defined’ expectations such being the "breadwinner" (Connell, 1995). Given structural
and racial bias against African American men, this expectation may be especially hard on
them. For instance, in March of 1994, the proportion of White males (27 %) was
employed in managerial and professional jobs were nearly two times that of African
American males (15 %). However, African American males were twice as likely as
White males to work in service occupations (20 % versus 10 %) (Collins, 1996).

According to Connell (1987) many women do not explore their capabilities of
exercising traditionally ‘male traits’ such as aggressiveness or independence. As a result,
they may feel powerless to take action in a range of situations, particularly if their
personal safety is threatened (Connell, 1987). Such restrictions may not be the case for
many African American women, however. Due to the large number of African American
single parent homes where only the mother is present, these women may be forced to
develop autonomy and assertiveness.

Connell (1987) found that traditional gender roles are slowly undergoing change.
This change is bringing about a vast number of positive outcomes for both genders
including freedom for both men and women to explore and develop new roles based on
personal choices rather than gender stereotypes, equality of interaction between genders,
and increased social, domestic and career opportunities. While this change is still
evolving, an expectation to ‘conform’ to traditional gender roles still exists with many
members of the society (Connell, 1987).
Collectivism Verses Individualism

The conceptualization of culture is by no means a simple matter. One possible way to think about culture is that “culture is to society what memory is to individuals”. It includes what has worked in the experiences of a society, so that it was worth transmitting to future generations. A useful idea is adopted by more and more people and becomes an element of culture. Elements of culture become shared standard operating procedures, unstated assumptions, tools, norms, values, and habits about sampling the environment. Cultures develop conventions for sampling information and determine how much to weigh the sampled elements from the environment (Triandis, 1989). Similar to Nichols (1988) Triandis (1989) argued that people in the individualist cultures, such as those of North and Western Europe and North America, focus on elements of the personal self. On the other hand people from collectivist cultures, such as those of Asia, Africa, and South America, tend to focus on elements of the collective self (Triandis, 1990).

Triandis (1994, 1995) proposed the hypothesis that collectivism is high in cultures that are simple and tight. Carpenter (2000) Beck & Cowan (1996) obtained empirical support for the correlation of collectivism and tightness but not necessarily with simplicity. In collectivist cultures people are interdependent with their groups (family, tribe, nation), they give priority to the goals of their in-group, shape their behavior primarily on the basis of in-group norms, and behave in a communal way (Mills & Clark, 1982). A defining character of people in collectivist cultures is their notable concern with relationships. For example, Ohbuchi (1999) showed that collectivists in conflict situations are primarily concerned with maintaining relationships with others, whereas
individualists are primarily concerned with achieving justice. Hence, collectivists prefer methods of conflict resolution that do not destroy relationships, whereas individualists are willing to go to court to settle disputes.

At the cultural level of analysis, individualism is on the other side of the spectrum with regard to collectivism. Attributes of individualism include an emphasis on personal responsibility and freedom of choice (Beck & Cowan, 1996). Other attributes include personal autonomy and self-fulfillment (Beck and Cowan, 1996; Hofstede, 1980) as well as distinctive personal attitudes and opinions (Triandis, 1995). Individualism also relates to attributes of personal success, status and competitive characteristics (Triandis, 1995). The distinction of the individual from others is defined in terms of the uniqueness of the self in comparison to the other (Triandis, 1995). These individualistic attributes can be expressed in a personal communication style (Triandis, 1995). African culture can be seen as collective, while European culture can be seen as individual. Furthermore, African Americans may have a blend of the two involving their cultural values.
CHAPTER 3

METHODOLOGY

Objectives and definitions of terms

The purposes of this research were as follows: 1) to explore whether Thinking-Feeling type preferences or gender is more associated with Separate and Connected knowing styles; 2) qualitatively to explore in-depth how persons of Separate and Connected knowing style of each gender construct and evaluate their style and the other style. All of the data will be collected from college students who identify themselves as African Americans and of African or Caribbean descent and are between ages 18 to 25.

Knowing Styles

Conceptual Definition (Belenky et al., 1986)

Separate Knowing: the tendency to be doubtful and critical of ideas and to use impersonal logic in analysis. The best process for learning and confronting ideas is debate. Such a style is marked by an individual separating themselves from their idea in order to evaluate arguments in a search for truth or reality. A climate of adversarial competition is common.
Connected Knowing: the tendency to be “believing” and to use empathy and conversation when attempting to understand and clarify an individual’s idea. The goal is to understand the other’s point of view, more than to judge it. A person with this style immerses him or her self into ideas and experiences in order to understand them. A climate of collaborative exploration is common.

Operational Definition: These two knowing styles were operationally defined according to responses to a qualitative interview designed by Mansfield & Clinchy (1992). See Appendix C for interview protocol. Two trained individuals rated the interview responses in order to classify them as preferring Separate or Connected knowing. If these two disagreed, they met and discussed the protocol. If they agreed after discussing the protocol, then the agreed style was used. If not, a third individual would rate the protocol and the match with one of the two previous raters becomes the rated style. Percentages of exact agreements and disagreements were reported. The rating criteria were from the Women’s Ways of Knowing (1986) rating manual.

The interview uses the following stimuli in order to obtain ratable data: “I never take anything for granted. I just tend to see the contrary. I like playing the ‘devil’s advocate’, arguing the opposite of what somebody’s saying, thinking of exceptions, or thinking of a different train of logic.” This stimulus represents the Separate style. “When I have an idea about something, and it differs from the way another person is thinking about it, I’ll usually try to look at it from that person’s point of view, see how they could say that, why they think they’re right, why it makes sense.” This stimulus represents the Connected style.
The 66 participants in this study were asked how both quotes “strike” them, and when/where/with whom they would or would not use each style. They were also asked to comment on the purposes for each style, and how difficult or easy those behaviors might be for them. Finally, each participant was asked to which style they best relate and how they might expand their style in light of the interview.

Interviews lasted between 30 and 45 minutes. Each interview was audio-recorded and transcribed. The transcripts were rated by a trained rater who had no knowledge of the participants’ gender or psychological type, using the manual first developed for identifying Connected and Separate knowing styles in the Belenky et. al, (1986) study.

The primary researcher conducted approximately one third of the interviews and research assistants conducted the other two thirds. Both the research assistants and the researcher transcribed the interviews that they conducted. The participants from this study were able to read the transcriptions of the interviews to allow for any needed changes before the qualitative analysis was completed. The primary researcher completed the analysis.

Psychological Type

Conceptual Definition: According to Carl Gustav Jung’s (1921) theory of Psychological Type, there are three aspects of personality type preferences. These aspects are a preference for Introversion (I) or Extraversion (E), Intuitive (N) or Sensing (S), and Feeling (F) or Thinking (T); Myers (1980) added the fourth dimension called Perception (P) or Judgment (J). The I-E aspect involves how we use our energy, mostly in the
internal or external worlds. The N-S aspect involves a preferred way to take in information or to perceive. The F-T aspect involves a preferred way to categorize the data and make decisions and judgments. Finally, the P-J aspect involves a preference for an organized or flexible lifestyle in one’s extraverted world.

In this study, the F-T categorized dimension is the focal point. When making a judgment or decision, those who prefer Feeling will tend to use personalized values in making judgments, factoring into their decision how they and others feel about the decision at hand. They emphasize the context of the decision. They value harmony in personal relationships and thus often want their decisions not to put relationships at risk. They are cooperative and compassionate. They tend to enjoy working with people rather than things Myers (1980).

Those who prefer Thinking use impersonal logical analysis. Thinkers tend to operate in a manner that is competitive and objective; they make decisions based on what will make sense in the long run. They most likely will not trust decisions based upon emotions. They tend to have a direct, critical, logical approach to decisions Myers (1980).

Operational Definition: The Myers-Briggs Type Indicator (MBTI), Form M (Myers, McCauley, Quenk, & Hammer (1998), was used to measure the F-T preference. Form M consists of ninety-three items that has been revised to reflect social and cultural changes from MBTI inventory G. The new form contained updated item wording and removed outdated language. It increased the capacity of the instrument to differentiate at the midpoint of each scale, which is an important issue in measuring people with close preferences. It based item weight on a national sample of adults, which included diverse groups according to gender, race ethnicity, religion, and socioeconomic status. It
eliminated research items used on Form G. It improved the item-to-scale correlations and lower scale inter-correlations. It also eliminated separate gender scoring, minimized the influence of social desirability in responses to the items with more than two response options (Myers et al., 1998).

The MBTI Form M (Myers, Mccaully, Quenk, & Hammer, 1998) divides personality type according to four dichotomous dimensions. Below is a summary of the reliability and validity of the new MBTI Form M:

The split-half reliabilities for the MBTI Form M showed an improvement from Form G, ranging from .91 on the I/E dimension, .92 on the N/S and P/J dimensions, and .89 on the F/T dimension (Myers et al., 1998). A summary of the Form G data suggests, however, that sample characteristics, particularly those related to type development, may result in variation in reliabilities across groups. The internal consistency of the four MBTI scales was estimated using coefficient alpha, which is the average of all of the item correlations (Myers et al., 1998 p.161). In the national sample (N=2,859) internal consistency ranged from .93 for the F/T preference to .95 on the N/S dimension (Myers et al., 1998).

Myers et al. (1998) found that the consistency of the four MBTI scales is quite high in all samples available to date, whether computed using logical split-half, consecutive item split-half, or coefficient alpha. There has been a substantial improvement in Form M reliabilities over those of Form G in samples collected so far. Test-retest reliabilities of the MBTI show consistency over time, with levels of agreement much greater than by chance. When subjects report a change in type, it is most likely to occur in only one preference, and in scales where the original preference clarity was low. The test-retest
reliabilities of Form M are improved over those of Form G. The reliability coefficient for T-F remains the lowest of the four scales.

A new method for estimating measurement precision is available with the use of the Item Response Theory (IRT). This method is based on calculating the amount of information that is available from each item that can be used to discriminate people of opposite preferences. Form M has a greater precision than all of the other scales used to measure the MBTI (Myers et al, 1998).

The factor structure of MBTI item pools provides evidence of the construct validity of the MBTI assessment tool. When examining factor analytic studies it is important to select an item pool that is appropriate for the question being asked. If the research question involves the four preference scales, then the items of interest are only those items that are used to score the four preference scales of the MBTI. For this study these are the 93 items that are used in the Form M scoring.

According to Myers et al. (1998) a number of exploratory factor analysis of the MBTI scales have demonstrated very close correspondence with the hypothesized four-factor structure. More rigorous confirmatory factor analysis provides even stronger support for the model. Correlations of the four preference scales with a variety of scales from other instruments support the predictions of type theory regarding the meaning of and the behaviors believed to be associated with the four dichotomies. Evidence for the dichotomous nature of the scales was seen in plots of preference scores against external variables. Analysis of these plots demonstrated that the only significant differences between successive groups of scores were exactly at the midpoint of the scales, which
was also where the major changes in direction and slope was observed (Myers et al., 1998).

Gender

**Conceptual Definition:** Gender is the state of being born male or female and the gender conditioning experienced from family and culture. This condition refers to one being male or female. Genitalia and reproductive organs are used to determine sex. Gender is sex as conditioned by society, culture and family.

