

Spring 2022

## From an Ambivert's Perspective: The Relationships Between Personality Types, Attachment Styles, and Behavioral Tendencies of Introverts and Extroverts

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## **Acknowledgements**

This project was made possible thanks to the assistance and utmost support from many professors, students, and staff at the University of South Carolina and South Carolina Honors College. Specifically, I would like to thank my thesis director, Dr. Sunny Park (University of South Carolina, Darla Moore School of Business), for helping me to collect data from students abroad in South Korea. I would also like to thank my second reader, Dr. Kealy Carter (University of South Carolina, Darla Moore School of Business), for providing additional research topics and resources to enhance my thesis further. Finally, a big thank you to the Darla Moore School of Business professors and students for helping with the distribution and completion of my surveys to proceed with my thesis.

## **Abstract**

Over the years, there has been continuous discussion around the idea that extroverts dominate the business workplace over introverts and vice versa. However, depending on the work setting and skillsets needed, it is imperative to realize how certain business practices, personality styles, and relationship approaches are different in every scenario. For this research thesis, the goal was to compare the personality and attachment styles of students who study in two different cultural environments, seeing if there were any apparent relationships between the two variables and student behavioral tendencies.

While personality types help to understand one's strengths, weaknesses, and responses to various environments and behaviors, attachment styles look more at individual relationships and how a person internally and externally connects to others. Previous studies have shown that personality, behaviors, and attachment levels can predict one's actions. The study conducted two versions of a survey that asked respondents about their perceptions and expectations when working and building relationships in professional work environments. One was sent to Darla Moore School of Business (DMSB) students at the University of South Carolina, and the other to Korea Tech and Chonnam National University (CNU) students in South Korea. Student responses were organized and analyzed in Tableau and through multiple figures, tables, and t-tests. Results showed relationships between the personality types and behavioral tendencies as well as both statistically significant and insignificant differences in attachment styles between introverts and extroverts. This further attests to the continued relevance and value that personality and relationships hold for understanding cultural and behavioral differences on national and global levels.

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## **Thesis Summary**

This thesis presents a general perception of how business students, both domestic and international, perceive their personalities in professional environments based on backgrounds, personal experiences, and future career aspirations. In this paper, two relationships are investigated and compared to see if there are any potential links between one's introverted and extroverted tendencies to one's work behaviors and building relationships with others. Through two comprehensive surveys, the goal is to have students respond to nonspecific questions that elicit a deeper understanding of how one's character, work experiences, and social environments could correlate to one's work style, performance, and social interaction in professional settings.

## Introduction

### Introversion v. Extroversion

Whether it's a finance or marketing class, a leadership role on campus, or a full-time job, how do personality, work preferences, and business traits play into how people perform in a business setting? Does where someone comes from or grows up impact how one behaves and thinks in professional environments? Some people tie this to the dichotomy of introversion and extroversion, and there are many presumptions of introverts and extroverts that don't necessarily constitute a definite label.

Personality tests like the Myers-Briggs or Enneagram have found a place in many universities and work settings. It has become a common tool for identifying potential career paths, initiating icebreakers between students and employees, and understanding the importance of people's strengths in a collaborative environment. One aspect of these tests is measuring a person's tendency towards responses to certain relationships, environments, and behaviors; it is commonly referred to as introversion and extroversion. When people first hear introversion and extroversion, they instantly define them as traits. Extroverts are *sociable*, *assertive*, and *energetic*; introverts are *reserved*, *insightful*, and *passive*.<sup>1</sup> In other words, extroverts recharge through social interactions with others, while introverts mainly recharge through spending time with themselves.<sup>1</sup> However, the issue becomes when people formulate presumptions and associate behaviors to how well someone does in their careers, particular environments, and especially within the business world. In many studies, some commonly compared behaviors were happiness, intelligence, work performance, and negative behaviors.<sup>1</sup> Extroverts expressed more positive emotions, unlike

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<sup>1</sup> Guy-Evans, O. (2021, February 9). *Introvert and Extrovert Personality Traits | Simply Psychology*. Introvert and Extrovert Personality Traits. <https://www.simplypsychology.org/introvert-extrovert.html#theories>

introverts who found it neutral.<sup>1</sup> Introverts were associated with greater levels of intelligence and success in academic settings, even predicting higher grade averages at high school and university levels.<sup>1</sup> In work settings, extroverts were believed to take on more *active* roles like sales and teaching, whereas introverts seemed more suited for *secluded* positions like engineering or accounting.<sup>1</sup> Finally, extroverts were more likely to exhibit delinquent behavior in their youth compared to introverts.<sup>1</sup>

Many preconceived notions can come with considering yourself as an introvert or extrovert. Characteristics are visible mainly through external interactions, but it also has to do with internal behaviors others cannot see unless shown. Personality can drive certain expectations and motivations; it can impact the satisfaction with a job, or the mannerisms exuded in the workplace.<sup>2</sup> Performance at work is just as important as job security, and one has no immediate control over how to react or handle situations in the workplace. Social relationships and work performance are naturally driven by the people you are surrounded by and the situations you deal with. To some surprise, research studying the relationship between personality and job satisfaction showed that there was indeed a direct relationship between introverts and job satisfaction.<sup>2</sup> The relationship was less apparent with extroverts.<sup>2</sup> The reason was how often the two engage with their natural surroundings. While extroverts solely fed off social responses and lacked consideration of themselves, a natural inclination to oneself seemed to show a direct correlation between introverts and work satisfaction.<sup>2</sup> By all means, this research does not apply to all introverts and extroverts, but the general belief was how personality types impacted performance decisions and self-values.

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<sup>2</sup> Golpayegan, M. A. (2017). Evaluating the Relation between Personality Properties with Job Satisfaction of the Staff. *Journal of History, Culture & Art Research / Tarih Kültür ve Sanat Arastirmalari Dergisi*, 6(3), 937–949. <https://doi-org.pallas2.tcl.sc.edu/10.7596/taksad.v6i3.964>

With the general comparison of reserved versus outgoing, a more complex definition has to do with one's tendency for responding to situations. Introverts can generally be seen to react to more negative emotions like stress or fear, whereas extroverts respond more to assertive and sociable settings.<sup>2</sup> How is this seen in the "business world"? In such a fast-paced environment that requires quick thinking, precision, and strong interpersonal skills, is someone likely to perform better with people who are introverted or extroverted? Does it even matter in business?

Introvert and extrovert "shaming" is common stereotypical behavior seen when labeling people with certain attributes and behavioral preferences. For example, introverts can be commonly labeled as *antisocial* while extroverts can be labeled as *clingy*. This leads to people formulating assumptions and helping to define their "liking" of someone. The barrier between introversion and extroversion is a strange phenomenon that has initiated much controversy over the years. Mostly, within businesses and team-oriented environments, it has become an assumption that introverts are too sensitive while extroverts are too energetic. Hence, many believe that extroverts are more successful than introverts and vice versa with how each side approaches various issues. Over the years, however, these stereotypes have been broken by numerous individuals such as billionaire Bill Gates who is an introvert not fazed by public speaking and artist Adele who is an extrovert admitted to having stage fright.

### What is Ambiversion?

In business, many studies and individuals have displayed behaviors that contradict the assumed work style of varying personalities. A mix of introverted and extroverted traits has



developed over the years, also known as ambiversion.<sup>3</sup> Growing up, some embody both traits with a preference towards interacting with people, but a necessity of having to revitalize energy in isolated environments. This new personality type is difficult to distinguish, but a study by Jason Ankeny shows observations and examples of how ambiverts enhance business practices.<sup>4</sup>

Ambiversion is a borderline term that many do not consider as a trait. Like introverts and extroverts, ambiverts display tendencies that highly depend on situations and communities. A person could be more active and communicate comfortably in one setting while preferring minimal interaction in other environments. Based on that definition, everyone might be considered an ambivert. Carl Jung, who first popularized the terms introversion and extroversion, said that the two differed in how each connected to the internal and external world.

Calling extroversion the "normal" personality type, Jung's formulation of introversion arose some debate. Edmund Smith Conklin was a psychologist helping to coin "the ambivert." After reading Jung's writings, Conklin interpreted introversion as a pathological trait.<sup>3</sup> Categorizing people into such clean-cut personality types seemed too ideal and brought attention to how people have dispositions of various personality types.<sup>3</sup> Later, Conklin proposed his own definitions of introversion, extroversion, and the new ambiversion type.<sup>3</sup> One aspect that distinguished ambiverts from "psychoanalytic or psychological" types were ambiverts' flexibility and adaptability.<sup>4</sup> He analogized introversion and extroversion as an axis. According to Jung, the relationship between our inner experience (subject) and outer experience (object) is driven by how psychic energy traverses.<sup>3,4</sup> For extroverts, the energy naturally flows towards the object, and they

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<sup>3</sup> Davidson, Ian J. "The Ambivert: A Failed Attempt at a Normal Personality." *Journal of the History of the Behavioral Sciences* 53, no. 4 (October 2017): 313–31. doi:10.1002/jhbs.21868.

<sup>4</sup> Weinstein, Ian. (2015). *Learning and Lawyering across Personality Types*. *Clinical Law Review*, 21(2), 427–453.

feel comfortable interacting with the outer world; in contrast, introverts energize from self-reflection and observation.<sup>3</sup> It is important to emphasize that these personality traits do not measure social capacities and abilities to engage in large groups; instead, it is a preference of how one connects and revitalizes themselves to carry forward.<sup>3</sup> These types, however, became nebulous when some started questioning how they exhibit both introverted and extroverted behaviors, especially in different cultural and business settings. Interestingly, Jung argued how pure introverts or extroverts do not exist and acknowledged a third personality type which represented a "normal man;" however, he could not figure out what this was.<sup>3</sup>

Following Jung, many other psychologists, authors, and scientists furthered aspects of these personality types into the third type that Jung was trying to coin. Later, many expanded upon the original two types and looked more into the new ambiversion type. People then started to put introversion and extroversion as opposites on a spectrum. Ambiversion became a hybrid trait, embodying a mix of the two and considered a more adaptable type.

In 2013, Adam Grant, a professor at The Wharton School, tracked various sales representatives at an unnamed software company for three months.<sup>5</sup> Using a 1-7 scale-based personality assessment, sales representatives who scored between 3.75 - 5.50 (ambiverts) had hourly revenues averaging \$154.77.<sup>5</sup> Compared to extroverts with \$125.19 and introverts with \$120.10, ambiverts who scored exactly 4.0 averaged revenues at about \$208.34 per hour.<sup>5</sup> As expected, while extroverts were over-dominating conversations during sales pitches, introverts were facing the opposite problem of staying too reserved.<sup>5</sup> In Han Eysenck's "Dimensions of Personality," Eysenck talks about how extroverts require energizing their minds and bodies which

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<sup>5</sup> Ankeny, Jason. 2015. "A WINNING PERSONALITY. (Cover Story)." *Entrepreneur* 43 (3): 36-41.  
<http://search.ebscohost.com.pallas2.tcl.sc.edu/login.aspx?direct=true&db=bth&AN=100775256&site=ehost-live>.

inherently draws out their adventurous, social, and active nature.<sup>5</sup> On the other hand, in Susan Cain's "Quiet: The Power of Introverts That Can't Stop Talking," many experts debate how introverts are better suited for running businesses due to their greater willingness to hear constructive criticism and their general focused character.<sup>5</sup> Grant immediately counterargues how both perspectives are not necessarily correct. People who participated in the study showed that many scored in the middle "ambivert" scale.<sup>5</sup> There is a comparison about how ambiverts are like bilingual individuals. For example, you can speak English to one person but Spanish to another; the question becomes what your real language is.<sup>5</sup> Similarly, ambiverts have the advantage of understanding introverts and extroverts equally well. Not only that, but ambiverts who exhibited both extroverted and introverted characteristics proved more successful in general.