**Operational Definition:** The African American students’ gender is measured by self-identification. Participants were required to respond to the email (Appendix A) inviting them to become a part of this study. In their response there was a section where students indicated their sex, male or female. Students were asked to indicate their gender on the MBTI Form M.

**African American Students**

**Conceptual Definition:** For the purposes of this study African American students was used to describe a very diverse group of people in American Society. This group is made up of different ethnic backgrounds that consist of: students from the Caribbean or African decent. These students must be United States citizens.

**Operational Definition:** The African American students’ email addresses were obtained from the registrar. A blind-email, which explained the purpose of the study and asked them to participate in both components: the instrument and interview-altogether one or two hour commitment, was sent to all these of African American students regardless of their ethnic subgroups or generation status. However, the email specifically asked
African American students who fit the requirement for this study to participate. The students who participated in this study are of Caribbean, or African descent, and citizens of the United States and ages 18-25.

Research Design

The Relationship Study

This study consisted in part of a relationship analysis, which is a type of correlation study. Relationship analysis employs a structural use of statistics to analyze a theoretical system or systems (Sax, 1968). The theoretical systems, which this study examined, are psychological type measured by MBTI Form M, gender and knowing styles measured by Mansfield & Clinchy’s (1992) Interview Protocol.

This analysis looks at how these three variables are related to each other. According to Sax (1968), this type of methodology stems from John Stuart Mill’s canon of concomitant variation which states that, “Whatever phenomenon varies in any manner whenever another phenomenon varies in some particular manner, is either a cause and effect of that phenomenon, or is connected with it through some fact of causation.” (p.263)

Correlational studies only demonstrate that a relationship between two or more variables either exists or not. This study cannot claim that type or gender causes knowing style, or vice versa. This study investigates only if there is a relationship or not. If there is not a relationship found then there is not a causal relationship present. If a relationship
is found, the study then points in the direction in which studies can go to test casual hypotheses (Sax, 1968).

Log-Linear Analysis was to be used to analyze the data. Log-Linear Analysis analyzes the frequency counts of observations falling into each cross-classification category in a contingency table (Gilbert, 1981). Each cross-classification in the table constitutes a cell and each categorical variable is called a factor (Gilbert, 1981). The factors in this study are Gender-Men and Women, Psychological Type-Feeling or Thinking, and Knowing Styles-Separate or Connected. Log-Linear Analysis requires all used categories to have at least five in frequency or the analysis cannot be conducted. Generally, this is called "the rule of five".

In Rodgers' (1992; 1998) studies, there were not enough respondents in some categories to use a Log-Linear Analysis. This was also the case for the current study. Thus, Generalized Linear Models were used to analyze the data. Generalized Linear Models (GLM) observe which predicted variables are more significantly related with the response variable. When GLM is used it makes no assumptions about data. Regardless of the distribution or the frequency of the data GLM is useable. GLM will analyze data that is not normally distributed. The GLM was used in this study because it had categorical data. GLM can be used to analyze this type if categorical data.

A list of all of the African American students email addresses was obtained from the office of the registrar. Then an invitation to participate in the study was sent to these students via email (Appendix A). A group of 148 African American college students, men and women, took the MBTI form M, which assesses personality type. All participants were given special instructions to complete the inventory by the researcher.
(See Appendix B), who had been trained in this protocol. After the results of the test were scored, 30 female Ts and Fs, and 30 male Fs and Ts with other psychological type preferences as diverse as possible were to be selected and interviewed to determine their knowing style. However, there were only 66 students that agreed to be interviewed. There were 14 Male Thinking types, 14 Male Feeling types, 12 Female Thinking types, and 26 Female Feeling types who were interviewed. The interviews were then transcribed and the participants’ names were changed for confidentiality.

The Qualitative Study

The qualitative data generated by the Mansfield & Clinchy Interview (1992) was used to understand how African American college students construct their ways of knowing and perceive their non-preferred style. The qualitative method is used to describe the patterns of meaning of individuals and any common patterns across sub groups (Lincoln & Guba. 1985).

According to Lincoln & Guba (1985), qualitative or naturalistic inquiry consists of five characteristics. Firstly, the purpose of this inquiry form is to appreciate and understand the multiple ways in which individuals construct a given phenomenon. In keeping with this methodology, the goal of this part of the study was not to predict the behavior, belief systems or values of African American students according to knowing styles. Instead the purpose was to unveil some of the complexity in how they construct meaning of and through those knowing styles. Secondly, the knower and the known, i.e., the researcher and the research participant, are inseparable and interact with and on one
another. The interview protocol designed and used by Mansfield & Clinchy (1992) was employed in order to minimize external influence and in order to be consistent with past studies done by the authors of *Women Ways of Knowing* and Rodgers et al. (1998, 2000). Thirdly, the hypotheses are time and context-bound; hence, results cannot be generalized to all cases. The experiences of the participating African American students may or may not be generalized to all African Americans students. However, the experiences of these students allow for the readers to determine if patterns exist and if they might be able to transfer to other similar contexts (Lincoln & Guba, 1985). Fourthly, the cause and effect cannot be clearly distinguished. This study does not make any claims at causation, but seeks to appreciate and understand how African Americans students make meaning of their own style preference and their non preferred style of knowing. Finally, qualitative inquiry is value-bound. If another researcher were to analyze the same data, it is possible that the other interpretations might emerge (Lincoln & Guba, 1985). In this study the data of each participant is coded into eight categories: Separate Thinking Men, Separate Feeling Men, Connected Thinking Men, Connected Feeling Men, Separate Thinking Women, Separate Feeling Women, Connected Thinking Women and Connected Feeling Women and how they construct meaning of their own style and the other style.

**Grounded Theory Analysis of Qualitative Data**

A qualitative study uses inductive logic or analysis. It does not force data into predetermined categories, but lets categories and patterns emerge from the data. Without
limiting the participants’ experiences, the researcher seeks to understanding of the meaning patterns in the data.

Glaser & Strauss (1967) first introduced grounded theory as methods of analyzing qualitative data. The authors describe grounded theory as “discovery of theory from data” (p.2). Strauss & Corbin (1990) describe the method as “a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon.” (p. 24) Furthermore, grounded theory is interpretive in nature, which can be understood through the participants’ own perspectives and actions. Thus, researchers seeking grounded theory can discover relevant predictions, explanations, interpretations, and applications. However, researchers need to be cautious in interpreting what is observed, heard, or read (Strauss & Corbin, 1994). Thus, adhering to the detailed coding procedure can reduce “the researcher from accepting any of those voices on their terms” (Strauss & Corbin, 1994, p. 280). The detailed coding prevents the researcher from misinterpretation of the data. The coding is done in such a way that does not allow for the researcher to skew the results of the findings.

In the process of analyzing the interviews, terms that Strauss & Corbin (1990) had defined may be used. These are:

Phenomenon: The central idea, event or incidents the set of actions or interactions are directed at managing or to which the set of actions is related.

Concept: Conceptual label used to describe discrete happening or instances of a phenomenon.
Category: A classification of concepts. Categories are discovered as concepts are compared with one another and seem to relate to similar phenomenon. Concepts are grouped together under a higher order.

Intervening Condition: A structural condition affecting action/interactional strategies that concern a phenomenon. It facilitates or constrains strategies enacted in a specific context.

Causal Condition: An event, incident, or happening that leads to the occurrence or development of a phenomenon.

Coding: A process of data analysis.

Code Notes: The products of coding.

Open Coding: The process of splitting a property into its dimensions or breaking down, examining, comparing, conceptualizing, and categorizing data.

Axial Coding: Procedures in which data are reconfigured after open coding by making connections between categories.

Thick Description: Provides the context of an experience, the intentions and meanings that organized the experience, and shows the experiences as process.

As part of the grounded theory, the Constant Comparative Method consists of four stages. Only the first two stages are used for this study. The first stage starts with “coding each incident in the data into as many categories of analysis as possible, as categories emerge or as data emerge that fit an existing category” (Glaser & Strauss, 1967, p.105).
The second stage consists of integration of categories and the properties. As a category is formed, the Constant Comparative Method allows added interviews to create a more complex picture in which patterns emerge, thus allowing “the analyst [to start] thinking in terms of the full range of types or continua of the category, its dimensions, the conditions under which it is pronounced or minimized its major consequences, its relation to other categories and its properties” (Glaser & Strauss, 1967, p.106). At this point, the researcher is able to construct preliminary theory, or to form grounded theory. In this study, participants were not interviewed until no new categories emerge. Patterns of meaning were reported for each question or the interview protocol.

Hypotheses

The following hypotheses were proposed after considering the samples’ age (18-25), educational level (undergraduate, graduate, or professional college students), and ethnic identity (of Caribbean or African descent, African Americans who are citizens of the United States).

Hypothesis 1

African American college students who prefer Thinking types on the MBTI will be significantly related to a Separate knowing style, regardless of their gender.

Hypothesis 2

African American college students, who prefer Feeling types on the MBTI, will be significantly related to Connected knowing, regardless of their gender.
Hypothesis 3

African American college students will not be significantly related to knowing style by their gender.

Research Method

Sample

The sample for this study was purposively chosen from undergraduate, graduate, and professional African Americans college students. There were 148 African American college students ages 18-25 who were randomly selected from students of a large Mid-Western research university. They were first contacted in October of 2004 through email; the message explained the purpose of the study and asked them to participate in the study (See Appendix A). The message also asked the students to take the Myers-Briggs Type Indicator (MBTI) (Form M). It further explained that some would be asked to participate in an interview at a later date. Those who accepted were invited to a workshop on type and knowing style after the study was completed.

A group of 148 African American participants first took the MBTI Form M instrument, which assesses personality type. All participants were given special instructions to complete the inventory by the researcher (See Appendix B), who had been trained in this protocol. First, they were told to take as much time needed to complete the inventory. Next, the researcher explained that the assessment is a force-choice questionnaire, which meant that they needed to choose one of the two responses. If they
found the two responses equally appealing, then they were asked to choose one that they would be happiest in using for the rest of their lives (Myers et al., 1998).