Now, ambiverts seem to be that "perfect" model of what all employers covet, so are there any disadvantages? Well, like for introverts and extroverts, the right environment can draw out the best but also the worst performances. Like Grant states, introverts can successfully perform extroverted activities if they find the right niche to grow from, and the same goes for extroverts.<sup>5</sup> Ambiverts, by all means, are not superior to the other personality types but there are some competitive advantages associated with having a balance of both traits. One problem that ambiverts can run into though is the idea of being overly flexible or unpredictable which can sometimes cause potential setbacks in professional settings.<sup>5</sup>

### What are Business Ethics?

Business work culture is an impetus for selecting future companies, firms, and organizations to work for. Fundamentally, business ethics can lay out the long-term success of a company. Businesses, firms, corporations, and organizations of all levels heavily emphasize their

respective work and people culture. Business ethics can encapsulate various social, environmental, cultural, and even legal influences which could ultimately mold or change one's beliefs and habits in the workplace. Nowadays, upholding high business ethics is not just about the reputation but also the image of one's country.<sup>6</sup> Harsha Sahu, an assistant professor at Guru Ghasida Vishwavidyalaya's Management Studies Department, business ethics introduces a barrier to companies with high versus low business ethical practices. For instance, a workplace with high business ethics and standards often experiences better decision-making practices, consistent profitability, employer-employee relationships, and competitive advantage.<sup>6</sup> Environments with low business ethics and values can face a series of issues like corruption or favoritism, leading to undesirable effects like negative work culture relationships, low employee utilization, and even legal matters.<sup>6</sup> Business ethics is a company's foot in the door when interacting with other organizations or clients and also a hub for quality employees.<sup>6</sup> All organizations make up a diverse workforce from varying backgrounds to technical skillsets and interests. One of the goals of this study is to see how business-minded students with these differences can perceive business ethics and culture based on various behavioral influences and experiences.

### What is Attachment Theory?

Along with personality types, attachment style is another association people make with business ethics and consumer behavior. Attachment style describes how people relate to others

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<sup>6</sup> Sahu, Harsha. 2016. "A Descriptive Study on Business Ethics." *CLEAR International Journal of Research in Commerce & Management* 7 (9): 35–38.  
<http://search.ebscohost.com/pallas2.tcl.sc.edu/login.aspx?direct=true&db=bth&AN=119728205&site=ehost-live>.

through their thoughts, feelings, and behavioral tendencies.<sup>7</sup> The overarching concept is attachment theory, which explains how social cognitive representations drive human needs to form interpersonal relationships.<sup>8</sup> Though this theory is associated more with psychological attachments like caregiving and romanticism, many individuals have come to see consumer attachment styles relating to things like brands, services, and business-related concepts.<sup>7</sup> According to researchers Matthew Thomson and Allison R. Johnson, avoidance and anxiety allow businesses to predict "consumers" patterns of commitment, involvement, and satisfaction," especially in their relationships with various brands and services.<sup>7</sup> This shows how attachment theory has manifested itself in the business world and work culture.

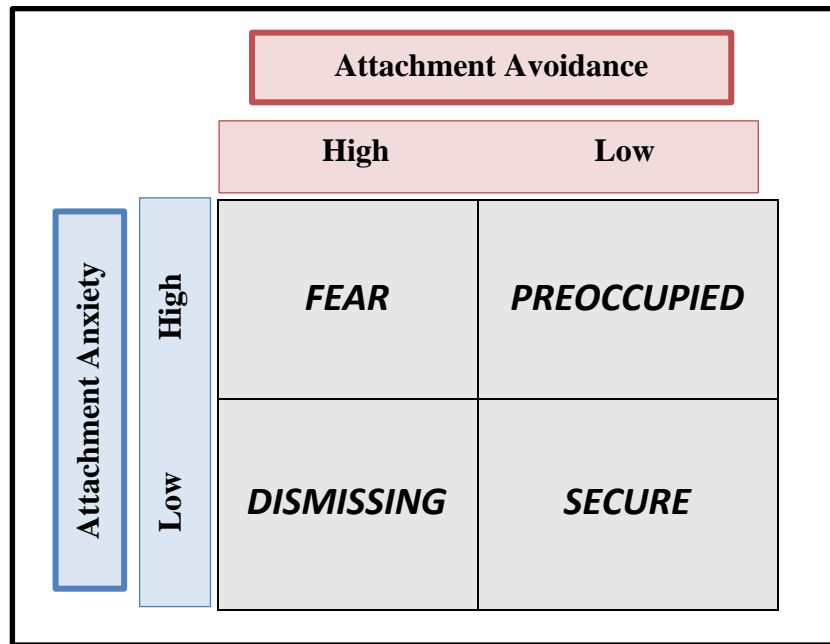
There are two dimensions to attachment style — attachment avoidance (AV) and attachment anxiety (AX).<sup>7</sup> While attachment avoidance reflects fears of "personal intimacy, dependence, and disclosure," attachment anxiety reflects fears of "rejection and abandonment".<sup>7</sup> These two dimensions define the four attachment styles: *secure*, *preoccupied*, *dismissing*, and *fear*, where avoidance is associated with negative representations of *others* and anxiety relates to negative representations of *oneself*.<sup>6,7</sup> Figure 1 below shows the relationships between attachment avoidance and anxiety to the four attachment styles.

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<sup>7</sup> Thomson, M., Whelan, J., & Johnson, A. R. (2012). Why brands should fear fearful consumers: How attachment style predicts retaliation. *Journal of Consumer Psychology*, 22(2), 289–298. <https://doi.org/10.1016/j.jcps.2011.04.006>

<sup>8</sup> Scott LN, Levy KN, Pincus AL. Adult attachment, personality traits, and borderline personality disorder features in young adults. *J Pers Disord*. 2009 Jun;23(3):258-80. doi: 10.1521/pedi.2009.23.3.258. PMID: 19538081; PMCID: PMC3195524.

Figure 1



**Figure 1:** Relationship between attachment avoidance, attachment anxiety and four attachment styles

In past studies, attachment styles were studied to see how they influenced different variables like the number of complaints or attitudes expressed.<sup>7</sup> Using two models, the test assessed if avoidance and anxiety were separate but interconnected or completely unidimensional with how consumers expressed themselves.<sup>7</sup> The results showed that avoidance and anxiety were distinct dimensions; not only that, but *secure* individuals were less likely to complain or directly go against brand actions, whereas *fearful* individuals were more likely to.<sup>7</sup> Later, two more variables were studied to show the significance of self-image and loss of benefits to attachment avoidance and attachment anxiety. The results were the same, concluding that avoidance and anxiety were reliable metrics for comparing individual traits.<sup>7</sup> Similarly, questions were taken from these studies, comparing these attachment styles to personality traits to see if there is a correlation or if one has more impact on business ethical practices than the other.

### Importance of Workplace Ethics & Social Responsibility

Globalization has inevitably impacted the way we conduct and view business. Globally, we see how virtue ethics and social responsibilities are highly emphasized and valued in business communities. In successful work environments, employee well-being, flexible work schedules, and team transparency are frequent practices seen.<sup>9</sup> Over the years, many debated whether organizations could be independently moral while sustaining a certain level of personal growth for employees.<sup>9</sup> Organizational virtue (OV) and business ethics have proven to carry out an organization's goal and showcase how direct business influences impact individual values.<sup>9</sup>

Many people have created OV scales to measure organizational virtues in the workplace.<sup>9</sup> Some focused on organizational practices and behaviors, while others on moral attentiveness and structural relationships.<sup>9</sup> In the past, there has been an issue with how virtue and standards were implemented in workplaces. In the United Kingdom (U.K.), a survey was conducted to measure business ethics and the relevance of its impact on undergraduate students. Approximately 440 students were selected from a participant poll, and out of the 440 students, 385 graduated from a university course.<sup>9</sup> With response rates of about 40%, the goal was for respondents to finish all the OV scales in the survey. The results showed that 32% of the respondents were able to complete all the scales successfully.<sup>9</sup> The appeal is geared towards students and individuals specified in the business field. In order to teach young adults before entering into the real world, this human resource study aims to explain business ethics when working with others. A few hypotheses were formulated in the process such as indications of OV being positively correlated with moral

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<sup>9</sup> Dawson, David. 2018. "Organisational Virtue, Moral Attentiveness, and the Perceived Role of Ethics and Social Responsibility in Business: The Case of UK HR Practitioners." *Journal of Business Ethics* 148 (4): 765–81. doi:10.1007/s10551-015-2987-4.

attentiveness (MA) and higher MA leading to more visibility of ethics and social responsibility.<sup>9</sup> Even though there were some positively correlated relationships with moral attentiveness, it showed that there were some negative correlations with OV trust, forgiveness, and relationships.<sup>9</sup> From most business students' perspectives, many agreed that social responsibilities and organizational ethics were vital to workplaces.<sup>9</sup> However, many also were uncertain about the priorities of the attention given to business issues versus the students themselves.<sup>9</sup> Studies like this have shown the relevance and importance of alleviating pressured work environments, workload stress, valuable work experiences in achieving compatibility between ethics and business.<sup>9</sup>

In this thesis, a similar approach was taken, where personality types and attachment styles were taken into consideration for understanding how students could view certain ethical practices. Based on business students' academic backgrounds, career goals, and social aspects of real-work experiences, the research compares the similarities and differences between two academic and cultural settings.

### Rationale & Hypotheses

When comparing Darla Moore School of Business (DMSB) students at the University of South Carolina to students at Korea Tech and Chonnam National University (CNU) in South Korea, the first goal was selecting variables that may impact how students behave in professional settings. For example, culture and family backgrounds, different educational mindsets, the types of work experiences, etc., were all considered when surveying both business student cohorts. Based on that, there were two specific hypotheses formulated.

All factors aforementioned are undeniably relevant to how students perform and learn. Education, for instance, is a big part of the many underlying differences in student educational



mindsets, even just between education systems in the United States and Korea. Based on how the education system in Korea is constructed, and from the academic standards that most Korean households uphold, students invest longer hours solely on academics and use that as a driver for success. On the other hand, education in the United States encourages individuality, where students pursue opportunities that pique their interests and become well-rounded. It results in a disparity between East Asian cultures, most notably Korea, and Western cultures in how students perceive their accomplishments. Students in the United States are more inclined to overestimate their abilities and believe that high self-esteem leads to success, while students in Korea tend to underestimate their abilities and believe only self-improvement leads to success. It is inevitably a big part of one's thought development process and behavioral patterns. Culture and family backgrounds also play into one's personality and professional demeanor. Although it was not heavily studied, cultural and family influences were also considered.

Work experiences were the main focus of the surveys. As the majority of business students have had past or have current and potential job offers, internships, and other professional opportunities, career experiences were used as the basis for the study. The beginning of a business student's career can vastly differ by individual. Some college students start with side jobs like fast food or academic sectors, while others begin working directly in their respective fields — financial analysts, brand ambassadors, consultants, administrative assistants, etc. In the workforce, one commonality is when students try to fit in with preconceived standards of their work environment. In other words, extroverts try to be introverts and vice versa because they believe certain behaviors or skills are favored. It is like having an "on-off" switch between the personality types.

Personality influences a multitude of factors, not just associated with behaviors. It controls a pattern of actions and emotions that elicit specific responses, especially in unfamiliar settings.

Introverts and extroverts may experience similar internal and social anxiety in new work environments, but their behavioral patterns and coping approaches could be different. Introverts are typically more socially withdrawn, while extroverts are more socially dependent in active environments. It is not a matter of how social one is but how often one gains energy and presents themselves in social settings.

However, this relationship between introverts and their behavioral tendencies may differ in professional settings. First impressions play a big part in how employers and other co-workers view an incoming employee. Introverts will feel obligated to engage in social activities and in-person events, thinking that active social engagements will be particularly favored. This study tests how additional factors, like work experiences and leadership positions, directly impact student behaviors among introverts and extroverts. Based on student presumptions of how successful personality types would be in various professional settings, introverts are more likely have the "on-off" personality switch and expect to be more extroverted/introverted than do extroverts in work environments. When placed in work settings, introverts who have more work experience or leadership positions will show more extroverted tendencies while extroverts will maintain their extroverted personality.

Attachment style was another trait variable used for studying business student behaviors and overall thought processes. With attachment theory, the study focused more on the "relationship" aspect of business students and how their emotional connections impacted their ability to interact with others. Attachment theory started with mainly referring to individual social and romantic relationships but gradually evolved into being described for business and marketing.<sup>7</sup> Researchers believed that attachment styles could be used to "predict" business and consumer relationships.<sup>7</sup>

Many believe that “attachments” to business partners, brands, service providers, etc., could lead to anti-brand behavioral actions and future relationships.<sup>7</sup>

Specifically, two business hypotheses were studied. The hypothesis was based on anti-brand behavior and the theory that individuals with high anxiety and avoidance — otherwise considered *fearful* consumers — would be most likely to experience anti-brand reactions. Fearful individuals are more likely to invest more into the business, which results in negative psychological impacts of lower self-esteem or self-reflection.<sup>7</sup> In other words, the higher the attachment anxiety (AX) and attachment avoidance (AV), the greater the investments individuals are likely to make to companies and brands, resulting in those reactions.<sup>7</sup> Results showed that attachment avoidance and anxiety were two separate yet distinct dimensions that clearly showed how individuals with low scores on both were less likely to initiate anti-brand actions like complaining or payback.<sup>7</sup>

Later, the study took the first hypothesis a step further by adding self-image and loss of benefits mediators into the equation. The relationship between avoidance and anxiety was then studied again, and it was proven that the metrics were precise in assessing individuals' responses.<sup>7</sup> When looking at self-image and loss of benefits independently, the metrics were less statistically significant, but, in conjunction, were highly correlated to the anti-brand behavioral patterns.<sup>7</sup> In conclusion, it was shown that anxiety and avoidance correlate to business actions and relationships. This thesis was conducted to take a similar approach but combining individualistic and business ethics viewpoints.