After completion of the inventories, they were scored using Form M templates. These scores have a rating of either Slight, Moderate, Clear, or Very Clear on four dimensions: Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judging/Perceiving. Furthermore, these scores indicated in which direction the participants answered consistently. After participants completed the MBTI instrument, 66 out of the 129 invited participants were interviewed for their knowing styles using Mansfield and Clinchy (1992) protocol. See Appendix C for the Knowing Style interview protocol. This interview was designed to determine the knowing styles, Separate and Connected, based on the theory of (Belenky et al., 1986).
CHAPTER 4

RESULTS ON CONSTRUCTION OF KNOWING STYLES AND QUANTITATIVE ANALYSIS REPORT

Gender, Type, Knowing Style Distributions

In this study the goal was to obtain 120 participants to complete the interview. The goal was 30 Thinking males, 30 Feeling males, 30 Thinking females, and 30 Feeling females (see Table 4.1). Having a set number of participants in each of the categories would increase the probability for obtaining five participants in the eight categories (Separate Thinking Male, Separate Feeling Male, Connected Thinking Male, Connected Feeling Male, Separate Thinking Female, Separate Feeling Female, Connected Thinking Female, and Connected Feeling Female). Having at least five participants in each category would allow the researcher to use log-linear analysis for analyzing the data. However Table 4.2 reflects the actual gender and type distribution for this study.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Feeling</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>60</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

Table 4.1: Anticipated Gender and Type Distribution
<table>
<thead>
<tr>
<th>Type</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>20</td>
<td>24</td>
<td>44</td>
</tr>
<tr>
<td>Feeling</td>
<td>21</td>
<td>83</td>
<td>104</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>107</td>
<td>148</td>
</tr>
</tbody>
</table>

Table 4.2: Actual Gender and Type Distribution

In this study the actual number of participants interviewed was less than the anticipated number due to students who were not responsive to the invitation to participate (see Appendix A). There were also students who did respond but declined to participate in this study.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Male Thinkers</th>
<th>Female Thinkers</th>
<th>Male Feelers</th>
<th>Female Feelers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewed</td>
<td>14</td>
<td>12</td>
<td>14</td>
<td>26</td>
<td>66</td>
</tr>
<tr>
<td>Not Interviewed</td>
<td>6</td>
<td>14</td>
<td>7</td>
<td>57</td>
<td>82</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>24</td>
<td>21</td>
<td>83</td>
<td>148</td>
</tr>
</tbody>
</table>

Table 4.3: Actual Number of Participants Interviewed.

It was the desire of the researcher to have as many of the 16 types represented as possible to avoid any possible bias from other preferences. Table 4.3 has excelled in this regard. There is only 1 of the 16 types not present in this table.
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTJ</td>
<td>ISFJ</td>
<td>INFJ</td>
<td>INTJ</td>
</tr>
<tr>
<td>N=1</td>
<td>N=1</td>
<td>N=2</td>
<td>N=1</td>
</tr>
<tr>
<td>Interviewed: S</td>
<td>Interviewed: C</td>
<td>Interviewed: S, C</td>
<td>Interviewed: S</td>
</tr>
<tr>
<td>3.5%</td>
<td>3.5%</td>
<td>7.1%</td>
<td>3.5%</td>
</tr>
<tr>
<td>ISTP</td>
<td>ISFP</td>
<td>INFP</td>
<td>INTP</td>
</tr>
<tr>
<td>N=3</td>
<td>N=2</td>
<td>N=2</td>
<td>N=0</td>
</tr>
<tr>
<td>Interviewed: C, S, S</td>
<td>Interviewed: C, C</td>
<td>Interviewed: C, S</td>
<td>Interviewed:</td>
</tr>
<tr>
<td>10.7%</td>
<td>7.1%</td>
<td>7.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>ESTP</td>
<td>ESFP</td>
<td>ENFP</td>
<td>ENTP</td>
</tr>
<tr>
<td>N=2</td>
<td>N=1</td>
<td>N=3</td>
<td>N=2</td>
</tr>
<tr>
<td>7.1%</td>
<td>3.5%</td>
<td>10.7%</td>
<td>7.1%</td>
</tr>
<tr>
<td>ESTJ</td>
<td>ESFJ</td>
<td>ENFJ</td>
<td>ENTJ</td>
</tr>
<tr>
<td>N=1</td>
<td>N=2</td>
<td>N=1</td>
<td>N=4</td>
</tr>
<tr>
<td>3.5%</td>
<td>7.1%</td>
<td>3.5%</td>
<td>(14.2%)</td>
</tr>
</tbody>
</table>

Table 4.4: Interviewed Male Type Distribution

There are 5 empty type categories in Table 4.5. This is acceptable but not as desirable as the men’s profile in Table 4.4. The missing types are all T types and mostly P types.
|          | ISTJ  
N= 3
Interviewed: C, S, C 
(8.9%) | ISFJ  
N= 5
(13.0 %) | INFJ  
N= 3
Interviewed: C, C, C 
(8.0 %) | INTJ  
N=3
Interviewed: S, S, S 
(8.0 %) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTP</td>
<td>N= 0</td>
<td>N= 1</td>
<td>N= 2</td>
<td>N= 0</td>
</tr>
</tbody>
</table>
|          | Interviewed: 
(0.0 %)                           | Interviewed: S 
(3.0 %)                           | Interviewed: C, C 
(5.0 %)                           | Interviewed: 
(0.0 %)                           |
| ESTP     | N= 0                                        | N= 1                                        | N= 7                                        | N=0                                         |
|          | Interviewed: 
(0.0 %)                           | Interviewed: C 
(3.0 %)                           | Interviewed: C, C, C, C, C 
(18.0 %)                      | Interviewed: 
(0.0 %)                           |
| ESTJ     | N= 6                                        | N= 4                                        | N=3                                         | N= 0                                         |
|          | Interviewed: S, S, S, S, S, S, S, S 
(16.0 %) | Interviewed: C, C, C 
(11.0 %)                     | Interviewed: C, C, S 
(8.0 %)                     | Interviewed: 
(0.0 %)                           |

Table 4.5: Interviewed Female Type Distribution

The sample of males was more widely distributed among the different type categories than the females (see Table 4.4). There was only one empty type (INTP) category. On the other hand the females had five empty type (ISTP, INTP, ESTP, ENTP, ENTJ) categories (see Table 4.5). Therefore the results among the women may not be as representative of the population studies as the men.
<table>
<thead>
<tr>
<th></th>
<th>ISTJ</th>
<th>ISFJ</th>
<th>INFJ</th>
<th>INTJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>S, C, S (6.0 %)</td>
<td>C, S, C, C (9.0 %)</td>
<td>S, C, C (7.5 %)</td>
<td>S (6.0 %)</td>
</tr>
<tr>
<td>ISTP</td>
<td>N=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C, S, S (4.5 %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESFP</td>
<td>N=2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S, C (3.0 %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENFP</td>
<td>N=10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C, C, C, C, C, C (15.1 %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENTP</td>
<td>N=2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S, C (3.0 %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENFJ</td>
<td>N=4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S, C (6.0 %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENFP</td>
<td>N=4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S, S, S (6.0 %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.6: Interviewed Male and Female Type Distribution

At least five participants were needed for the eight categories (Separate Thinking Male, Separate Feeling Male, Connected Thinking Male, Connected Thinking Female, Separate Thinking Female, Separate Feeling Female, Connected Thinking Female, and Connected Feeling Female) in order to analyze data using Log-Linear Analysis. However, Table 4.7 reflects the actual distribution of participants’ gender, Male and Female, knowing styles, Separate and Connected, and psychological type, Thinking and Feeling. Three categories, Connected Thinking Male, Connected Thinking Female, and Separate Feeling Female, did not have five participants; therefore, log-linear analysis could not be used for this study.
<table>
<thead>
<tr>
<th>Knowing Styles</th>
<th>Thinking Type</th>
<th>Feeling Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Separate</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Connected</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 4.7: Actual Type, Knowing, and Gender Distribution

The percentages of the participants’ type and knowing style in relation to their gender in this study are reported: 85% of Thinking men were Separate; 83% of Thinking women were Separate, 64% of Feeling men were Connected; and 88% of Feeling women were Connected. Overall, regardless of the participants’ gender, 84% of Thinkers were rated Separate while 77% of Feelers were rated Connected. Perhaps Feeling men are most susceptible to gender cultural influences at 64%, nevertheless the majority associated with type.

Statistical Results

The Generalized Linear Models for Binomial Model

The Generalized Linear Model (GLM) analyzes whether gender or type is more significantly associated with the response variable of Connected and Separate knowing styles. Table 4.8 provides the statistical report of the results for this study. The table does not list the response variable; however, it does include the predicted variables. It is also important to note that the probability (p-value) determines whether the reported statistics are significant. The lower the p-value, the lower the probability that the
observed statistics did not occur by chance. For the purposes of this study, the p-value used is 0.01. This value indicates that the analysis is 99% certain that the observed statistics did not occur by chance.

Quantitative Results

GLM (formula = knowing ~ gender + type, family = binomial, data = Results for this study)

Deviance Residuals:
  Min      1Q  Median       3Q      Max
-1.9728  -0.4952  -0.4952   0.6039   2.0782

Coefficients:
                     Estimate Std. Error  z value   Pr(>|z|)
(Intercept)       -2.0368     0.6115  -3.331   0.000866 ***
Gender            1.4491     0.8276   1.751   0.079958
Type              3.6463     0.9869   3.695   0.000220 ***

Signif. codes:  0 `***' 0.001 `**' 0.01 `*' 0.05 `. ' 0.1   ' 1

Dispersion parameter for binomial family taken to be 1

Null deviance: 90.949  on 65  degrees of freedom
Residual deviance: 59.143  on 62  degrees of freedom
AIC: 67.143

Table 4.8: Generalized Linear Model for Binomial Model Statistical Report

The above result (see table 4.8) is the Generalized Linear Model for Binomial Model for this study. It can be seen that the effect of type is significant with the knowing style at the significant level p<0.0002 whereas the effect of gender is not significant at
the \( p \geq 0.0799 \) with the knowing style. Therefore, Type is more associated with knowing style than is Gender. Type and knowing style have a significant association.

<table>
<thead>
<tr>
<th>Knowing Styles</th>
<th>Thinking Type</th>
<th></th>
<th>Feeling Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male Female</td>
<td>Total</td>
<td>Male Female</td>
</tr>
<tr>
<td>Separate</td>
<td>12 10</td>
<td>22</td>
<td>5 3</td>
</tr>
<tr>
<td>Connected</td>
<td>2 2</td>
<td>4</td>
<td>9 23</td>
</tr>
<tr>
<td>Total</td>
<td>14 12</td>
<td>26</td>
<td>14 26</td>
</tr>
</tbody>
</table>

Table 4.9: Type, Knowing and Gender Distribution

Qualitative Results

The results of the Separate knowing and Connected knowing interviews are presented in the following sections. The first section describes how the eight categories of this study, Separate Thinking Men, Separate Feeling Men, Separate Thinking Women, Separate Feeling Women, Connected Feeling Men, Connected Thinking Women, Connected Feeling Men, and Connected Feeling Women, responded to the Separate Knowing interview protocol and the second section describes how these groups responded to the Connected Knowing interview protocol (See Appendix C).

Separate Knowing Style

"I never take anything someone says for granted. I just tend to see the contrary. I like playing the devil’s advocate, arguing the opposite of what somebody is saying, thinking of exceptions, or thinking of different train of logic."

How does this strike you? Is this something that you would do?

Separate Thinking Men: There were twelve men in this category, all of whom said they would use the Separate knowing style. Four of these men said that the quote struck them
as something they would do. One participant said, “I agree with it, I enjoy it”. Another participant said, “I think it’s funny”. There were also two participants who admitted that they would use this style but did not view the devil’s advocate part as positive. One of these men said, “I’m not necessarily a devil’s advocate”. While the other said, “It strikes me as a person that is not a good communicator. I mean, don’t get me wrong, I um, well I do it sometimes if I think that it is what the other person needs, but other than that I would like to at least understand where they are coming from first”. Hence, this group mostly endorses this style totally or a few have some qualifications, either with the devil’s aspect or the need to understand and then debate.

Separate Feeling Men: There were five men who met the criteria for this category. The patterns that emerged from the respondent’s answers were very similar. All five men said that the Separate quote was something they would do. One person said, “Yes! I’d do it, all the time if I have to and with everyone, no exception”. Another participant said, “Umm... I like being the devil’s advocate. I like to hear people’s point of view and then argue it... I like to see if they could back you what they are saying. I do it with everyone... I don’t care!” These men seem to embrace and enjoy the Separate style.

There was only one male in this group who did not identify with the quote as much as the others and he said, “I wouldn’t say that I don’t take anything for granted but I do like to look at the other side of the argument, especially if there might be some validity to exploring another point of view”.

Connected Thinking Men: There were two men in this category. The two men in this category did not relate with the Separate knowing quote. One said, “Uh... I don’t think it’s something I would do. The other participant said,
"No it isn’t something I would do. People who nitpick what others are saying, it’s annoying. I would do it myself. If it’s something important I would say you are wrong, it’s actually like this. I wouldn’t nitpick most of the time. If someone says something wrong I just agree. People like you better if you don’t nitpick. Part of being a good people person don’t pick out faults all the time”.

Neither of their comments was specific to how the quote struck them.

Connected Feeling Men: There were nine men in this category. Four of these men said they would use this style; however, the conditions under which they would use it varied and were restricted. One of the participants said he would use this style, but also said the Separate knowing quote struck him as “arrogant”. Another participant said he would use this style but only in certain situations, he does not think it is appropriate to be used at all times.

There were three men in this category that said they would not use this quote. One participant said the quote struck him as something used “to hurt someone’s feelings”. Another participant said he would not use it and it struck him as argumentative. Another participant said someone who is inconsiderate would most likely use this quote.

There were also two men whose response was neither yes nor no. One of these men said maybe, but mostly no. He did not see this being something he would do but he decided not to say a definite “no.” The other participant said,

“It depends on the situation you’re in. I know sometimes it’s like, in having a discussion about something that’s really important to me and somebody has an opposing view, I’m going to say like my view and then like contrast it to what they’re saying just to see like how they, where they’re coming from just like making them think a bit.”

Separate Thinking Women: There were ten women in this category. One of them said she would not use the style presented in the Separate knowing quote. Another participant said she would use this style but it would depend on the situation. The other eight women said that they would use this style. Four of the women reported that they liked the quote.
One participant said, “I think this quote is realistic.” Another participant said, “I tend to do it just for fun.” Another participant said, “This is a good idea.” The participant that said they would not use this style reported that it is really outspoken and that a troublemaker is likely to use this style.

**Separate Feeling Women:** There were three women in this category. Their responses were similar but were stated differently. They each said they would use this quote but for various reasons. One participant said she would use this quote for fun just to see the other person’s reaction. Another participant said that the quote describes the way she is, playing the devil’s advocate. She said she uses this style as a way to be remain opposite of the group. While yet another participant said,

“I don’t really have a problem with it. I don’t think this is a problem to stick with something you believe. In certain situations I will do this if I believe that they are wrong. I will just say it. I have a tendency where I feel I am always right and they are wrong. Sometimes this is true, and sometimes it’s not.”

This participant also said that the Separate quote strikes her as how she views herself.

All three participants had a very positive outlook of the quote and identified with using it.

**Connected Thinking Women:** There were only two women in this category. One of the participants said, “Okay, it’s like half and half of me already. Cause, I’m arguing person. With most of my friends, I’m not very confrontational, but I pick an argument, or, I got a friend that does that a lot too.” The other participant said, “It strikes me a somebody, like a difficult person, like a person who always has to be different. Like if everybody is in the room is saying one opinion, then this person would be opposite just because they want to be different”. This participant also said this is something she would not do. On
the other hand, the other participant said this is something she would do because it was half her and half not her.

**Connected Feeling Women:** There were twenty-three women in this category. Fourteen of the twenty-three said that they would not use this style. Two of the fourteen said that they could not understand the quote. One participant simply said that’s not me. Two of the other participants said, “I’m the total opposite.” Six of the fourteen said they had no comment at all about the quote. Three of them said that this quote strikes them as something they would not do.

Eight of the twenty-three women said that they would use this style but viewed it as negative. They would only use it sometimes. Although three of these participants said they would use this style, they said this quote struck them as negative and offensive. One participant said part of me likes to argue. One participant said she did not know if she would use this style, she said it depends on the situation.

Both the Connected feeling men and the Connected feeling women had a hard time understanding the Separate knowing style. The responses from both groups were very similar. Only a few in each group said they would use this style. However, they all seemed to agree that this style’s use was something they viewed negatively. The Separate men and women mostly view Separate positively and they use it regularly. A few viewed it negatively but still used it. Another pattern was to understand first, then argue or debate.
When/where/whom do you do this?

Separate Thinking Men: Eleven of the men in this category said they would use this style with friends. One of the eleven participants also said he would use this style with family. One participant said he would use this style in class. Previously, most said they would use it generally.

Separate Feeling Men: The men who were a part of this category were very comfortable with the Separate knowing style. They all said they would do this with everyone at all times. One participant said, “Yes! I’d do it, all the time if I have to and with everyone, no exception”. They believed it provides a learning opportunity. “Different perspectives provide new knowledge every time.”

Connected Thinking Men: There were two men who were in this category. They both were highly opposed to this style. One of these men said this is something he has not done with anyone. The other participant said he would not behave in this manner either, he said, ”if someone says something wrong I just agree”.

Connected Feeling Men: Three of the nine men in this category said that they would not use this style with anyone. One of these three men said, “I would not use this style with anyone, I haven’t done it!” A variety of patterns emerged from the responses of the other six men. One of these participants said he would use this style with select people. Another participant said, I would use this style anywhere and at anytime. Another participant said he would use this style in serious conversations. Another participant said, “With family and friends, but with family I could see myself being more obnoxious”. Another participant said in classroom environments. Lastly, one male said
he would use this style in a one on one setting, discussing a subject matter in which he was more knowledgeable.

Separate Thinking Women: There were five of the ten women in this category who said that they would use this style with their peers. Three of the participants said they were likely to use this style in class. One participant said she would use this style if she were on jury duty. Another participant said she would use this style with everyone. Most, however, use it selectively.

Separate Feeling Women: The three women in this category reported that they all would use this style. Two of the three participants said they would use this style with anyone. While one participant was more specific in how she would use the quote. This participant said, “Generally I wouldn’t do it one-on-one. I would do it, me against a larger group like two or more people because that’s when the group think syndrome takes place, particularly if you are trying to make a judgment call or make a decision about a certain issue”. This participant said she is more likely to use this style in formal settings, for instance at work or in staff or committee meetings.

While the other two participants said they were likely to use this style most anywhere and at anytime. However, one of these two women had some stipulations as to when she would not use this style. She said, “I would use this quote with anybody else except my parents…out of respect. Not saying that I don’t respect everyone else. But usually parents and elders have a way of…. are a little wiser”.

Connected Thinking Women: The two females in this category gave different scenarios as to when they might use this style. One participant said she feels very strongly about not using this style but said she would use it if there were an issue about which she felt
very strongly. The other participant said she would use it with her friends the majority of the time. She said, "Uh, I guess if we were in the dorm room, just walking down the street maybe".

**Connected Feeling Women**: Eleven of the twenty-three women in this category said that they would use this style with friends and family. Five of the participants in this category said they would use this style in discussions, especially in a class. The discussion topics mentioned were politics and religion. Two participants said that they did not know where they would use this style. One participant said she would use this style with people with whom she felt comfortable. Another participant said, "I would use this quote with people in general, if I had to". Another participant said, "I would use this style with shy or other quiet people". Another participant said I would use this quote in a discussion where there is a right and a wrong answer. Lastly, there was one participant that said she could not think of anytime that she would use this style.

From the responses of these women it can be gathered that most of them use this style with friends and family. These women also would be likely to use this style in certain emotional discussion topics like politics and religion. Overall the use of this style by these women is not very likely. While some of them said they would use it, their strict stipulations as to when they would use it show that it is not their preference.

The responses of the Connected feeling males and the Connected feeling females were different. There were only three of the nine Connected feeling men that said they would not use this style. On the other hand most of the Connected feeling women said they would not use this style. Hence, more men were open to using this style than women in this category. The men who remained in this category responses to when and why
they would use this style were similar to the responses of the Connected Feeling women’s rationale. Both men and women gave specific reasons to why they would use this style.

*What’s the purpose of it? Why do you do it?*

**Separate Thinking Men:** There were many different responses from the twelve men as to what the purpose for using this style was. Six of the twelve men said they would use this style to increase the other person’s understanding of what they are trying to say. Along this same line one participant said, “Just arguing your point sometimes. I don’t necessarily like doing it, but if someone has a different view about something, you want to express your view.” Hence, self-expression is a strong reason for using the Separate style. You have to question and argue in order to bring out information about the other point of view.

**Separate Feeling Men:** These participants’ responses expressed four purposes. Firstly, Separate style helps them to explore and clarify issues using different points of view. One participant said, “It’s worth viewing issues from the different lenses. We can’t all think alike!” Another participant said he uses the Separate style to explore and get clarity. Secondly, Separate is used to force others out of their comfort zone. Thirdly, another participant said he uses this style to prove that the other person is wrong. While another participant said he uses this style to push people’s buttons. Finally, some used it just to be defiant. Hence, although one purpose focuses on exploring and clarifying one’s own views, most focus on forcing the other to consider view, most focus on forcing the other to consider different views or to prove their wrong. The purposes are adversarial and forceful.
**Connected Thinking Men:** The two men in these category responses were quite different.

One participant said,

"Um... I guess you would do it um if you didn't uh trust the person giving who was giving out the information ... um or if you didn't think that what they saying seems possible... I guess um.

The other participant said,

"It seems to try to get them to adopt your beliefs. Sometimes that works and sometimes no matter how much you argue a particular subject a person will be stubborn enough not to change their beliefs. Like the 2004 election, it was bipartisan. I could be the devils advocate. I could say Bush did this. But if a person isn't willing to hear, it doesn't matter how much I play devil's advocate.

Hence, one might use the Separate if you cannot trust the other person or their views seem improbable. The other might use Separate to persuade the other that they are wrong and you are right; however, often the others is perceived as too stubborn to adopt your belief. Hence, why use it?

**Connected Feeling Men:** Three of the nine men in this category had a very negative outlook on using this style. These three men said they do not see the purpose for using it. One participant said, "I haven't done it and if I did, it would be because I would have no self concept to anybody's personal feelings or opinions". These three men did not report there being any reason why they would use this style.

Three others said that the purpose for using this style is to get into the other person's mind. One participant said, "Afterwards, I usually get a better sense of what they are trying to communicate. It's not about winning the argument"? These men seem to use this Separate style as a means of communication and gaining understanding i.e., a Connected purpose.
There were three additional men in this category and they use it for status and emotional reasons. One participant said, "it makes me quick in a certain sense". Another participant said, "in order to equalize and balance the playing field, I don't like to feel like someone thinks they are above me". The last participants said, "It's entertaining to see people get heated about certain situations".