The study worked to integrate both the social and business-related attachments that students perceived when thinking on a business level. Using some questions that assessed attachment anxiety and avoidance in the survey, the second hypothesis wanted to investigate how

business students felt about their relationships, specifically in the business world. If the first hypothesis was looking more into the personality aspect of students, this wanted to get some insight on how students engage with their environment and go about their relationships in business settings. After analyzing the survey responses, the goal was to see if there was a correlation between personality and attachment theory or if one was more statistically significant.

Attachment anxiety and avoidance both impact the way people build relationships, and the study looked to identify if there were any differences for students in professional work settings. Not only that but does attachment style impact the personality types? While researching attachment styles and looking into studies that show how different attachment levels impact individuals, there was some correlation between anxious or secure individuals and predictions of their behavioral patterns.<sup>7</sup> The ways one emotionally connects and approaches relationships could be predicted through these patterns. Later, this then brought up the question of whether attachment styles also predict levels of introversion and extroversion. Were introverts and extroverts more highly anxious, avoidant, secure, or fearful, and could this be used to predict certain behavioral tendencies?

There are four types of attachments which are secure, avoidant, anxious, and disorganized/fearful attachments. Each of these attachments is based on the relationship and different levels of AX and AV. Higher or lower levels of anxiety and avoidance can show signs of a more secure or fearful individual. Introverts are believed to have higher levels of anxiety and avoidance due to their naturally reserved and perceptive personalities. For extroverts, attachment levels may seem lower because their personalities allow them to cope with challenges using their more outgoing and gregarious personality. In business environments, the first steps in meeting new people and integrating into the workplace have a lot to do with how individuals mentally prepare to start a connection. By testing the relationship between attachment styles in introverts and

extroverts, the study wanted to see if students displayed certain levels of AX and AV in their respective academic and work settings.

Although there may be more *secure* individuals in interpersonal and comfortable social settings, this could be the opposite for business students who constantly engage with new people in fast-paced work environments. It is predicted that AX and AV are higher in business students, which could inevitably impact student perceptions of the work culture, their capabilities, and professional relationships. U.S. and Korean education systems and work cultures are vastly different. Unlike the Korean work culture, the American work culture has many more direct lines of communication with its employees. In other words, it is much easier to express opinions, thoughts, and decisions with anyone at all hierarchical levels. Korean work culture is more individualistic with how Koreans handle situations. They are more of the "keep-it-to-yourself" type and find it hard to open up about struggles. They believe figuring problems out alone is easier, even if it takes longer. This may also have to do with the intense hierarchical levels of Korean work culture compared to the U.S. work culture. In Korean work culture, formalities are not only critical but mandatory for thriving in business settings. While incoming employees can be a little more casual in their interactions with other staff, Koreans take formal language very seriously, even when interacting outside of work. These differences and factors can predict how DMSB and Korean students respond to and build relationships. Due to these differing work and social factors, DMSB introverts and extroverts will show higher signs of anxious attachment, while Korean introverts and extroverts will display higher levels of avoidant attachment. In addition, there will be significant differences in attachment styles between introverts and extroverts, both in the DMSB and Korean university student population.

## **Methodology**

### Survey Design

The first step of the research process was collecting data from surveys that would explore business student perspectives and their thoughts on how introverts and extroverts successfully incorporate business practices worldwide. Two groups of students were surveyed. The first was students in the DMSB, which broadened the scope of individuals to those who would possibly utilize and experience ethical business practices in the future. Since there are in-state, out-of-state, and international students, it helped diversify the survey with people within and outside the United States. The second group was business students at two South Korean universities, Korea Tech and CNU. The goal was to compare these two business subgroups from two different environments and cultures, seeing if there was a relationship between them and the business ethical principles they value in various workplaces and settings. There were two versions of this survey: one in English and one in Korean.

Aside from some questions like the student's university and major that the Korean version asks to list out — since students will be from different universities with possibly different majors — the questions were the same in both versions. Each survey was practically identical, with the only difference being the language and some questions relating to the business curriculum specific to DMSB, Korea Tech, and CNU. All responses remained anonymous, and the only identifier was the student university email to ensure that only University of South Carolina students responded to the DMSB survey.

For the DMSB survey, there were four specific sections. The first section required respondents to answer background questions like the year, major, and hometown to gather general demographics of students at the university. The last question in that section asked whether the

students considered themselves introverts or extroverts. The next section was a transition to introversion and extroversion in business. These questions were a little more probing, where the goal was to see if students thought any differently in a business context, giving their views on business introverts and extroverts. The third section asked how business students defined introversion and extroversion. It goes back to the preconceived notions research part of the thesis to see how students defined these personality types.

The final section of the survey asked questions on attachment anxiety and attachment avoidance. Respondents were asked to answer each statement — with no context on the attachment styles — and the extent to which they agreed or disagreed with each one. These questions were given on the Likert scale, where the choices given were strongly disagree, disagree, neutral, agree, and strongly agree. The goal of these questions was to have students rate their agreement to statements. For this section, there was no description of what these questions were measuring but prompted how students felt about their relationships with close others — a broader way of describing attachment avoidance and anxiety. For the Korean survey, the state questions and email portion were excluded. Sections 2-4 were identical but just in Korean.

### Data Collection

The data collection of students started in February 2021 until March 2022. Since then, one year's worth of data was collected resulting in the final sample size of around 250 DMSB students and 60 Korean university students. This survey was the first step in initiating the analysis. It was also what took the longest due to different academic seasons where students would be on break or busy seasons at the three universities. All results were then compiled into an excel spreadsheet and organized in the Tableau software.

Due to COVID-19, there was no opportunity to go abroad, making it harder to collect data in person, especially for the Korean cohort. Through friends and DMSB professors, anonymous google surveys were distributed and administered via email. The only compensation given was a gift card to one random student that participated in the survey. No other rewards or compensation were awarded for participation.

## **Results**

### Results on Personality Types

For DMSB students, the ratio of extroverts and introverts was similar across all majors. As seen in Figure 2 below, the percentage of introverts and extroverts, their demographics, and majors within the student pool was compiled. There were 137 students (54%) who classified themselves as extroverts, while 116 (46%) students classified themselves as introverts. Looking into the demographics helped to better understand the student population being studied. Respectively, Tables 1 and 2 break down the number of students per major and whether they considered themselves an introvert or an extrovert. This initiated the first step of the analysis to see whether the responses were similar across majors. With 70% comprised of accounting, finance, international business, and management majors, it was interesting to see how the majority of certain majors like finance and international business, were extroverts, and the vast majority of accounting majors were introverts.



Figure 2

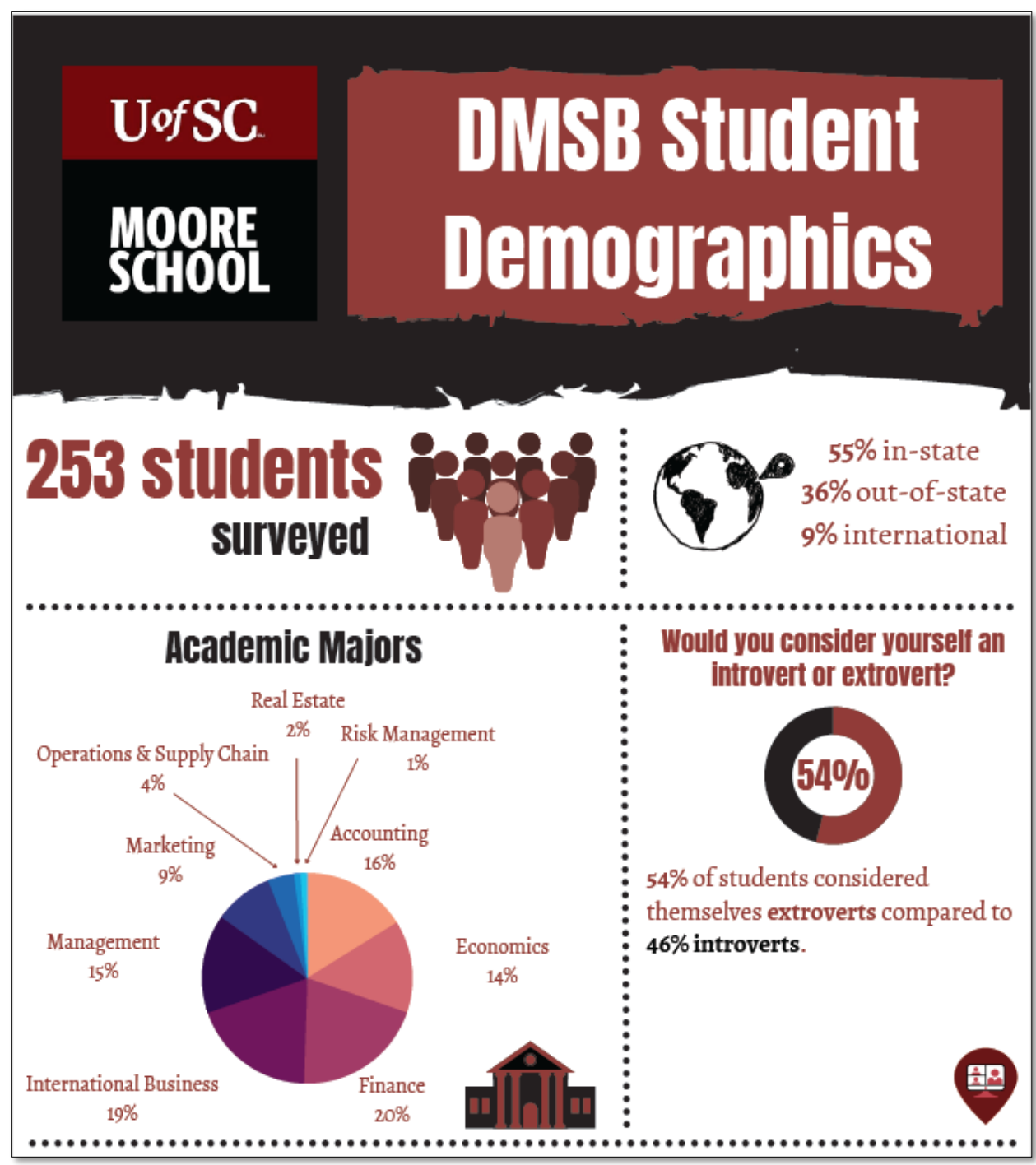


Figure 2: Surveyed Darla Moore School of Business (DMSB) Student Demographics

**Table 1**

Student major(s) at DMSB	
Majors	
Accounting	60
Economics	55
Finance	77
International Business	73
Management	58
Marketing	34
Operations and Supply Chain	17
Real Estate	5
Risk Management and Insurance	3

**Table 1:** # of students per major (organized in **Tableau**)**Table 2**

Darla Moore School of Business (DMSB) Extroverts and Introverts Demographics			
Would you consider yourself an introvert or extrovert?	In-state	International	Out-of-state
Extrovert	75	8	54
Introvert	64	15	37

**Table 2:** Domestic/international demographics for DMSB students and what personality type — extrovert or introvert — each student classified themselves as (organized in **Tableau**)

The survey was also sent to two Korean universities, Korea Tech and CNU, where business students were surveyed. It was much harder to gather many responses from the Korean cohort due to the differing academic seasons and wait times. As a result, the number of students surveyed was relatively low compared to the DMSB student population. Although there were only about 60 students surveyed, information from two universities contributed to the diversity of the results. As seen in Figure 3 below, there was a wide range of majors across the universities ranging from business administration, accounting, and economics to agricultural chemistry, software engineering, and English literature. Most students majored in business administration.

Figure 3



Figure 3: Surveyed Korea Tech & Chonnam National University Student Demographics (as of 3/31/22)

Similar to the DMSB student population, 52% of Korean students considered themselves extroverts (compared to 54% of DMSB students), and 48% classified as introverts (compared to 46% of DMSB students). Korean university students were also prompted to answer if they felt more introverted or extroverted in the business context. According to Figure 4, 13 students claimed they felt like the opposite personality type, 14 students said they were still the same, and most of them said that it depended on the situation.

Figure 4

엄격하게 "비즈니스"라고 생각할 때 이전 답변이 변경 될 것이라고 생각하십니까 (예: 내성적에서 외향적 또는 그 반대)? "When thinking strictly "business," do you think your previous answer would change (e.g. from introvert to extrovert or vice-versa)?"			
당신은 당신이 내성적이라고 생각하나요 아니면 외향적이라고 생각하나요? "Would you consider yourself an introvert or extrovert?"	예. 비즈니스 활동 / 환경에서 나는 내성적 / 외향적이라고 생각합니다. "Yes. In business activities/settings, I think I'm more of an introvert/extrovert."	아니요. 여전히 내성적 / 외향적이라고 생각합니다. "No. I would still consider myself an introvert/extrovert."	상황에 따라 다릅니다. "It really depends on the situation."
내성적 "Introvert"	7	5	16
외향적 "Extrovert"	6	9	14

Figure 4: Demographics for Korean university students and what personality type — extrovert or introvert — each student classified themselves as (organized in *Tableau*)

Following the interpretation of these results, the study then prompted students about how they felt when thinking "strictly business". The next two questions asked students if they had a job (part-time, full-time, on or off-campus) and any leadership positions (on or off-campus). One of the reasons for this was to isolate how work experiences and leadership positions can impact student behaviors and ethical beliefs. For both introverts and extroverts, 49% of students who had both or either a job or leadership role stated that they were more of the opposite personality type. 26% stated that they would still consider themselves an introvert or an extrovert, and then 15% said that it would depend on the situation (as shown in Table 3 below). The remaining 10% came from introverts and extroverts who did not have a job or leadership roles. Though expected with

introverts, it was surprising that 50% of extroverts claimed to be more introverted in business settings, while 49% of introverts stated that they were more extroverted. Table 3 showed the breakdown of what DMSB extroverts and introverts, in business environments, thought about how they behave — more introverted or extroverted. It also showed how many had jobs or leadership roles. The purpose of asking about the jobs and leadership positions was to consider how professional work environments can impact student behavior and thoughts on business practices. It is different when one gains real-world experience, and their initial thoughts can change once they have experienced working in various fields.

**Table 3: DMSB Results**

Do extroverts/introverts think the same way in business and professional environments?						
Personality Type	Personality Type (in business)	Do you have a job?	Any leadership positions at job or on/off-campus?			
			Yes	No	Yes	No
Extrovert	Yes. In business activities/settings, I think I'm more of an introvert/extrovert.	Yes		46		16
		No		4		3
	No. I would still consider myself an introvert/extrovert.	Yes		29		11
		No		4		4
	It really depends on the situation.	Yes		8		7
		No		4		1
Introvert	Yes. In business activities/settings, I think I'm more of an introvert/extrovert.	Yes		41		12
		No		4		6
	No. I would still consider myself an introvert/extrovert.	Yes		14		8
		No		1		7
	It really depends on the situation.	Yes		10		7
		No		3		3

Do you have a job?  
 Yes  
 No

**Table 3:** Data on how introverts and extroverts perceive their personality in business settings and the relationship that has on students with jobs and/or leadership roles (organized in **Tableau**)

Like the DMSB student survey, students at Korea Tech and CNU were asked whether they had a job or any other leadership positions on or off-campus. The data for this was organized in a way to compare student business personality types to the respective roles, if applicable. As seen in Table 4, only about 3% of introverts and extroverts with jobs and leadership roles stated that they were more introverted and extroverted, while 6% of students said they were the same. 32% of students, who did not have a job or leadership position, agreed that it depended on the position.

**Table 4: Korea Tech & CNU Results**

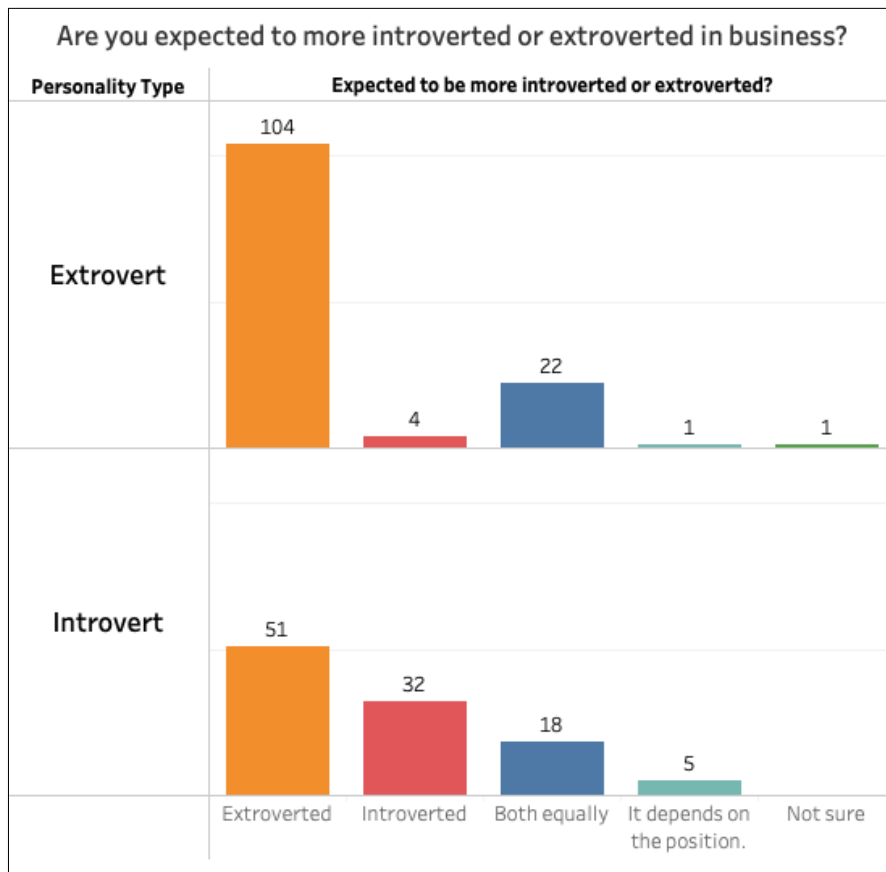
<b>내향적인/외향적인 사람들은 비즈니스 및 직업 환경에서 같은 방식으로 생각합니까?</b> <b>"Do introverts/extroverts think the same way in business and professional environments?"</b>				
성격형 "Personality Type"	"비즈니스" 성격형 "Business Personality Type"	직업이 있습니까? "Do you have a job?"	리더 직책? "Leadership positions?"	
			네 "yes"	아니요 "no"
내성적 "Introvert"	예. 비즈니스 활동 / 환경에서 나는 내성적 / 외향적이라고 생각합니다. "Yes. In business activities/settings, I think I'm more of an introvert/extrovert."	네 "yes"	2	2
		아니요 "no"	1	2
	아니요. 여전히 내성적 / 외향적이라고 생각합니다. "No. I would still consider myself an introvert/extrovert."	네 "yes"		1
		아니요 "no"		4
	상황에 따라 다릅니다. "It really depends on the situation."	네 "yes"	1	5
		아니요 "no"	2	8
외향적 "Extrovert"	예. 비즈니스 활동 / 환경에서 나는 내성적 / 외향적이라고 생각합니다. "Yes. In business activities/settings, I think I'm more of an introvert/extrovert."	네 "yes"		2
		아니요 "no"	2	2
	아니요. 여전히 내성적 / 외향적이라고 생각합니다. "No. I would still consider myself an introvert/extrovert."	네 "yes"	4	1
		아니요 "no"	2	2
	상황에 따라 다릅니다. "It really depends on the situation."	네 "yes"	2	4
		아니요 "no"	2	6

**Table 4:** Data on how introverts and extroverts perceive their personality in business settings and the relationship that has on students with jobs and/or leadership roles (organized in **Tableau**)

As a follow-up, the survey then asked students from all three universities who answered "yes" to either question whether they were expected to be more introverted or extroverted in their respective roles — again from a business standpoint. One of the scariest things entering the workforce firsthand is going in blind and not knowing the expectations a company or organization holds. Out of the 238 students who responded “yes” to one or both questions, the results in Figure 5 showed that 65% of DMSB introverts and extroverts unanimously felt like they were expected to be more extroverted in professional work environments, 15% of students said introverted, 17% said both were equally important, 2.5% said it depended on the position, and 0.5% said they weren't sure. This question focused more on the expectations rather than the self-evaluations of how individuals felt in their actual job or role.

For Korean students, 42.1% of students responded that they expected to be more extroverted in their work environments, while 8.8% said introverted. 24.6% of students said both were equally important in the workplace, 14% said it depended on the position, and 10.5% said they were not sure. With ever-increasing desires to make good first impressions and fit in the work culture, this question was designed to see the students perceived entering the work culture.

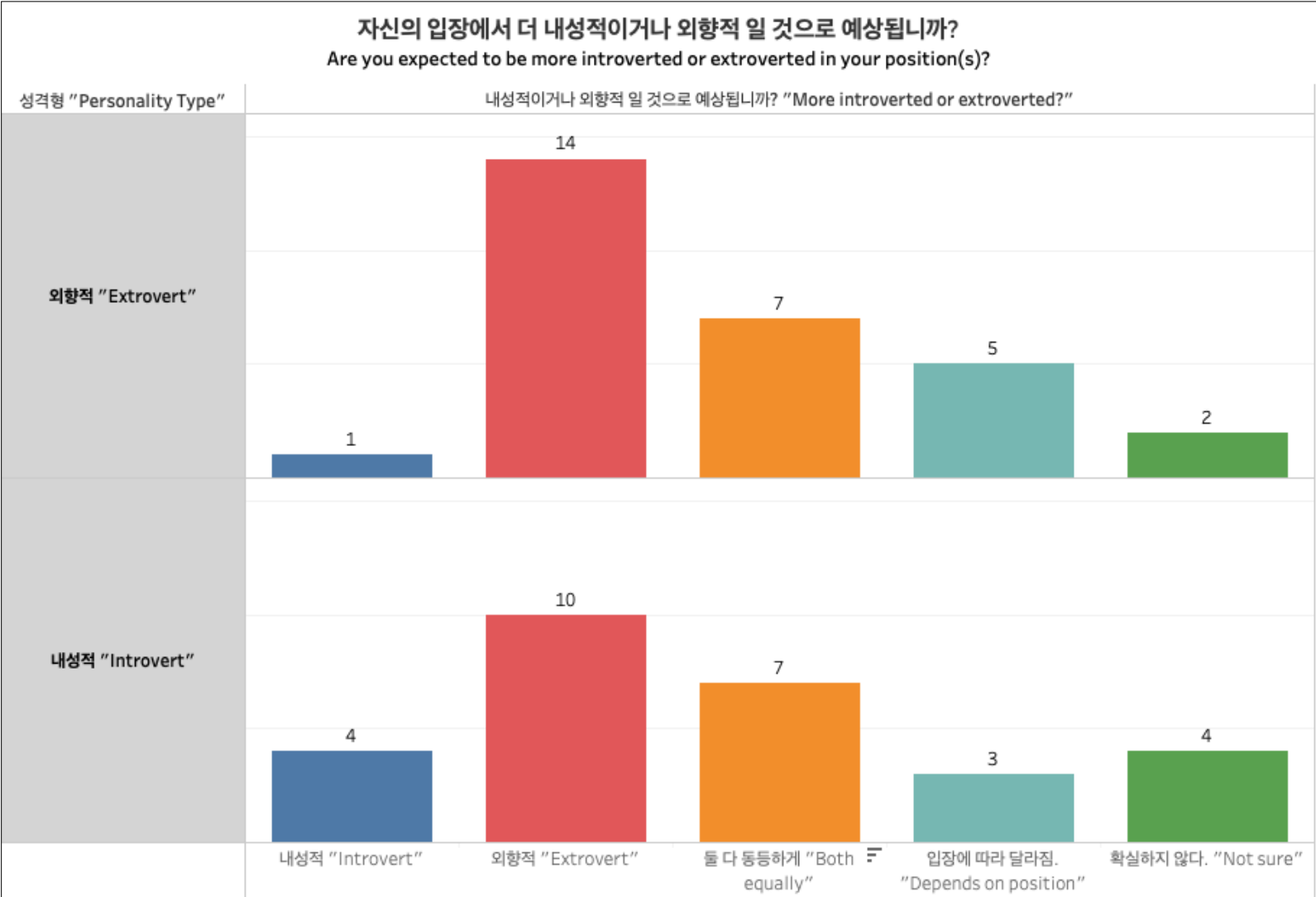
**Figure 5: DMSB Results**



*Figure 5: Breakdown of whether students felt the need to be introverted, extroverted, or both in professional roles and experiences (organized in **Tableau**)*



**Figure 6: Korea Tech & CNU Results**



*Figure 6: Breakdown of whether students felt the need to be introverted, extroverted, or both in professional roles and experiences (organized in Tableau)*

For those who responded introverted, extroverted, or both, the study then wanted to compare the behavioral responses and see if those who responded one way believed that certain personality traits had advantages in business. Many people initially believe that being extroverted provides advantages and access to better opportunities, which is what the following two questions wanted to engage. Table 5 showed that regardless of the professional work experience or role students had, most introverts and extroverts agreed that there are advantages to being introverted

or extroverted. Out of 137 extroverts, 80.7% of them with jobs and leadership roles stated that there were advantages, while 7.3% said there were not any advantages. 8.4% stated both were equally important, and 3.6% said personality types did not pose any advantages or disadvantages. For introverts with jobs and roles, 75.4% of them with jobs and leadership roles stated that there were advantages, 6.2% said there were no advantages, 13.8% stated both were equally important, and 4.6% said personality types did not pose any advantages or disadvantages. Results for the Korean group were very similar, where many students agreed there were advantages of one type.