**Separate Thinking Women:** Nine of the women in this category said that they would use this quote to get people to open their minds to new perspectives. One of the nine participants said,

"A lot of times, for me personally, to get my point across and to open up people's minds to a whole other point of view. Lots of people think one way about something, but when they hear someone arguing against or for it, they can see it in that light or perspective".

One participant, however, said she also would use this style just to see people's reaction.

**Separate Feeling Women:** One of the three women in this category reported that she uses this style to have fun. She said, "Oh, to get their reaction and then I know that it makes 'em feel bad. It's pure fun to me." While the other two women say the purpose for using this style is more serious. They used it to challenge the others views. One of these participants said,

"To make people think about the other side. A lot of times people get stuck in their own ideologies and do not consider you know the other side of things and also just a part of being considerate of other people cause although some things I may not agree with I am not going to infringe on someone else's right to think, or think something is right, so that share's one solid belief and they don't want to hear anything else, then I try to impose my knowledge on them, I guess".

**Connected Thinking Women:** The two women gave different perspectives on their purpose for using this style. One participant said the use for this style is for attention and

55
to be different, so you can stand out. The other participant said, “Actually, you get to see both sides, get to see the pro and cons, the yes and nos”.

Connected Feeling Women: Twelve of the twenty-three women in this category said the purpose for using this style is to view another person’s perspective. That is, the Separate style can help you understand the other person’s point of view. This is a Connected use of Separate style.

Three participants said the purpose for using this style is to prove whose right or wrong. Several participants perceived the purposes of the Separate style in a negative light. Two participants said the purpose of using this style is just to argue. Two participants in this category said the purpose for using this style is to make things “difficult”. One participant said it was, “just to joke around”. Another participant said the purpose was simply to be obnoxious. Two of the other participants said they did not know why someone would use this style.

Hence, many of the Connected feeling males and Connected feeling females said they would use this style as a means of viewing another person’s perspective. They also viewed the use of this style negatively regardless of the circumstances under which it was being used. The men in this category used this style as a means for gaining status. However, this was not the case for the women.

Are there people in your life, or have there been people in your life who treated you this way? And how do you feel about that?

Separate Thinking Men: All twelve of the men in this category report having been treated in this way. Nine of these men said that when treated in this manner it makes them
angry. One participant said when treated with this style it makes him feel like the other person did not know where he was coming from. There were two participants that said this style did not bother them at all. Hence, even though they use their style a lot, most of these men had negative reactions to being treated this way themselves.

Separate Feeling Men: Only one of the five participants reported never being treated in this manner. The other four said that they have all been treated with the Separate style. None of them had a problem with being treated in this manner. One participant said, “Of course there are people (family friends, classmates, and about everyone I have interacted with) have not always agreed with my points of view. I feel everyone’s entitled to his or her points of view no matter how it may contradict mine. Plus it provides a learning opportunity. Different perspectives provide new knowledge every time!” Hence, the Separate style is how this person learns. One-person response was simply “good” to how being treated in this manner made them feel. While another person said, “Yes, um, well, if am presented with an argument, I roll with the punches most times, but can sometimes just avoid a nasty situation”.

Connected Thinking Men: Both of the men in this category reported having been treated in this way. One participant was specific and said that his brother and friends treat him this way. While the others said people have treated him this way in general. One participant said,

“Umm. My brother does it from time to time. My younger brother, I don’t get anger. He has aspriger syndrome. It’s a form of autism. It’s in his nature, so I don’t get angry, I just deal with it. Also my friend Jeffrey does it. How do I feel? It just makes me not want to speak to him. I haven’t talked to him in two weeks. He’s always nitpicking what I say and its like find something better to do. No one is going to like you if you keep finding fallacy. I keep telling him to learn to bite his tongue”.

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The other participant said it really does not bother him when someone treats him this way.

**Connected Feeling Men:** The nine men in this category each said that they had been treated in this way. Each of them reported that they had been treated like this by family and friends. There were two of the nine that felt that this type of treatment served as a teacher and that they learned valuable lessons by being treated in this way. There was one person in particular that felt very negatively about this type of treatment, he said, “Yes, I have been a victim…and it hurt mentally”. There was another participant that shared his sentiments but used frustration to describe his feelings. There were also two participants who said it felt just fine to be treated in this way. Hence, Connected Feeling Men had very different reactions to being treated in a Separate way. On one hand, being treated in a Separate way was mentally hurtful and a very negative experience; on the other end Separate is a good teacher and this man felt fine.

**Separate Thinking Women:** Nine of the women in this category said they had been treated in this way. Five of these women said being treated with this style made them upset. One participant said, “I feel attacked, and it makes me defensive”. One of the participants said she had not been treated with this style. She said, “I think its messed up that people treat you this way, not listening to your viewpoint”. Hence, although they use this style of knowing, they experience it mostly in a negative way just as Separate Thinking Men. They want others to hear their viewpoint.

**Separate Feeling Women:** Each of the three participants said others have treated them this way. However, one person said people only seem to treat her in this way when she is upset. She did not express how being treated in this way makes her feel, rather she said it
will cause to her to think about what they have to say. Nevertheless, she is still stubborn and maintains her viewpoint. Another participant said, “Yes, my boyfriend, we will discuss something and he may give me like this look like where is she coming from but then he sit back, he’s the rational one and will say, “Oh I see where you are coming from.” And that way we both feel like we at a point where we agree on the same thing”. Hence, after debate and discussion she used Separate style to change her mind. The last participant said,

“Typically...most people always try and listen to my point of view because some, some, most of the time, like, with my friends and like family, we listen to both point of views because, I mean, my point of view might not be necessarily be what they said but it might bring, like, something that neither one of us is able to see”.

One of the three participants in this category said she could not think of anyone treating her in this way right off hand. Then she recalled that maybe her mother or friends probably have treated her this way. She went on to say that it would make her upset at first but in hindsight she is able to look back and appreciate someone telling her when she is wrong. She believes that this type of treatment will keep her from making mistakes in the future.

Both of the other women also felt that this treatment caused them to become upset. One even said that this treatment makes her become more aggressive. While the other said,

“Usually, I get angry at them. If it is a friend, someone of my like peer, I will usually tell them the truth, right back at them. How they said it to me, I would say it to them in the same tone it doesn’t matter. Other than that, sometimes I feel bad after...you know; cursing them out and stuff, but I don’t take back what I said. Eventually, I do feel sorry and then we have to make up at some point. But that point doesn’t have to be anytime soon”.

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Connected Thinking Women: The two women in this category said that people have treated them in this way. One participant specifically said her friends treat her in this way, she also said that it does not bother her. One the other hand the other participant said, “Yeah, um, it makes you feel pretty bad that this person is just doing it just to be opposite of you, just to strike up an argument, and sometimes it might make you feel stupid”.

Connected Feeling Women: Two of the twenty-three women could not recall ever being treated in this way. The other twenty-one women all reported that were people who have treated them with this style. The participants who specified being treated in this manner all mentioned family. The other specifications were, supervisors and professors. Two of the other participants said, ”I just kind of got use to it”. One participant said, “It shuts me down, when someone treats me like this”. Another participant said, “It could be a good thing or a bad thing, but mostly bad if the other person is stuck in his ways”. One participant said, “I just chalk it up to my professors teaching style, I don’t take it personally”. Lastly, one participant said, “I would not say I get upset about it”.

Connected Knowing Style

“When I have an idea about something, and it differs from the way another person is thinking about, I’ll try to look at it from that person’s point of view, see how they could say that, why they think that they’re right, and why it makes sense.”

How does this strike you? Is this something that you would do?

Separate Thinking Men: These men reported that this style should be used when there was conflict or disagreement. They characterize it as “...communication at its best”. Most indicated that they had just started doing this and it lead to better understanding.
Some thought they would learn to do this as they got older. One participant even said, “This sounds exactly like me”. Hence, this style received a positive evaluation, however, most of these Separate Thinking Men were just learning to do this.

Separate Feeling Men: These men use the Connected style “sometimes” or “not at all”. Use was conditional; it depended upon circumstances. This did not seem to be the preferred style for any of these men. One said, “[Laughs] That sure isn’t me”. Another person asks, “Does the other person give my point of view a consideration too? I would do it only if we have to reach an agreement. The fact that we have different ideas about the same issue means we need to give each other an opportunity to listen to each other.”

Connected Thinking Men: This quote is something both of the men in this category said they would do. One said, “It’s something I do all of the time. I always look at things from another perspective before I make a decision. This is the epitome of being an open-minded person and I consider myself an open-minded individual”. They both said they preferred to see things from other person’s perspective and/or point of view.

Connected Feeling Men: All nine men in this category said that this was something they would do. One participant said, “there is an importance of looking at it from the other point because I know I am not always right”. The words these men used to describe how the quote struck them were “reasonable” and “intelligent”. One participant said, “This does not strike me because this is the manner in which I behave”. Another participant said, “This quote is more acceptable because I enjoy getting people’s feedback”. Another response from a participant was that this quote seemed like an effective way to understand and compromise with others.
**Separate Thinking Women:** Eight of the ten women in this category said they would use the style of the Connected knowing quote. One participant said, “Not so much, I mean I think it’s a good way to look at things, but I’ll be honest if it’s not working for me. If I still disagree, I’m not going to push myself” to use the Connected style. Another participant said, “It depends on the situation, this person sounds like they are not confident”. Hence, if you are confident use Separate, if not use Connected. Generally, Separate Thinking women would assert themselves if Connected was not working for them, or they would view a person as not confident in their own values if they had to resort to using the Connected style.

**Separate Feeling Women:** The three women in this category had very different responses to this question. One participant said, “This strikes me as something that I would probably say, hmm yeah! Yes I do it all the time”. Another participant said, “I think this comes from a person who is very rational. Who looks on both sides of the situation that isn’t me. No, this isn’t something I would do…” Another women said,” Umm…when I have an idea about something, I normally don’t express it because I have, they might think its wrong”. Hence, this quote describes one person, is never used by another, and third want to assert myself but others might think she’s wrong; hence judgment by others prevent her from asserting herself as she would prefer to do.

**Connected Thinking Women:** The two women in this category had very different things to say about the Connected quote. One participant said, “Sometimes, I do not initially take their side, like after the fact I think, I see where she’s coming from, or I can see it differently”. Hence, I “see” their style afterwards. The other participant said, “It’s a person who is able to look at a situation from two points, rather than just their point, they
try to see the other side of it from another person’s life, maybe, analyzing it from two
different positions”. Similar to Connected Thinking Men, both usually use this style. One
said she would use it unless she felt strong about the topics. The other said that most
times she does use this style.

**Connected Feeling Women:** All twenty-three of the women in this category said that
they would use the style presented in the Connected knowing quote. Seventeen of the
women said, “This sounds like me!” There were also a number of different responses
given by the remaining women; they were all positive. One participant said, this sounds
sensible and reasonable. Another woman said this is what I try to do. Some of the other
responses were, “I do this all the time”, “It’s a very good thought”, and “This is for
learning.”

Both the Connected men and women in this category said they would use this
style. Participants in this category that said they would use this style with anyone and at
anytime. It was their way. Separate men and women use it only selectively or not at all.