**Table 5**

Do you think being an introvert/extrovert provides advantages over the other or is considered "more important" for business?				
Personality Type	Job?	Leadership roles?	Advantages to one over another?	
Extrovert	Yes	Yes	Yes	67
			No	6
			Both are equally important.	7
			In this case, I think introversion/extroversion is insignificant.	3
		No	Yes	14
			No	3
	No	Yes	Both are equally important.	17
			Yes	9
			Both are equally important.	3
		No	Yes	4
			Both are equally important.	3
			In this case, I think introversion/extroversion is insignificant.	1
Introvert	Yes	Yes	Yes	49
			No	4
			Both are equally important.	9
			In this case, I think introversion/extroversion is insignificant.	3
		No	Yes	17
			No	2
	No	Yes	Both are equally important.	7
			In this case, I think introversion/extroversion is insignificant.	1
			Yes	5
		No	No	1
			Both are equally important.	2
			Yes	9
No	Yes	No	1	
		Both are equally important.	4	
	No	Yes	9	
		No	1	
		Both are equally important.	4	
		In this case, I think introversion/extroversion is insignificant.	2	

**Table 5:** DMSB student responses on whether they believed that being more introverted or extroverted posed advantages and better opportunities for them in professional environments (organized in **Tableau**)

This later segued into the next question about what made an ideal business professional. Respondents were asked to list out three characteristics they believed were the *most important* to his question aimed to have students avoid rationalizing previous responses and put down the first words that came to mind. The top five responses from students in both groups were taken and listed below. For DMSB students, these were *decisiveness* (33.6%), *trust* (33.2%), *versatility* (21.7%), *assertiveness* (12.6%), and *confidence* (9.1%). Like with the DMSB student group, Korean university students were also asked to list characteristics that they believed defined a business professional and traits respondents believed made them a better professional. Due to a large volume and variety of characteristics, it was harder to translate each trait. For Korean university students, they were *determination* (54.4%), *trust* (31.5%), *leadership* (24.6%), *communication* (8.8%), and *analytical* (5.3%).

**Table 6: What Characteristics Define a Business Professional?**

Characteristics (DMSB)	Frequency (%)	Characteristics (Korea Tech, CNU)	Frequency (%)
<b>Decisiveness</b> (결단력)	<b>33.6%</b>	<b>Determination</b> (결단력)	<b>54.4%</b>
<b>Trust</b> (신뢰)	33.2%	<b>Trust</b> (신뢰)	31.5%
<b>Versatility</b> (다재한)	21.7%	<b>Leadership</b> (리더십)	24.6%
<b>Assertiveness</b> (주장)	12.6%	<b>Communication</b> (소통능력)	8.8%
<b>Confidence</b> (자신감)	9.1%	<b>Analytical</b> (분석력)	5.3%

**Table 6: Top five student responses of characteristics believed to make a successful business professional**

When listing characteristics that embody the ideal business professional, individuals sometimes have low self-efficacy or thoughts about what they could be to become more successful. Oftentimes, college is where students first deal with low self-esteem or confidence. The next question asked about a trait that students wish they could embody but find nearly impossible to achieve. The goal was to observe if there were unanimous traits across the student populations, regardless of the student majors, age, and demographic. Given that the academic and business environment in South Korea is divided between conservatism and business-friendly work cultures, the survey also asked Korean respondents what traits they wished they had to be better professionals. As seen in Table 7 below, the top five responses from students were recorded.

**Table 7: What Traits Make You a Better Professional?**

Characteristics (DMSB)	Frequency (%)	Characteristics (Korea Tech, CNU)	Frequency (%)
<b>Decisiveness</b> (결단력)	<b>20.2%</b>	<b>Audacity</b> (대담함)	<b>29.8%</b>
<b>Self-Esteem</b> (자존 감)	10.3%	<b>Determination</b> (결단력)	19.2%
<b>Confidence</b> (자신감)	7.5%	<b>Steady</b> (꾸준함)	5.3%
<b>Resilience</b> (회복력)	5.1%	<b>Self-Esteem</b> (자존 감)	5.3%
<b>Assertiveness</b> (주장)	4.0%	<b>Confidence</b> (자신감)	5.3%

*Table 7: Top five student responses of traits they wish they had as a future businessperson*

Once business students finished self-assessing personality types, they were asked how they defined the personality types. Many people can be predominantly extroverted, introverted, or in-between (ambivert). Because many students have different perceptions and first impressions of others, especially in business, the survey wanted to see what people in an academic and cultural setting thought about personality types. Following the previous prompts, the study asked both groups to list words they thought of when defining introversion and extroversion. The survey allowed students to write out characteristics instead of giving them options to select. Table 8 showed the most common traits described for introversion, with three of the five traits — *shy*, *timid*, and *quiet* — being the same across both groups. Table 9 then showed the most common traits for extroversion. Some misconceptions of introvert and extrovert behaviors that students gave were directly challenging these surface-level perceptions. Many commented introverts are antisocial and don't care for meeting others, while extroverts hardly like to be alone and are not as productive and better than introverts overall. With self-defining and misconceptions of personality types, results from both introverts and extroverts were pretty unanimous across the board.

**Table 8: Words that describe “Introvert/Introversion”**

Characteristics (DMSB)	Frequency (%)	Characteristics (Korea Tech, CNU)	Frequency (%)
<b>Shy</b> (수줍)	<b>37.2%</b>	<b>Timid</b> (소심함)	<b>45.6%</b>
<b>Quiet</b> (조용함)	32.8%	<b>Quiet</b> (조용함)	42.1%
<b>Timid</b> (소심함)	15.0%	<b>Passive</b> (소극적)	26.3%

<b>Reserved</b> (조용함/내성적인)	14.6%	<b>Calm</b> (차분함)	17.5%
<b>Independent</b> (독립적)	6.7%	<b>Shy</b> (수줍)	14.0%

*Table 8: Top five described traits that came to mind when hearing “introvert” & “introversion”*

**Table 9: Words that describe “Extrovert/Extroversion”**

<b>Characteristics</b> (DMSB)	<b>Frequency</b> (%)	<b>Characteristics</b> (Korea Tech, CNU)	<b>Frequency</b> (%)
<b>Outgoing</b> (외향적인)	<b>20.6%</b>	<b>Active</b> (활발함)	<b>64.9%</b>
<b>Confident</b> (자신감)	18.6%	<b>Noisy</b> (시끄러움)	12.3%
<b>Cheerful</b> (쾌활한)	21.7%	<b>Lively</b> (활기)	10.5%
<b>Optimistic</b> (낙관적인)	16.6%	<b>Bright</b> (밝음)	8.8%
<b>Loud</b> (시끄러움)	16.2%	<b>Energy</b> (에너지)	7.0%

*Table 9: Top five described traits that came to mind when hearing “extrovert” & “extroversion”*

The first behavioral hypothesis was partially supported. It was seen that introverts, regardless of their work experiences and leadership roles, showed more extroverted personalities and behaviors. On the other hand, extroverts responded that they felt more extroverted in professional workspaces, which disproved the idea that extroverts consistently showed extroverted tendencies in professional work settings.

### Results on Attachment Styles

After looking at the results from the first behavioral hypothesis, the survey shifted to looking into the second hypothesis regarding attachment anxiety and attachment avoidance. Attachment style, represented by these two dimensions, studies the relationships and various thoughts and behavioral tendencies closely associated with those relationships.<sup>7</sup> Utilizing some of the questions used in the anti-brand study — survey samples located in the *appendix* — the goal was to see how business students possibly associate themselves with relationships they make in professional environments. The average AX and AV means were computed. For AX, extroverts had an average mean score of 2.85, while introverts had a score of 2.60. The resulting p-value came out to 0.403. Table 10 showed average AX mean scores directly for both personality types.

For AV, the average mean scores for extroverts and introverts were 2.52 and 2.95 respectively, and the p-value came out to 0.049. Table 10 showed the average AV mean scores more directly for introverts and extroverts. It is also important to note that the survey inclusions for the DMSB survey was sent out much later, which explains the low number of observations compared to the overall sample size. Table 11 and 12 below shows the t-test that was conducted to compute the average AX and AV scores for DMSB students. This was later used to determine the significance of the relationship between attachment anxiety, introverts, and extroverts.

**Table 10: DMSB Results**

PERSONALITY TYPE	AX	AV
Extrovert	2.85	2.52
Introvert	2.60	2.95

*Table 10: Average AX and AV scores for introverts and extroverts*

**Table 11**

t-Test: Two-Sample Assuming Equal Variances		
AX		
	<i>Extroverts</i>	<i>Introverts</i>
Mean	2.85333333	2.6
Variance	0.66552381	0.90909091
Observations	15	23
Pooled Variance	0.81437037	
Hypothesized Mean Difference	0	
df	36	
t Stat	0.8458612	
P(T<=t) one-tail	0.2016088	
t Critical one-tail	1.68829771	
P(T<=t) two-tail	<b>0.40321759</b>	
t Critical two-tail	2.028094	

*Table 11: Significant differences of Attachment Anxiety (AX) between introverts and extroverts***Table 12**

t-Test: Two-Sample Assuming Equal Variances		
AV		
	<i>Extroverts</i>	<i>Introverts</i>
Mean	2.52	2.94782609
Variance	0.336	0.44079051
Observations	15	23
Pooled Variance	0.40003865	
Hypothesized Mean Difference	0	
df	36	
t Stat	-2.0381401	
P(T<=t) one-tail	0.02446716	
t Critical one-tail	1.68829771	
P(T<=t) two-tail	<b>0.04893431</b>	
t Critical two-tail	2.028094	

*Table 12: Significant differences of Attachment Avoidance (AV) between introverts and extroverts*



Like with the DMSB group, the Korean survey prompted respondents with the same statements to test the hypothesis of attachment anxiety and attachment avoidance and its relationship to the personality types. The same questions were utilized to get some detail on student behavioral tendencies. Table 13 directly reports both the average mean scores for AX and AV among Korea Tech and CNU students. Table 14 shows the average AX mean scores of 2.09 for extroverts and 2.13 for introverts, with a p-value of 0.855. Likewise, it also reports the AV scores of 2.34 for extroverts and 2.81 for introverts, with a p-value of 0.003.

**Table 13: Korea Tech & CNU Results**

PERSONALITY TYPE	AX	AV
Extrovert	2.09	2.34
Introvert	2.14	2.81

*Table 13: Average AX and AV scores for introverts and extroverts*

**Table 14**

t-Test: Two-Sample Assuming Equal Variances		
AX		
	<i>Extroverts</i>	<i>Introverts</i>
Mean	2.089655172	2.125925926
Variance	0.507389163	0.578917379
Observations	29	27
Pooled Variance	0.541828674	
Hypothesized Mean Difference	0	
df	54	
t Stat	-0.184252103	
P(T<=t) one-tail	0.427252941	
t Critical one-tail	1.673564906	
P(T<=t) two-tail	<b>0.854505883</b>	
t Critical two-tail	2.004879288	

*Table 14: Significant differences of Attachment Anxiety (AX) between introverts and extroverts*

**Table 15**

t-Test: Two-Sample Assuming Equal Variances		
AV		
	<i>Extroverts</i>	<i>Introverts</i>
Mean	2.337931034	2.807407407
Variance	0.363152709	0.266096866
Observations	29	27
Pooled Variance	0.316422118	
Hypothesized Mean Difference	0	
df	54	
t Stat	-3.120809012	
P(T<=t) one-tail	0.001447189	
t Critical one-tail	1.673564906	
P(T<=t) two-tail	<b>0.002894379</b>	
t Critical two-tail	2.004879288	

**Table 15:** Significant differences of Attachment Avoidance (AV) between introverts and extroverts

The hypotheses on the different levels of attachment and significant differences were partially accepted and rejected. Though attachment anxiety and avoidance scores were relatively mixed, both were proven to impact student perceptions of work relationships and behavioral tendencies. When taking a closer look at the mean scores for extroverts and introverts, the correlation between AX and AV was visible by how relatively close the score ranges were. AX scores were higher in DMSB extroverts (2.85), and AV was higher in DMSB introverts (2.95), indicating the variability of anxious and avoidant attachment, respectively. On the other hand, both AX and AV scores were higher for Korean introverts (AX: 2.14; AV: 2.81). While there were significant differences in AV levels, there were no differences shown for AX between introverts and extroverts.

## **Discussion**

### Personality Types

For the first relationship between personality types and behavioral tendencies, DMSB introverts agreed that displaying extroversion tendencies provided advantages in business environments, and Korean university introverts were more split down the middle. Overall, there was a distinct relationship between personality types and student responses to new environments.

The first step of the survey was getting insight into the student demographics. One of the reasons for categorizing in-state, out-of-state, and international students was to establish a first step in how new environments impact student behavior and abilities in building relationships. For many students, especially international and out-of-state students, the first year is one of the most challenging socially due to the feeling of isolation, unfamiliarity, and period of adjustment. This study wanted to see how this first factor would impact how students perceive new professional, academic, and work cultures in an area where they have never resided. For domestic students, the ratio of introverts and extroverts was pretty split even, while there were more introverts than extroverts within the international student population. Though that doesn't majorly play into personality types, international students deal with a brand-new culture; for students studying or entering a business field, the business etiquette and work culture are distinct. For the Korean student population, it was split down the middle overall. With most respondents being upperclassmen, it played more significance to their perceptions as they are about to enter more professional research fields in graduate school, workplaces, and even work abroad. All three universities, DMSB, Korea Tech, and CNU, had a wide range of academic disciplines, with various majors surveyed. Something to really point out is the difference in education for American and Korean students. As briefly mentioned, the U.S. and Korean education systems are set up

differently. Korean students often study ahead of their age, and there is much more emphasis on exams and some holistic factors rather than GPA. On the other hand, the U.S. emphasizes GPA but considers holistic factors that play into college and job admission processes. In business settings, the pressure and expectations, especially for incoming college graduates starting in the real world, are high. This led to the next point of how introverts and extroverts thought about their perception of behavior in business environments. For DMSB students, the result was quite intriguing. Out of 137 extroverts with jobs or leadership positions, 50% of them stated that they believed to be more introverted in business settings. This sort of broke the preconceived notion that extroverts are just as active and lively in business settings as in interpersonal ones. As was shown in Table 3, the majority of extroverts and introverts — 49% out of 116 introverts with jobs or leadership positions — stated they felt more like the opposite in work settings. Similarly, in the Korean university population, 25% of introverts stated they were more extroverted, 18% said introverted, and 57% said it depended on the position. On the other hand, 21% of extroverts said they were more introverted, 31% of them said extroverted, and 48% said it depended on the position. The results were surprising and unexpected with the percentage of extroverts who felt more introverted in both the DMSB and Korean respondent pools. In business settings, the dichotomy of introversion and extroversion seems to be somewhat established. Introverts are encouraged to not be overly apologetic for not being as "social" and to spend some time regaining energy. One of the potential reasons for extroverts becoming more introverted seems to come from the idea that extroverts learn to be more cognizant in working with introverts. It comes to show that different personality types can display opposite personality behaviors that do not necessarily change the person as a whole.

Now taking these results, the study wanted to compare what students believed to what they believed was "expected" of them. Many students ask employers what is expected of them when they first join and then feel obligated to adjust to standards immediately. Out of 132 extroverts and 107 introverts who said they had jobs and leadership positions, 79%, and 48% respectively said they were expected to be more extroverted. This finding supports the hypothesis that introverts were more likely to be extroverted in business environments. Students with more work experience and active leadership roles agreed that extroversion was prominently expected. Like with common stereotypical shaming that can occur in the workplace, introverts are still seen to be hard to work with due to this prejudged idea that they are reserved or spend time alone. This may be why some introverts answered extroverted because they were afraid to be placed in this preconceived categorization of being "hard to work with." In the DMSB group, 16% of extroverts and introverts said that both personality types were equally important, and 14% said they were more expected to be introverted. The Korean study followed the same trend of students saying they were expected to be extroverted (42%). The results were more spread out among the Korean students, with 15% saying both were equally important and 8% saying it depended on the position. Overall, it was interesting to see how both American and Korean students were unanimous in stating that they expected to be more extroverted in their respective work environments. Given the varying levels of strict business, especially in East Asian countries, the similarity in two different business cultures was quite surprising. This also supplemented the hypothesis that introverts believed they were extroverted, implying that they were more likely to be extroverted in the workplace. Like Ian Davidson states, personality traits are not supposed to measure one's social capacities; rather, it is how one needs to simply recharge.<sup>3</sup> As a society, it still seems that personality types entail certain behaviors and, as a result, certain capabilities one possesses. The responses to what personality

types students were "more of" and their role expectations justified the idea that personality types are still considered drivers of business aptitude when they should not be. More evidence was found when students were asked to answer "yes," "no," or "both are equally important" to whether extroverts or introverts had advantages. As expected, 69% of DMSB students said "yes" versus 6.7% stating "no." Although the question did not ask about which type specifically, it was clear that both felt the need to display one over the other.

The next few questions revealed some commonalities between the two groups. Students were asked to list out traits that they believed shapes professionals and a characteristic they wish they possessed to become one. For the DMSB group, it was *decisiveness*, and for the Korean group, it was *determination*. These results show how different business cultures can be and how American and Korean minds are trained and can be seen differently. Oftentimes, Korean business revolves a lot around communitarianism and social conservatism. Every individual plays a vital role in establishing a coherent business community, with emphasis placed on business levels and power structures. In addition, Korean professionals are naturally great negotiators and are ideally quick decision-makers. On the other hand, American business can be very individualistic and has similar professional structures, but the power structure is not "as" intense. Based on personal experiences and hearing from other domestic and international student experiences too, U.S. workplaces cultivate a more casual business culture but still maintain the standard professionalism expected of workers. This is what makes the "decisiveness" and "determination" aspect very clear. Regardless of personality types, it showed that DMSB students did not seem to face problems with forming relationships, but this contributed to the potential doubt about making the "right" decisions and showing the "right" behavioral actions expected of them. Meanwhile, Korean students seem to face the opposite problem, where they do well integrating themselves into the workplace

firsthand but struggle more with the relationship aspect due to the intense business structure. This isn't to say that American students can't make decisions or Korean students can't form relationships. These are just evidential presumptions revolving around the respective work and business culture environments established in the U.S. and South Korea.

The last part of the survey asked students to list adjectives they use to describe introversion and extroversion and misconceptions they once had. For introversion, most students expressed introverts as "timid, passive, reserved, shy." As for extroversion, the common adjectives were "active/outgoing, loud, and confident." With so many misconceptions listed, the data for both had to be filtered, but there were clear common misconceptions. For introverts, many misconceptions revolved around wanting isolation and not liking people, whereas extroverts are just always loud and are overall "better" than introverts because of their natural vitality. As many business schools and companies emphasize the importance of diversity, especially with work styles and preferences, many misconceptions about personality types can sometimes be oversimplified. The conclusion to the personality types research was asking students to describe a business ethic or principle they wish was always visible in their future work environment. Fair treatment, equal opportunities, individual and business responsibility, and open work culture and accountability were the most common business ethical practices students from both groups wished to see.

### Attachment Styles

Business relationships are often highly emphasized to students during their entire careers. From family to professors to employers, students are constantly reminded to form good relationships with people who can understand boundaries or work well with them. The second part of the research focused on how relationships related to student behavioral tendencies in business.

Specifically, the study focused on the concept of attachment styles and garnered student responses to see how relationships can drive their behavioral patterns. A 10-questionnaire Likert scale was used to assess two dimensions of attachment style. Attachment anxiety focuses on relationships tied to the fear of rejection or abandonment, and attachment avoidance reflects relationships tied to fears of intimacy or dependence.<sup>7</sup> Students from both groups were asked to rate their level of agreement for each of the five statements that were given for attachment anxiety and attachment avoidance. Students were not made aware of what this was measuring and were only told to answer as honestly as possible.

After gathering all the responses from students in both groups, the mean AX and AV scores for introverts and extroverts were calculated. Then, a t-test was conducted for the respondent pool to see if there were any significant differences between the two attachment styles and personality types. For DMSB extroverts and introverts, respectively, a mean score of 2.85 and 2.60 for AX was calculated. With the results from the t-test, two variables were then considered to determine the significance of both attachment anxiety between introverts and extroverts. The first was comparing the t-stat to the two-tail t-critical value. For AX, the t-stat was 0.846, while the t-critical value was 2.03. This implied that there was no statistically significant difference in AX between introverts and extroverts. The other variable used to support this was the p-value which was also testing to see if AX correlated to the personality types. The p-value was 0.403, which indicated that the null hypothesis showing the relationship to be statistically insignificant was true. The same process was then conducted when observing the data of Korea Tech and CNU students. The average AX means for extroverts and introverts were 2.09 and 2.14, respectively. The t-stat was -0.184, while the t-critical value was 2.00, and the p-value was 0.855. Like the DMSB group, there was no significant difference in AX between introverts and extroverts. In terms of AX, both groups



were pretty stable in their responses to how concerned they were with being alone or feeling insecure if they didn't have relationships.

Although there were no significant differences, it did seem there was some inverse correlation between how DMSB and Korean university students responded. Interestingly, 36.84% of DMSB students agreed to worry about being alone, while there was an even 28.95% split between agree and disagree for students worrying about their relationships. In the Korean group, 38.60% of students disagreed with the statement about being alone, and 22.81% were more concerned that they worry a lot about their relationships — compared to 28.95% of DMSB students who disagreed with this. Based on DMSB student responses, attachment anxiety was higher when not having enough relationships but lower in terms of actual rejection. It actually shows just how important relationships were for DMSB students, and how anxious they were if they did not have enough or any bonds with others they work with.

Conversely, the Korean students seemed to be less concerned about being alone. This partially rejected the hypothesis which stated attachment anxiety is higher in students because it wasn't necessarily the case in the Korean university group. At certain ages, many Koreans have to develop a sense of independence. This is no exception for college students, especially in business, where individual and community boundaries are prominent. Unlike DMSB students, who feared more about actually being alone and not having enough relationships, it seemed that Korean students were more concerned about causing an inconvenience for someone and inevitably giving more than they are given. Much of this has to also do with the culture itself, and it is an important fact to consider.

If AX focused on the inevitable, AV focused more on student choice. In other words, it was how an individual's reliance on others impacted the level of vulnerability one was to disclose

in a relationship. For DMSB extroverts and introverts, the AV mean scores were 2.52 and 2.95, respectively. The t-stat value was -2.04, while the t-critical and p-value were 2.03 and 0.049. Unlike with AX, both these variables showed that there were statistically significant differences in AV between introverts and extroverts. In the Korean university group, the average AV scores were 2.34 for extroverts and 2.81 for introverts. The respective t-stat, t-critical, and p-value scores were -3.12, 2.00, and 0.003. It showed the same results as the DMSB, where there were significant differences in AV among introverts and extroverts.

For both groups, the majority of students did not have issues with opening up to others — 31.58% of DMSB students strongly disagreed and 35.09% of Korean university students disagreed with not feeling comfortable. Similarly, 31.58% of DMSB students and 35.09% of Korean students strongly disagreed with feeling uncomfortable when people in a relationship want to be very close with them. This showed a direct correlation to the last statement about students feeling comfortable being close to others, with 39.47% of DMSB and 45.61% of Korean students, respectively, agreeing that they have no issues with being close to people. Many students in both didn't seem to face issues with pulling themselves away from others when relationships get closer.

The only statement where the two groups differed was the statement discussing the level of dependence students place on their relationships with others. 34.21% of DMSB students agreed that it was difficult to depend on people they have relationships, while 33.33% of Korean university students disagreed. This ties back to the results from when students were asked to list characteristics they wished to possess. Many DMSB students said *decisiveness*, and many Korean university students stated *determination*. There is an indirect correlation between dependence and the two group's concerns as business professionals. Korean students tend to have fewer problems when relationships backfire. It also explains why many Korean students were not afraid of being

alone. If there is too much dependence in the relationship and it does not end up as expected, Korean students have already developed some independence while growing up. On the other hand, DMSB students have more difficulty building resilience from issues like backstabbing and manipulation. In business, this can pose a great barrier for most students because the amount of trust placed in a relationship can steer the direction of future performance and workplace behaviors. Overall, both AX and AV proved to impact student perceptions of work relationships and behavioral tendencies.