*When/where/whom do you do this?*

**Separate Thinking Men:** Nine of the twelve men in this category said that they would use
this style with their friends. One participant said he would use this style in class. Another
participant said he would use this style with family. While another participant said, “I
would use this style with anybody”. Hence, Separate Thinking Men tend to this style
with friends and family.

**Separate Feeling Men:** Similarly there were only three of the five men who said they
would use the Connected style; however, they do so. For instance, one person said, “I
would do it only if we have to reach an agreement”. The men were less specific as to when, where and with whom they would use this style.

**Connected Thinking Men:** The two men use this style at all times and especially at work.

**Connected Feeling Men:** Seven of these men all said that they would use this style with anyone and at any time. Two of the men in this category were more specific saying they used it especially in academic settings. They each used examples of classroom discussions.

**Separate Thinking Women:** Eight of the women in this category said that they would use this style with peers but not others. There were two who would use it with anybody, but only on certain occasions.

**Separate Feeling Women:** The three women in this category had unique ways in explaining when, where and with whom they would use this approach. One participant said she doesn’t use this style. She usually wants to assert herself but does not do so except with friends. Another participant said she uses this approach in class when her ideas differ from her classmates, she then tries to understand how they might have arrived at their perspective. The other participant explained her use of the connected quote occurs after the fact. She said she would only use this style after some time had passed from an initial conversation. She was also very specific and said she would most likely use this style with her best friend. Hence, they use it only selectively, mostly with friends.

**Connected Thinking Women:** Both women in this category said they would be more likely to use this style in situations they felt were sensitive. One participant said, “Um, maybe in a discussion about abortion. Like, I can have a view on being against, while
some people are for, and I would see it from two different sides because they do have two strong points behind them.” Both participants made reference of usage during regular conversations.

**Connected Feeling Women:** Most of the women in this category said they would use this style anytime and with anyone. Three of them said they would be more likely to use this style in discussions. The specified places of discussions were in class, and with friends and family. One participant said, “I would do this with anyone, but mostly with my mom and dad”. Another participant said, “I would use this style in romantic relationships, and with clients”. Another participant said, “I would use this style to mediate conflicts between friends having an argument”.

Everyone, no matter their type preference, said that they would likely use the Connected knowing style. The participants also reported that they enjoyed being treated in this manner. It appeared that the Connected participants were even more salient with this style than the Separate participants. Many of the Separate participants appreciated this style but commented that using it was a more recent occurrence, something they had learned to do. They use it more selectively.

*What's the purpose of it? Why do you do it?*

**Separate Thinking Men:** Seven of the twelve men in this category reported that the purpose for using this style was to look at things from another person’s standpoint. One participant said the purpose was to be a good communicator. Another participant said he would use this style to be fair. While another participant said, people are respected when
you use this style. Some of the other reasons reported for using this style were to prevent arguments and to understand people better. Hence, they viewed its purpose as positive.

**Separate Feeling Men:** There were two of the five men in this category who were adamant about not using this style. Thus, they did not see a purpose or reason for using this style. The responses from the other three men varied. One participant said his purpose for using this style was to make everyone happy. One of the other men had a similar response, he said that his style is used to try to be more easy going and keep the peace. While another said, “To understand someone’s feelings on an issue, I guess”. Hence, some did not see it as serving a positive purpose and some did.

**Connected Thinking Men:** Both of the men in this category said the purpose of this style is to understand the other person’s perspectives better. One participant said,

> “Umm, yeah, I guess just to, so you see all the angles of a certain perspective. So you don’t miss a particular angle because you are only looking at it from one way. So you don’t assume anything that may or may not be true. It makes things more clear and less narrow”.

**Connected Feeling Men:** Five of the nine men in this category said that the purpose for using this style is to get another person’s point of view. Another participant’s response was similar but also included that it teaches one to be a good listener. One participant said that he uses this style to avoid confrontation. Two of the nine men said that they use this style to understand others.

**Separate Thinking Women:** Four of the participants said they would use this style to not be close-minded. Some of the other responses were to smooth things over, to get feedback, for discussions, and to get a broader perspective. One participant said she would use this style to analyze things more closely. Another participant said, “Um...because
I’m not always confrontational and I mean sometimes I’d like to be more understanding and you know—try to be agreeable”.

**Separate Feeling Women:** Each of the three women in this category had a different response as to what the purpose was for using this quote. One participant said, “I do this just to get a better understanding and also like when I’m trying to understand someone else’s side I try to use it as a learning experience because sometimes I take for granted the diverse experiences that I have had”. Another participant said, “I think the purpose is to say that something you have to back down, hold your tongue and see where the other person is coming from, what they are thinking and to hopefully put it together with your thoughts”. The last participant said, “I probably, why, probably cause I feel like my answer might not be the right one so I would just listen to somebody else’s and hopefully maybe see it from a different point of view. Probably fear my own answer of being wrong”.

**Connected Thinking Women:** Both women in this category said the purpose of using this style was to gain understanding. One participant said, “To understand every aspect of each person is coming from, before you hurt their feelings, before you say something that you don’t mean, before you say something stupid, because you could be wrong at times”. The other participant added that when more views are considered it provides a broader idea of the situation, thus, giving a better view of the big picture.

**Connected Feeling Women:** Most of the women in this category response about the Connected knowing quote were the same. Seventeen of them said they would use this style because they like to know what other people are thinking. One participant said, “I see the purpose as honestly seeking to broaden one’s own point of view. I do it to become
more knowledgeable. There are many times when my views are the ignorant ones and hearing what someone else has to say might cause me to rethink my own views”. One participant said using this style enhances your own knowledge. Another participant said, “I use this style to let the other person know that I am listening”. Another participant said, “I try to keep the peace, no need for tension. I don’t like a negative atmosphere”. Another participant said using this style keeps her from becoming upset.

Many of the participants across categories saw the purposes for using this style as a way to broaden their perspectives. Most of the Connected participants said this was a way to be a good listener. There were some Separate participants who said the purpose for using this style was more of a mechanism to silence them from giving their opinion. Both Connected and Separate participants saw this style being suitable for conflict resolution.

*Are there people in your life, or have there been people in your life who treated you this way? And how do you feel about that?*

**Separate Thinking Men:** Nine of the participants in this category said that they had been treated with this style. Curiously, two of them said they had not noticed if they had been treated this way. While one said he had not been treated with this style. Seven of the participant said this made them feel good.

**Separate Feeling Men:** The five men who were a part of this category all reported to have been treated in this manner. Family, friends, employers, teachers and professors had treated them this way. One person turned the focus back upon his Separate self, “Yes, I think most people love to hear my point of view”. While another said, “Yeah, I
think so. My physics teacher in high school was kind of like that. He always said that there no certain answers, just approximates”. These men seem to comment more on who treated them in this manner and also and not so much on how it made them feel.

**Connected Thinking Men:** Both of the men in this category reported having had people treat them in this way. One of them said,” I like it because they’re trying to see my point of view, understand where I’m coming from”. The other participant said,

“The first person coming to mind is my mother. She has treated me this way from the moment I was born to now. She always looked at things from my point of view. I think this is why I am the way I am. She always said don’t critique anyone until you’ve been in their shoes. I credit her making me the way I am. It made me feel respected and I was being listened to.

Both participants had positive feelings for being treated in this way.

**Connected Feeling Men:** All nine of the men in this category report having being treated in this way, and mostly family and friends treated them in this way. There was one participant that also mentioned a teacher treating him in this manner. All of these men had positive feelings about being treated in this manner. Some of the words used to describe their feelings were “good” and “fine”.

**Separate Thinking Women:** The ten women in this category all said that they had been treated in this manner. Seven of the ten women said that being treated in this manner made them feel appreciated, there were also three of the seven who used the word “important” in addition to appreciated. One participant said she felt like had been given a bit of power. Another participant said, “I don’t think I have any feelings about this.”

While another participant said, “it feels good”.

**Separate Feeling Women:** The three women in this category said that they had been treated in this manner. One participant said, “Yes, my boyfriend, we will discuss
something and he may give me like this look like where is she coming from but then he sit back, he’s the rational one and will say “Oh I see where you are coming from.” And that way we both feel like we at a point where we agree on the same thing. I just didn’t say it right or something”. Another participant said, “Typically... most people try to listen to my point of view because some, some, most, of the time, like, with my friends and like family, we listen to both point of views because, I mean, my point of view might not be necessarily be what they said but it might bring, like something neither one of us is able to see”.

Each of the participants in this category viewed being treated in this way positive, even thought they did not treat others in the same manner.

**Connected Thinking Women:** One of the participants used an example of being treated in this manner in a class by a professor. The other participant did not give a specific person who treated her in this way. However, she did comment on how this type of treatment made her feel. This participant said, “It makes you feel good that a person is actually looking outside their own opinion, to look at yours, rather than just say, no your point doesn’t matter. So it makes you feel maybe more included”. The other participant also commented on it feeling good that another person is able to see where she is coming from.

**Connected Feeling Women:** Only one of the twenty-three women in this category said that they have not been treated in this way. The other twenty-two women reported yes to having being treated in this manner. Fourteen of the women who said they had been treated this way said it felt good. Some of the other responses were, “it’s considerate”, “I felt respected”, and it “feels like I am getting through to the other person”. One participant said, “I felt like I was important”. Another participant said, “I like when
people try to look at it my way, that means that they’re genuinely interested”. There was one participant in this category who said, “I don’t care, if they’re not interested then they can just move on. Some people have said why do you think that but don’t go any deeper than that”.
CHAPTER 5
DISCUSSION AND CONCLUSION

Quantitative Result Discussion

One purpose for conducting this study was to examine whether knowing styles were more associated with gender (Belenkey, et. al., 1986) or psychological type among African American college students. Belenky, Clinchy, Goldberger, & Tarule (1986) introduced the concept of procedural knowledge of Separate and Connected knowing styles. These styles were related with gender, with males being mostly associated with Separate knowing style, and females being mostly associated with Connected knowing style. There are attributes associated with each of the knowing styles. A person with the Separate knowing style will tend to doubt and apply logical criticism to ideas (Belenky et. al., 1986). While a person with the Connected knowing style tends to be collaborative, supportive, and accepting of ideas (Belenky, et. al., 1986).

The relationship of Jung’s personality preferences of Thinking and Feeling and Belenky et al., (1986) Separate and Connected knowing styles was studied by Rodgers (1998). Rodgers’ (1998) study found that 84% of those who preferred Thinking, regardless of their gender, showed a preference for the Separate knowing style, and 87%
of those who preferred Feeling, regardless of gender, preferred Connected knowing style. Rodgers conducted a follow up study in 2000 and the relationship between psychological type and knowing style remained consistent. In this study 88% of the Thinking type participants preferred the Separate knowing style, regardless of gender, and 80% of the Feeling type participants preferred the Connected knowing style, regardless of gender. Therefore, type was more significantly associated with the knowing style than gender in both studies.

The results from the current study are very similar to Rodgers’ previous studies. This study reports that regardless of the participants’ gender, 84% of those who preferred Thinking also preferred the Separate knowing style while 77% of those who preferred Feeling also preferred the Connected knowing style.