### **Conclusion**

This thesis analyzed two concepts and studied the relationships between business students and their personality and attachment levels. By sampling two student groups — Darla Moore School of Business (DMSB) students at the University of South Carolina and students at Korea Tech and Chonnam National University (CNU) in South Korea — the study focused on analyzing the relationship between personality types and attachment styles to behavioral tendencies in professional environments. The first relationship between personality types and behavior found that introverts were more likely to display extroverted characteristics than extroverts with introverted tendencies. However, introverts and extroverts alike in both groups had common responses toward the characteristics, behavioral tendencies, and ethical practices they commonly see or would like to see in business settings. In conclusion, the first hypothesis was partially supported.

With attachment styles, some evidence through the survey proved that attachment anxiety and avoidance had direct relationships to student behaviors. Although the questions were somewhat surface level, the responses from both groups tied to the research of personality types

and showed relationships to how students in the U.S. think and react differently than students in South Korea. Overall, attachment anxiety and avoidance were low, implying that many students were *secured* individuals. However, there was more of a mix between the levels of agreement, making it difficult to establish an exact relationship.

Regardless of the cultural background, work experiences, personality types, and attachment styles, the study concluded that there were relationships between introvert and extrovert personalities and secured, preoccupied, dismissing, and fearful attachment styles. Although business culture is vastly different, business relationships and work environments revolve around various perspectives. It is important to realize that personality types or levels of attachment styles do not define or make someone more successful. Many people often show both signs of personality traits or differing levels of attachment anxiety and avoidance. Different behavioral tendencies may be more favorable in establishing relationships within varying professional fields and cultures. As such, every experience and relationship one encounters only enhances and contributes to one's ever-growing growth and success.

### **Potential Limitations**

There were three main limitations to this research study. One was how small the Korean sample size was. Compared to over 250 DMSB students, only around 60 students from Korea Tech and Chonnam National University responded to the survey. Due to COVID-19 and different academic seasons in South Korea, it was challenging to garner adequate responses from Korean students, especially when they came back from break or during their exam seasons. Next, only two Korean universities were included in the survey. For U.S. universities, the research wanted to limit it to one specific group of business students and compare that to university students in other

countries. In the end, narrowing the focus to one other country sufficed, but there were only so many South Korean universities that could contribute. As a result, this didn't comprise the majority of the business student population in South Korea. However, this was offset by the diversity of majors in the two universities and the single DMSB student population. Finally, the last major limitation was the limited number of sources on attachment theory. The concept of attachment style has been around for a while, but the research aspect is still relatively new. Not too many resources about it could be found, or at least, directly connected to this research.

Another limitation was how some data tables didn't reflect 7% of the Korean students who responded (as of 3/31/22). This is because more responses rolled in, but the data was already tabulated and organized for the analysis. This was only a minor limitation and still led to the same results and conclusion. Other barriers were due to inevitable COVID-19 impacts and indirect methods of survey distribution, especially for the Korean university respondent pool. COVID-19 has definitely taken a toll on students mentally and may have impacted potential responses and results compared to if students were surveyed before the pandemic. Initially, the Korean responses were to be collected in person during a study abroad semester but got canceled at the start of the pandemic. It would have been much easier to gather more data and witness the Korean academic and business culture.

### **Areas for Further Research**

Some areas for further research would be expanding this one step further by surveying a larger, diverse range of groups from other universities, students from majors outside of business, and maybe even those who just entered the workplace. Although more variables would have to be considered and methodologies of data collection would need to be expanded, it would inevitably

help reduce limitations impacting the reliability of the data. Another relationship that wasn't observed was the causal relationship between personality and attachment styles. Since attachment style can be seen both as a trait and a relationship, it is also important to see how the personality types and attachment styles can be manipulated and influence each other. Through regression and sample modeling, one could potentially test if certain traits influence different attachment levels and if that changes an individual's behavioral tendencies and perceptions of business practices in the workplace. Future research could also address current limitations once the pandemic is hopefully over, and potentially incorporating interviews or transcripts would provide more meaningful insight into student experiences and why they responded the way they did.

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## Appendix

### Survey Distribution Request to Professors:



Good morning/afternoon,

I hope you are doing well and staying safe amidst this pandemic. My name is Andrew Chang and I'm currently a senior in the honors college majoring in accounting. I am currently working on my senior thesis and need to collect some data by surveying DMSB students and comparing it with the results of students I will also be surveying (virtually) in South Korea (More details are in the google form).

I wanted to ask if you could possibly send this out to your students this semester. If not, that's totally fine. Please don't feel obligated as I understand that you may have multiple sections, or it may not work out.

**(You can disregard the rest of this email if declined)**

**Here is the memo you can send out to them:**

SUBJECT: Senior Thesis Research Survey Distribution Request

Hi DMSB Students,

My name is Andrew Chang, and I am a senior in the Honors College at the University of South Carolina. I am currently working on my senior thesis which focuses on introversion/extroversion and ethical practices in the business world (more details in the google form). My research is supervised by Dr. Sunny Park in the Darla Moore School of Business.

Our goal with this survey is to see if there is a relationship between how introverts/extroverts value or perceive business ethical practices in various work settings. **We are interested in collecting data from two business cohorts: students at the DMSB and business students in South Korea.** We are hoping to diversify this study as much as possible and would greatly appreciate your help.

The survey will take approximately 10 minutes to complete. As a thank you for your time and effort, you will have the opportunity to be entered in a raffle to win a \$20 Amazon gift card!

To begin the survey, please click here:

[https://docs.google.com/forms/d/e/1FAIpQLScHGFzUp3Kgk4-x7f17B4Tc-vu\\_lzbLqX9MjNsvduLSn3tJag/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLScHGFzUp3Kgk4-x7f17B4Tc-vu_lzbLqX9MjNsvduLSn3tJag/viewform?usp=sf_link)

Any questions or concerns can be directed to Andrew Chang at [ahchang@email.sc.edu](mailto:ahchang@email.sc.edu) or Dr. Sunny Park at [sunny.park@moore.sc.edu](mailto:sunny.park@moore.sc.edu). Thank you again for your participation in this study!

Sincerely,  
Andrew Chang

—

**Andrew Chang**  
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## Article surveys on relationship between attachment styles and anti-brand reactions

**Table 1**  
Factor analyses of Anxiety, Avoidance, Loss of benefits, and Self-image.

Items	Study 1 <sup>a</sup>		Study 2			
	Anxiety	Avoidance	Anxiety	Avoidance	Loss of benefits	Self-image
I worry about being alone.	0.83	-0.04	0.75	0.06	0.10	0.04
When I'm not involved in a relationship, I feel somewhat anxious and insecure.	0.78	0.11	0.72	0.12	0.16	0.12
I worry that the people I have relationships with won't care about me as much as I care about them.	0.79	0.26	0.77	0.22	0.01	0.13
My desire to be very close sometimes scares people away.	0.73	0.09	0.69	0.04	0.23	0.09
I worry a lot about my relationships.	0.76	0.22	0.73	0.23	0.06	0.07
I don't feel comfortable opening up to people in relationships.	0.11	0.82	0.22	0.79	0.14	0.05
I get uncomfortable when people in my relationships want to be very close.	0.09	0.84	0.15	0.76	0.17	0.11
Just when my relationship partners start to get close to me, I find myself pulling away.	0.21	0.81	0.23	0.77	0.19	0.13
I find it difficult to allow myself to depend on the people I have relationships with.	0.14	0.76	0.10	0.68	0.12	0.10
I am very comfortable being close to people (R).	0.06	-0.63	0.00	-0.62	0.06	0.05
I lost access to extra service benefits.	-	-	0.15	0.14	0.79	0.08
I lost the ability to save money.	-	-	0.10	0.12	0.69	0.07
I had to spend a lot of time and effort finding a replacement.	-	-	0.11	0.07	0.55	0.11
Over time, it became embarrassing for me to continue buying and using this brand.	-	-	0.13	0.05	0.12	0.87
I received pressure from my friends to stop doing business with this brand.	-	-	0.26	0.05	0.26	0.57
I could no longer condone this brand by buying it.	-	-	0.02	0.09	0.00	0.63

Note: Principal axis factoring with varimax rotation; Study 1, n=428; Study 2, n=481.

Correlation between Avoidance and Anxiety: Study 1:  $r=0.25$ ,  $p<0.01$ ; Study 2:  $r=0.30$ ,  $p<0.01$ .

<sup>a</sup> Data on mediators was not collected in Study 1.

**Table 2**  
Factor analysis of Avoidance, Anxiety, and Need for uniqueness.

Items	Factor			
	NFU 1	Anxiety	Avoidance	NFU 2
I have often gone against the understood rules of my social group regarding when and how certain products are properly used.	<b>0.77</b>	0.08	0.04	0.10
I have often violated the understood rules of my social group regarding what to buy or own.	<b>0.75</b>	0.04	0.04	0.12
As a rule, I dislike products or brands that are customarily purchased by everyone.	<b>0.72</b>	0.15	0.19	0.27
I often try to avoid products or brands that I know are bought by the general population.	<b>0.69</b>	0.15	0.16	0.32
The more commonplace a product or brand is among the general population, the less interested I am in buying it.	<b>0.69</b>	0.14	0.24	0.32
I worry about being alone.	-0.03	<b>0.77</b>	0.08	0.11
I worry that the people I have relationships with won't care about me as much as I care about them.	0.14	<b>0.75</b>	0.20	0.02
When I'm not involved in a relationship, I feel somewhat anxious and insecure.	0.09	<b>0.74</b>	0.13	0.11
I worry a lot about my relationships.	0.07	<b>0.73</b>	0.23	0.03
My desire to be very close sometimes scares people away.	0.20	<b>0.70</b>	0.04	0.05
I don't feel comfortable opening up to people in relationships.	0.14	0.22	<b>0.79</b>	0.08
Just when my relationship partners start to get close to me, I find myself pulling away.	0.13	0.24	<b>0.78</b>	0.09
I get uncomfortable when people in my relationships want to be very close.	0.17	0.16	<b>0.76</b>	0.04
I find it difficult to allow myself to depend on the people I have relationships with.	0.15	0.10	<b>0.67</b>	0.05
I am very comfortable being close to people (R).	-0.05	0.01	<b>0.63</b>	-0.18
Often when I buy merchandise, an important goal is to find something that communicates uniqueness.	0.19	0.04	-0.04	<b>0.80</b>
I have sometimes purchased unusual products or brands as a way to create a more distinctive personal image.	0.32	0.06	0.05	<b>0.79</b>
I often think of the things I buy and do in terms of how I can use them to shape a more unusual personal image.	0.33	0.19	0.01	<b>0.79</b>

Note: Principal axis factoring with Varimax Rotation; NFU=Need for Uniqueness. Bold and italicized factor loadings indicate the items that comprise the factor.

*From: Thomson, M., Whelan, J., & Johnson, A. R. (2012). Why brands should fear fearful consumers: How attachment style predicts retaliation. Journal of Consumer Psychology, 22(2), 289–298. <https://doi.org/10.1016/j.jcps.2011.04.006>*

**Survey for UofSC Darla Moore School of Business (DMSB) students:**

## A Business Study of Introverts and Extroverts in DMSB: How does introversion and extroversion correlate to the business ethics people value in professional work settings?

Whether it's your finance or marketing class, leadership role on campus, or full-time job, how does personality, work preferences, and business traits play into how you perform in a business setting? Does where you come or grow up from inevitably impact how you behave and think in professional environments?

Some people tie this to the dichotomy of introversion and extroversion. Do you feel a constant need to be around people or require breaks every time you do? Are you generally more passive and prefer thinking before you speak or expressive and prefer thinking out loud? There are many presumptions of introverts and extroverts that don't necessarily constitute a definite label.

How is this seen in the "business world"? In such a fast-paced environment that requires quick thinking, precision, and strong interpersonal skills, are you likely to perform better with people who are introverted or extroverted? Does it even matter in business?

As part of my senior thesis, I'm interested in seeing how individuals define introversion/extroversion, specifically as it relates to business-driven careers. I will be surveying two groups: 1) Students at the Darla Moore School of Business (DMSB) and 2) Business students in South Korean universities. My goal is to compare two business subgroups from two different environments and cultures, seeing if there is a relationship between introverts/extroverts and the business ethical principles they value in various workplaces and settings.

Please use your UofSC email when submitting the survey – this is just to confirm you are a UofSC student. Your email address will automatically be entered for a chance to win a \$20 Amazon gift card!

Thank you in advance for your cooperation.

Sincerely,

Andrew Chang

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\* Required

1. Email \*

---

2. What year are you in school? \*

*Mark only one oval.*

- Freshman  
 Sophomore  
 Junior  
 Senior

3. Are you an in-state, out-of-state, or international student? \*

*Mark only one oval.*

- In-state  
 Out-of-state  
 International

4. What is your major(s) at the DMSB (Select all that apply)? \*

*Check all that apply.*

- Accounting  
 Economics  
 Finance  
 International Business  
 Management  
 Marketing  
 Operations and Supply Chain  
 Real Estate  
 Risk Management and Insurance

5. Where is your home country, city, and state? \*

If in or out-of-state, please write out the city and state (e.g. Columbia, SC). If international, just list the country (e.g. South Korea).