Generalized Linear Models for Binomial Model was used to test whether type and knowing style would be statistically significant with the African American college students. The Generalized Linear Models for Binomial Model tested the relationships of the gender, type, and knowing style. According to the results of the Generalized Linear Models for Binomial Model there is not a significant relationship between gender and knowing style. However, the Generalized Linear Models for Binomial Model results does show a significant statistical relationship between psychological type and knowing style at p-value of 0.00.
The Construction of Separate and Connected Knowing Styles

The current study explored how each knowing type constructed itself and its non-preferred style. There were eight categories: Separate Thinking Men, Separate Thinking Women, Separate Feeling Men, Separate Feeling Women, Connected Thinking Men, Connected Thinking Women, Connected Feeling Men, and Connected Feeling Women. The following sections will describe the ways in which these students construct the knowing styles.

Separate Knowing Styles

Separate Thinking Men: All twelve of these men reported that they would use the Separate knowing style. All but two of them thought this style was either positive or amusing. These participants said that they would use this style with friends, family, and in classroom settings. Most of the men in this category said that the purpose of this style to assist someone in understanding their point of view. All of the men in this category said that they have been treated in this manner. Although these men said that they use this style, most of them reported being treated in this manner caused them to become angry.

All of the men in this category said they that they would use the Connected knowing style. These men said that they use it in certain situations such as when they were conflicts or disagreements in points of view.

The men in this category said they would use the Connected style with friends, family and in classroom settings. Most of them said that the purpose for using this style was to look at things from another person’s standpoint. The men in this category felt it
was positive to be treated in this way. All but two of them reported having been treated in this manner. There were two of them who could not recall if they had been treated like this before.

**Separate Thinking Women:** All ten women in this category said they use the Separate knowing style. Many of them said they “Liked the quote”. However, two of them said they used it conditionally. These women said they would use this style, especially with their peers and in classroom settings. The purpose of using this style was to get people to open their minds to new perspectives or to persuade others to their point of view. Nine of these women reported being treated in this manner. Similar to Separate Thinking men most of them said being treated in this way causes them to become upset. One participant said she had not been treated in this manner.

Most of the women in this category said that they would use the Connected knowing style. While one of the other two said she would not use it, the other women said use would depend upon the situation. Most of these women said they used this style with their peers. Its purpose was not to appear to be closed-minded. It was also used to smooth things over, to get feedback, and to get a broader perspective. All of the women in this category said they had been treated in this manner. Many of them said being treated in this manner made them feel “appreciated”. One participant said, “When treated in this manner, I feel like I have been given a bit of power”.

To sum up Separate Thinking Men and Women had very similar responses. Both groups use the Separate style. They tend to use it with friends, family and in classroom settings. Most of them thought this style fit them and that it was positive style to use.
However, all of them said being treated in this manner caused them to become upset even though they use it frequently.

Almost all of the Separate Thinking men and women in this category reported that they would use the Connected knowing style. Many, however, gave conditions under which they would use this style. Some were just learning to use it. Many of them responded that the purpose of using this style is to smooth over conflicts. There were only two of the women that said that they would not use this style. These men and women felt positive about being treated this way themselves.

**Separate Feeling Men:** All but one of these five men said they use the Separate knowing style. One of them said he did not think this was something he would do. The others identified with this style. The one exception seemed to be reacting to the “devil’s advocate” aspect of the Separate quote. He identified with the rest of the quote. All except one said that they would use this style with anyone and at anytime. These men saw this style as a way to see things through a different perspective or lens. One participant said, “we can’t all think alike”. All but one of the men in this category can recall being treated in this way. None of them reported that this style bothered them. One participant said, “I feel everyone is entitled to his or her points of view, no matter how it might contradict mine”.

Three of the five men in this category said that they use the Connected knowing style. Two did not use it. “This isn’t me”, said one. If the Connected knowing style were to be used, it would be under strict conditions. They saw the purpose as trying to make everyone happy or to keeping the peace. All of the men in this category said they had been treated in this way. None of them viewed this style as being negative.
Separate Feeling Women: There were three women in this category. One of these women said she would use the Separate knowing style just for fun. The other two said this is just “The way I am”. The women in this category said they would use this style with anyone. The purpose of this style was to get someone to react to their point-of-view. They also enjoyed seeing the other person’s reaction. They all reported having being treated in this manner. Each of them said this might make them upset, but one said she had been able to look back and appreciate it.

The three women in this category said all use the Connected knowing style. One participant said, “This person sounds very rational”. The women in this category said they would use this style in class. Its purposes were to understand someone’s point of view, to back down and hold your tongue. One person so feared being wrong if she presented her views that she used this style instead. Each of the women in this category had been treated in this manner and has positive feeling about it.

To sum up, all of the Separate Feeling women reported that they would use the Separate knowing style, while there was one Separate Feeling man that reported that he would not. He seemed to be reacting to the “devils advocate” aspect of this style. The men and women had different views of the purpose for using this style. The men reported they would use the Separate knowing style to see things from a different perspective. The women reported they would use this style for fun and to make people react. Both the women and men reported that they would use this style with anyone and at anytime. The men in this category reported that being treated in this style did not bother them, where as the women reported it making them upset. However one of the women said she could look back in retrospect and appreciate being treated in this manner.
Two of the Separate Feeling men reported they would not use the Connected knowing style, where as all of the women in this category reported that they would. The men seemed to be more adverse to this style but the women viewed it as rational. The men reported that the purpose of using this style was to keep the peace and the women viewed it as a way to understand someone’s point of view. Both the men and women in this category viewed this style as being positive.

Connected Knowing Style

Connected Thinking Men: There were two men in this category. The both said they would not use the Separate knowing style and they could not relate to the style. They all reported that they normally would not use it. The purpose for using this style was to get someone to adopt your beliefs. If they had to use the Separate style, they would do so if they did not trust the other person or their information. Both said they had been treated in this manner and this style did not bother them.

Both men said they use the Connected knowing style. One said he used this style at all times. These men said they use this style with everyone. The purpose was to better understand the other person’s perspective. Both men reported having being treated in this manner. They each had positive feeling about this treatment.

Connected Thinking Women: There were two women in this category. Both said the Separate style struck them as negative. One of these women said she would use this style with friends. One said its purpose was to make one stand out. The other person said this style is used to make you see both sides of a story. Both of the women in this category
said they have been treated in this manner. One said it does not bother her. The other women said it made her feel "pretty bad".

The two women in this category said they would use the Connected knowing style, especially in "sensitive" situations. The purpose of using this style was to gain understanding. They each commented on being treated in this manner and said that it made them feel good.

The Connected Thinking men reported that they would not use the Separate knowing style. They both were adamant about not using this style. They viewed the Separate knowing style as negative; however, it did not bother them to be treated in this way.

Both the men and women reported that they use the Connected knowing style. The men reported that they would use this style with anyone and at anytime, while the women viewed this style as especially appropriate in sensitive matters. Both the men and women said they would use this style to gain more understanding. The men and women in this category had positive feelings about receiving this type of treatment.

Connected Feeling Men: There were nine men in this category. Four said they would use the Separate knowing style conditionally. Five of them said they would not use this style and that it struck them as something very negative. Three of these men said they would not use this style with anyone. The others said they would use this style selectively with family, friends, and co-workers. One person said he could not see any purpose in using this style. The other men saw it as a way to communicate argumentatively in certain situations. All of the men in this category said they had been treated in this manner. Two of these men said they appreciated being treated in this manner because it taught them
valuable lessons. The others mostly viewed this style as negative and said this type of treatment either upset them or caused feelings of frustration.

All of the men in this category said that they would use the Connected knowing style. They viewed this style as being important, reasonable, and intelligent. Most of them said they would use this style with anyone and at any time. According to these men, the primary purpose for using this style is to better understand the other person’s perspective. All of the men in this category said they have been treated in this manner. They each had positive feelings of this type of treatment.

**Connected Feeling Women:** There were twenty-three women in this category. Fourteen of them said they would not use the Separate knowing style. Most of them said this style struck them as negative and offensive. Eleven out of the twenty-three women said they would use this style selectively with friends and family. The other said they might use this style in discussions of emotional issues such as religion and politics. Twelve of these women said the purpose of using this style is to gain another person’s perspective. This appears to be a use of the Separate style for a Connected purpose. Some of them viewed this style as a way to prove what is right and wrong. While some others viewed the purpose of this style “was just to be difficult”. Two of these women said they could not recall being treated in this manner. While the other twenty-one said they had experienced such treatment and most of these women said being treated in this manner made them feel “mad” or “upset”. Some felt “devalued” and “irritated”.

All of the women in this category said they would use the Connected knowing style. Many of the women in this category responded to the Connected knowing quote by saying, “This sounds like me”. Almost all of them said they would use this style with
anyone and at anytime. These women viewed the purpose for using this style as a way to know what other people are thinking. They also said this style can be used to keep the peace or rethink their own views. Only one of the women in this category reported never being treated in this manner. The others all said they have been treated with this style. These women had positive feelings when they were treated in this manner. They said they felt good to have someone looking at something from their perspective.

To sum up, most of the Connected Feeling men and women said they would not prefer to use the Separate knowing style with anyone. Both the men and women viewed this style as negative and offensive. The men and women who would use this style do so selectively with family, friends, and co-workers. Both the men and women used words like “argumentative” and “difficult” to describe this style. Two of the men in this category said they could appreciate being treated in this manner, while the rest of the participants, both men and women, said this style caused them to become upset.

All of the men and women in this category said they used the Connected knowing style frequently and with anyone. The men and women held this style in high regard. Some of the words used to describe this style were “intelligent” and “reasonable”. The women said one of the purposes for using this style is to rethink their own views. All but one of the participants in this category reported being treated in this manner. Both the men and women had positive feelings when treated with the Connected knowing style.
men and women whose knowing styles were different from their type. Most of these were Feelers who preferred the Separate knowing style. This is the opposite of what Nichols' model would posit. This result could be associated with influences of the broader dominant European/American culture. The epistemology of the European/American dominant culture is Separate and this may be a conditioning factor for the African American students in this study. The dominant education system also has a Separate knowing style bias. Hence, this traditionally Separate learning environment and dominant European/American culture may have influenced the few participants in this study who did use the Separate style while preferring Feeling.

Traditional gender characteristics would suggest that men are strong, aggressive and dominant, while women are described as passive, emotional, and gentle. Nevertheless, the men and women in this study demonstrated both types of characteristics. Hence, type, once again, maybe more associated with how the students behaved in this study than gender conditioning.

Culture is inclusive of norms, values, habits and unstated assumptions. Nichols (1988) believes the African American culture is more of a interpersonal and collectivist culture. The collectivist culture gives priority to the goals of the in-group and behaves in a communal way. This was not true in all cases for this study. There were a number of students whose behavior was more in the direction of an individualist. An individualist has an emphasis on personal responsibility and freedom of choice. The Connected knowing style could be seen as being similar to the collectivism, while individualism is similar to the Separate knowing style. Both men and women in this study demonstrate both characteristics based upon type preferences. For the few who were more influenced
by culture, the direction of most of the cultural influence was toward individualism of the dominant culture.

Significance of Study

This study demonstrated a relationship between knowing styles and psychological types. The focus of this study was 66 African American college students ages 18-25. These students are United States citizens and are of Caribbean or African decent. This study is a follow up study to Rodgers’ study conducted in 1992, 1998 and 2000. In Rodgers’ study there were 120 U. S. college students ages 18-25. This study found that psychological type was more associated with Separate or Connected styles than gender. Men and women who preferred Thinking favored the Separate knowing style, and men and women who preferred Feeling favored the Connected knowing style. The results for the current study were very similar; 85% of Thinking men were Separate; 83% of Thinking women were Separate, 64% of Feeling men were Connected; and 88% of Feeling women were Connected. Overall, regardless of the participants’ gender, 84% of Thinkers were rated Separate while 77% of Feelers were rated Connected. However, a few Thinking type females preferred Connected and vice versa for males (Rodgers, 1998). This was also the case in the current study. There were a few Thinking types who preferred the Connected style and vice versa.

The current study was done to determine whether being a Separate or Connected knower is more influenced by gender or psychological type preference among African American College students. Gilligan (1982) Belenky et. al. (1986) and others speculated
that these differences result from differences in the experiences of roles played by men and women in our culture. Rodgers’ study and this study do not support this view.

Within the realm of higher education African Americans have been considered at risk students and are facing many issues. It was important to take a closer look at this population of students alone to see if there were any significant differences in this study and Rodgers previous study in order to better serve African American college students. In most instances of a general sample of college students Rodgers (1998) study found, type preferences appear to take precedence over gender conditioning and in a few instances gender conditioning may take precedence over the preferred type preferences. It was noted, however, that among the instances where gender conditioning took preference, African Americans were over represented. Hence, the need for this study being repeated with only African Americans college students in order to see if type or gender is more associated with Separate and Connected knowers within this group. Although a naturally Connected knower can learn in a Separate knowing style environment, the student might be less comfortable, learn less, and never “identify” with the discipline or profession that is being taught in the Separate style. The same would be true for a Separate knower in a Connected learning environment. Hence, if an educator values individualizing learning experiences to fit the student preferred style, then African American student’s education should focus more on Thinking and Feeling type difference than male and female in designing environments to help these students succeed.

Limitations of the Study

The strict sample requirement was a major factor in the limitations of this study. The current study sought participants whose age ranged from 18-25 and were of African
or Caribbean descent. The contact information of the African American college students was obtained from the Office of Registrar. There were approximately 2,500 students who were on the list of African American students between the ages of 18-25. However, a large number of students on the list could not be contacted. The researcher-received emails back indicating that many of these students’ mailboxes were either full or no longer existed. There were also participants who were interested in participating in the study but indicated that they were not United States citizens. The list of African American students that actually received the email and were United State citizens is estimated to be approximately 1250. From that sample, 148 participants completed the MBTI inventories. Only 66 of the 129 invited students participated in the Separate/Connected interview. Despite the fact that the sample of only 148 participants was used for this study, it is important to note that the 148 participants were randomly selected from the pool of 1250.

It was the intent of the researcher to use Log-Linear Analysis for the statistical analysis of this study. Log-Linear Analysis statistics analyze the frequency counts of observations falling into each cross-classification category in a contingency table (Gilbert, 1981). At least five participants in each of the categories (Separate Thinking Male, Separate Feeling Male, Connected Thinking Male, Connected Feeling Male, Separate Thinking Female, Separate Feeling Female, Connected Thinking Female, and Connected Feeling Female) were needed in order to use the Log-Linear Analysis. However, there were only three participants in the Separate Feeling female category, and only two participants in both the Connected Thinking Male and Connected Thinking Female categories. Hence, Log-Linear Analysis could not be used and Generalized
Linear Model for Binomial Models was used to assess the relationship between the psychological types and knowing styles in this study.

The consistencies as well as wording of the questions in the interview protocol were limitations of the current study (Appendix C). In order to improve the Separate and Connected quotes’ validity, the “devil’s advocate” aspect of the Separate knowing quote appeared to solicit negative connotations from many of the participants in this study. The two quotes would be more parallel if this aspect of the Separate quote were revised, even if this means new studies would not have the same stimulus as the current studies using this measure.

In addition to increasing the interview protocol consistencies, the wording of some questions in the interview may need revision. There are questions in the interview protocol that were not clear (see Appendix C). For example, these specific questions: “How does this strike you?” “Give specific examples of when you have used one or both”; and “Can you describe ways in which you might broaden your approach?” Many of the participants expressed that they did not understand exactly what the question was asking due to the wording of the questions. The lack of clarity in the wording limited the substance of the responses. Furthermore, the interview protocol groups questions together, for instance: “Has anyone treated you in the way?” “How did you feel about it?” In many instances participants would not answer one of the questions asked. Hence, each question should be asked separately in future studies.

During this study the researcher contacted and attended a variety of student organization meetings. Some of those organizations were the Black Graduate and Professional Student Caucus, the African American Living Learning Program, Black
Men Investing, the Black Association of North Campus Students, and the South Area
Black Student Association. When the researcher was allowed to attend the organizational
meetings, students were informed about the study and were asked to participate.
However, not many of the students wanted to stay after the meeting to complete the
MBTI inventory. Furthermore the atmosphere usually was not conducive for taking the
MBTI inventory. Moreover, there were a number of students who completed the MBTI
inventory who did not wish to participate in the interview section of the study.

The current research was conducted in a large Predominately White Mid-Western
research university. The African American student population comprises only seven
percent of the total student body. It would be beneficial to conduct such a study at a
Historically Black Institution to increase the sample size. A larger sample size will
increase the generalization of the results to the African American student population.

Future Research Areas

As previously stated, the current study was conducted at a Predominately White
Institution. If this same study is conducted at a Historically Black Institution there may
be a difference in the results. This study could also be conducted at single sex
institutions as well to investigate whether cultures at various types of institutions have an
affect on the results.

In this study it was speculated that the information provided by Nichols (1998)
was not true for the participants in this study. The students in this study most likely
adhered to the dominant cultural conditioning of the European/American educational
system. Hence, a binary study may need to be conducted with both African American
college students as well as African Americans who are not in college to further investigate that speculation. In addition to a binary study, a second interview with those students who prefer the opposite learning style of their type preference might be needed to qualitatively explore how and why their knowing style preferences vary from their type preferences.

Conclusion

The quantitative results from this current study were similar to the previous studies conducted by Rodgers (1998), and Rodgers (2000). In both studies psychological type, Thinking and Feeling, were more associated Separate and Connected with knowing styles, than gender. In the qualitative results, the results were also similar; however, there were a few unique patterns in the African American college students’ construction of these styles.

This study indicated that psychological type and knowing style are in fact related for African American college students. Hence, if educators value designing learning environments to account for this style differences, it appears to be more important to know a student’s type than their gender. On the other hand, for a few students, mostly men and women who prefer Feeling, the Separate style of much of schooling and the dominant culture appears to have made the Separate style preferable.
LIST OF REFERENCES


APPENDIX A

RECRUITMENT LETTER
Hello

We are seeking your participation in a research study to examine relationships along gender, preference for personality types and knowing styles of African American students. Please read the following message.

To participate, we ask for two things. First, we want you to take the Myers-Briggs Type Indicator (MBTI) form M. This is a personality type inventory that will take about 30-45 minutes to complete. Second, we want to conduct an interview with some of you about your knowing style. The interview process will take about 30 minutes to complete. We will be taping the interview, which will remain confidential. In sense, we will not be identifying individuals for MBTI or interviews. However, we could use quotes from your interview to illustrate a point, without identifying you.

If you meet the criteria below and you would like to have FREE PIZZA, you could participate in this study to learn about your personality type and knowing style.

First, you must be between the ages of 18-25.
Second, you must be African American or of African or Caribbean descent.
Third, you must be a citizen of the United States Citizen.

Participation in this research is strictly voluntary. If you are interested in a theory of personality types, we will be providing several workshops in order to help you understand your results on the MBTI personality assessment. We appreciate your time and assistance in this matter. If you are interested in participating in this research, please respond to this message with your name, age, gender, and citizenship. In addition, please indicate which date and time you would be able to participate.

Date and Time:

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<tr>
<th>Thursday 10/14</th>
<th>10:00-11:00</th>
<th>Thursday 10/21</th>
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APPENDIX B

SCRIPT FOR MBTI ADMINISTRATION
Thank you all for coming to participate in this study. You have decided to participate in this study with the awareness that some of you will be invited for an interview after taking this assessment. This interview is to determine your knowing style. Today, you all will be taking the Myers-Briggs type indicator Form M, which will give you feed back on your personality preferences. Through this personality inventory, you will be able to discover how you prefer to look at differing opinions. There is no right or better way to perceive the world, but we can learn a lot from our preference differences. Recognizing how we perceive is important because it can help us communicate with others better.

The assessment will take between 30-45 to complete. When you are finished, please bring your answer sheets and question booklets to me. Feel free to have pizza after you are done in the next room. Please be considerate to those who are trying to complete the inventory. We will return as a group to talk about the theory of psychological type and how it affects your life. I will be providing a bibliography of resources on the theory of personality types and how it is used in different settings.

Everyone please take out a pencil. If you do not have a pencil, please raise your hand and I will give you one. Now, I am going to hand out the answer sheet and the question booklet. Please do not right in the question booklet. On the answer sheet please indicate your ethnicity, age, gender, citizenship, and OSU email address. These items will only be used to identify you for the interview. After the interview, your MBTI results and the transcript of your interview will be matched. Once this occurs, your name will be removed and you will not be identified with the knowing style interview or MBTI. This will be strictly confidential. After you are finished you will need to hand in both the answer sheet and the questions booklet. After the answer sheets are scored, I will be returning them to you for you to keep.

(Read instructions of the instrument and have students follow along). If you have any questions please raise your hand. You may start filling out the answer sheet.
APPENDIX C

INTERVIEW PROTOCOL FROM MANSFIELD AND CLINCHY (1992)
SEPERATE KNOWING QUOTE: “I never take anything someone says for granted. I just tend to see the contrary. I like playing the devil’s advocate, arguing the opposite of what somebody is saying, thinking of exceptions, or thinking of a different train of logic.”

(1) How does this strike you? Is this something you would do? When/where/ with whom would you do it?

(2) If possible, describe in detail a specific situation where you’ve done it.

(3) What’s the purpose of it? Why do you do it?

(4) Some people say they find it hard to argue. Is that true for you? What’s so hard about it?

(5) When/where/with whom would you probably not do it?

(6) Are there people in your life, or have there been people in your life who treated you this way? How do you feel about that?

CONNECTED KNOWING QUOTE: “When I have an idea about something, and it differs from what another person is thinking about it, I’ll usually try to look at it from that person’s point of view, see how they could say that, why they think they’re right, and why it makes sense.”
(1) How does this strike you? Is this something you would do? When/where/with whom would you do it?

(2) If possible, describe in detail a situation where you’ve done it.

(3) What’s the purpose of it? Why do you do it?

(4) Do you find it easy or hard to do? Why?

(5) When/where/with whom would you probably not do it?

(6) Are there people in your life, or have there been people in your life who treated you this way? How do you feel about that?

(7) Which of these are you more likely to use?

(8) How do you use them? (Give specific examples when you have used one or both.)

(9) Can you describe ways in which you might broaden your approach?