---

6. Would you consider yourself an introvert or extrovert? \*

If you are "in-between," please pick the trait that describes you more overall. If you aren't sure or just want to reaffirm, you can take the 16 Personalities quiz: <https://www.16personalities.com/free-personality-test> (when finished, just look at the "Mind" section).

*Mark only one oval.*

Introvert

Extrovert

**Business-related  
Questions**

Now, let's dive more into the business side as it relates to introversion and extroversion.

7. When thinking strictly "business," do you think your previous answer would change (e.g. from introvert to extrovert or vice-versa)? \*

*Mark only one oval.*

Yes. In business activities/settings, I think I'm more of an introvert/extrovert.

No. I would still consider myself an introvert/extrovert.

It really depends on the situation.

8. Do you have a job (e.g. part-time, full-time, on or off-campus)? \*

*Mark only one oval.*

Yes

No

9. Do you have any leadership positions on or off-campus (e.g. this does include positions in your job)? \*

*Mark only one oval.*

- Yes
- No

10. If you selected "yes" to one or both questions above, are you expected to be more introverted or extroverted in your position(s)?

*Mark only one oval.*

- Introverted
- Extroverted
- Both equally
- It depends on the position.
- Not sure

11. If you selected either "it depends on the position" or "not sure" for the previous question, please elaborate or provide a brief example.

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12. Do you think being an introvert/extrovert provides advantages over the other or is considered "more important" for business in general — especially when working in teams, interviewing, recruiting, presenting ideas to top executives, etc? \*

*Mark only one oval.*

- Yes
- No
- Both are equally important.
- In this case, I think introversion/extroversion is insignificant.

13. What do you think are the three most important characteristics that all businesspeople should possess? List three traits (e.g. decisiveness, trust, versatility). \*

\_\_\_\_\_

14. As an introvert/extrovert and future businessperson, is there a trait that you wish you had, but find it hard to attain/achieve (e.g. resilience, self-esteem, decisiveness)? If none, type "N/A" \*

\_\_\_\_\_

15. In your future career or dream job: if you could pick only ONE business ethic/principle that is always visible within your company's staff and work environment, what would that be (e.g. All employees are treated fairly regardless of status; People must have accountability and serve proper consequences for their actions; Employees that always understand each other)? \*

\_\_\_\_\_

How do YOU define introversion and extroversion?



16. What are the first three words that come to mind when you hear "introvert" or "introversion"? \*

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17. What are the first three words that come to mind when you hear "extrovert" or "extroversion"? \*

---

18. What is one misconception you hear about or preconceived notion you first had of introverts/extroverts that you believe shouldn't exist or is inaccurate overall? If none or you don't have any, type "N/A" \*

---

How do you feel about your relationships with others?

This is the FINAL section of the survey!

19. Please rate your agreement with each statement below. \*

*Mark only one oval per row.*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I worry about being alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am not involved in a relationship, I feel somewhat anxious and insecure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry that the people I have relationships with would not care about me as much as I care about them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My desire to be very close sometimes scares people away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry a lot about my relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. Please rate your agreement with each statement below. \*

Mark only one oval per row.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I do not feel comfortable opening up to people in relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get uncomfortable when people in my relationships want to be very close.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Just when my relationship partners start to get close to me, I find myself pulling away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it difficult to allow myself to depend on the people I have relationships with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very comfortable being close to people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Survey for Korean university business students

## 비즈니스 업무 환경에서 내/외향적 성향과 비즈니스 윤리간에 관련성에 관한 연구

임원이든 사원이든, 정규적이든 비정규적이든, 비즈니스 업무 환경에서 당신의 성격과, 업무선호도 및 비즈니스 특성은 각각 어떻게 여러분이 일하시는 방법에 어떤 영향을 미칠까요? 당신이 태어난 곳과 자란환경이 당신이 비즈니스 환경에서 어떻게 행동하고 생각하는지에 영향을 미칠까요?

사람들은 일반적으로 다른 사람들의 행동양식에 대한 이유를 내향적인 성격과 외향적인 성격의 이분법에 연결합니다. 항상 사람들과 함께 있어야 할 때마다 휴식이 필요하다고 느끼십니까? 당신은 일반적으로 더 수동적이고 말하기 전에 생각하거나 표현하기를 선호하고 소리내어 생각하는 것을 선호합니까? 명확하게 구분하지는 않지만, 많은 사람들은 이러한 내향성 및 외향성에 대한 가정을 많이 가지고 있습니다.

이것이 "비즈니스 업무환경"에서는 어떻게 보여질까요? 신속, 정밀한 의사결정, 그리고 밀접한 대인관계가 요구되는 그런 업무 환경속에서, 여러분은 내성적이거나 외향적인 사람들 중 어느쪽이 더 일을 잘 할 것 같나요? 비즈니스에서 내성적 혹은 외향적인 성격이 중요한 성공요소 일까요?

제 연구는 개인이 내성적 / 외향성을 정의하는 방식, 특히 비즈니스 중심의 경력과 관련하여 이것이 어떻게 정의되어야 하는지에 대한 질문으로부터 시작되었습니다. 제 논문의 목표는 서로 다른 환경과 문화속에있는 두개의 그룹을 비교하여 내향적 / 외향적인 사람들의 다양한 작업장과 환경이 그들이 중요하게 여기는 비즈니스 윤리 원칙 사이에 어떠한 관계가 있는지를 확인하는 것입니다. 두 그룹 중 하나는 University of South Carolina, Darla Moore School of Business (DMSB) 학생들이고, 다른 하나는 여러분들입니다.

여러분의 협조에 미리 감사를 드리며, 이 논문이 연구결과가 궁금하신 분은 저에게 알려주시면 논문 발표에 맞추어 결과를 공유해드리도록 하겠습니다.

감사합니다.

Andrew Chang (장현우) 드림.

**\* Required**

1. 재학중인 대학 이름 -- 한국어와 영어로 써주세요 (예: 한국대학교, Hanguk University). \*

\_\_\_\_\_

## 2. 대학 몇학년이세요? \*

*Mark only one oval.*

- 대학교 1학년
- 대학교 2학년
- 대학교 3학년
- 대학교 4학년

## 3. 대학 전공은 뭐예요? \*

\_\_\_\_\_

## 4. 당신은 당신이 내성적이라고 생각하나요 아니면 외향적이라고 생각하나요? \*

\*중간\* 인 경우, 당신을 전반적으로 더 잘 설명하는 특성을 선택하세요. 확실하지 않거나 재확인하려는 경우 16개의 개인 정보 퀴즈를 볼 수 있습니다. <https://www.16personalities.com/free-personality-test> (완료 시 "마인드" 섹션만 참조)

*Mark only one oval.*

- 내성적
- 외향적

## 비즈니스 관련 질문

이제 내향성 및 외향성과 관련된 비즈니스 측면을 자세히 살펴 보겠습니다.

## 5. 엄격하게 "비즈니스"라고 생각할 때 이전 답변이 변경 될 것이라고 생각하십니까 (예: 내성적에서 외향적 또는 그 반대)? \*

*Mark only one oval.*

- 예. 비즈니스 활동 / 환경에서 나는 내성적 / 외향적이라고 생각합니다.
- 아니요. 여전히 내성적 / 외향적이라고 생각합니다.
- 상황에 따라 다릅니다.

6. 직업이 있습니까 (예: 파트 타임, 풀 타임, 캠퍼스 내외)? \*

*Mark only one oval.*

- 네  
 아니요

7. 캠퍼스 내 또는 외부에서 리더 직책을 가지고 있습니까? \*

*Mark only one oval.*

- 네  
 아니요

8. 위의 질문 중 하나 또는 두 가지 모두에 "네"를 선택했다면 자신의 입장에서 더 내성적이거나 외향적일 것으로 예상됩니까? \*

*Mark only one oval.*

- 내성적  
 외향적  
 둘 다 동등하게  
 입장에 따라 달라짐.  
 확실하지 않다.

9. 이전 질문에 대해 "입장에 따라 달라짐" 또는 "확실하지 않다" 중 하나를 선택한 경우, 자세히 설명하거나 간단한 예를 제공하십시오.

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10. 당신의 내성적인 (혹은 외향적인) 성격이, 면접이나 채용 과정에서, 비즈니스 조직내에서 다른 팀원들과 일할때나, 혹은 상사에게 자신의 의견을 제시할때, 다른 성격들에 비해 더 중요한 것으로 간주되거나, 이점을 제공한다고 생각하는가요? \* \*

*Mark only one oval.*

- 네
- 아니요
- 둘 다 동등하게 중요합니다.
- 이 경우에, 나는 내향성과 외향성은 중요하지 않다고 생각한다.

11. 모든 사업가들이 가져야 할 가장 중요한 세 가지 특성은 무엇이라고 생각하십니까? 세 가지 특성을 적어주세요 (예: 결단력, 신뢰, 다재다능성). \*

\_\_\_\_\_

12. 내성적 / 외향적이며 미래의 사업가로서 당신이 갖고 싶었지만 달성하기 어렵다는 특성이 있습니까 (예: 회복력, 자존감, 대담함)? 없는 경우 "N/A"를 적어주세요. \*

\_\_\_\_\_

13. 만약 여러분이 회사 직원들에게서 바라볼 수 있는 하나의 비즈니스 윤리나 원칙만을 선택할 수 있다면, 그것이 무엇일까? (예: 1. 모든 직원들은 지위에 상관없이 공정하게 대우받기 2. 사람들은 그들의 행동에 대한 책임감 3. 사람들은 항상 서로를 이해하는 직원들)?

\_\_\_\_\_

내향성과 외향성을 어떻게 정의하니까?

14. "내성적" 이라는 말을 들을 때 가장 먼저 떠오르는 세 단어는 무엇입니까? \*

\_\_\_\_\_

15. "외향적"이라는 말을 들을 때 가장 먼저 떠오르는 세 단어는 무엇입니까? \*

\_\_\_\_\_

16. 내성적인 사람 (혹은 외향적인 사람)에 대해 가지고 있는 선입감이나 오해가 있다면 한 가지만 말씀해주세요 (예를들자면, 같이 일하기 절끄러운 동료일 것 같더라던가, 전반적으로 일처리가 부정확할 것 같더라는 것입니다). \*

\_\_\_\_\_

설문 조사의 최종 섹션입니다!

다른 사람과의 관계에 대해 어떻게 생각하세요?

17. 아래의 각 항목에 관한 귀하의 의견을 평가해 주십시오. \*

Mark only one oval per row.

	강하게 동의하지 않습니다	동의하지 않 습니다	중립	동의합 니다	강하게 동의합 니다
나는 혼자가 될까 봐 걱정된다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
나는 관계에서 제외되면 불안하고 불안정감을 느낀다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
나는 나와 관계가 있는 사람들이 내가 그들을 신경 쓰는 만큼 나를 신경 쓰지 않을까 봐 걱정한다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
나의 너무 가까와지고 싶어하는 욕망은 때때로 사람들을 겁나게 한다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
나는 내가 맺는 관계들에 대해 많이 걱정하는 편이다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. 아래의 각 항목에 관한 귀하의 의견을 평가해 주십시오. \*

Mark only one oval per row.

	강하게 동의하지 않습니다	동의하지 않 습니다	중립	동의합 니다	강하게 동의합 니다
나는 인간관계에서 사람들에게 마 음을 터놓는 것이 편치 않다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
나는 나와 관계있는 사람들이 너무 가까와지는것이 불편하다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
나의 관계에서 파트너가 나에게 가 까워지기 시작하자마자 나는 멀어 진다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
나는 내가 관계를 맺고있는 사람들 에게 의존하것이 어렵다고 생각한 다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
나는 사람들과 친하게 지내는 것이 매우 편하다.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Google Forms



<b>Attachment Style Survey Questionnaire</b>
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<b>Questions on Attachment <span style="color: red;">Anxiety</span></b>
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I worry about being alone.
----------------------------

When I am not involved in a relationship, I feel somewhat anxious and insecure.
---

I worry that the people I have relationships with would not care about me as much as I care about them.
---

My desire to be very close sometimes scares people away.
--

I worry a lot about my relationships.
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<b>Questions on Attachment <span style="color: red;">Avoidance</span></b>
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I worry a lot about my relationships.
---------------------------------------

I get uncomfortable when people in my relationships want to be very close.
--

Just when my relationship partners start to get close to me, I find myself pulling away.
--

I find it difficult to allow myself to depend on the people I have relationships with.
--

I am very comfortable being close to people.
--