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**THE INFLUENCE OF REGIONAL STEREOTYPES
IN EMPLOYEE SELECTION**

by

Brittani E. Plaisance, B.S., M. A., M.S.

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

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ABSTRACT

An individual's social world is understood through categorizing other people as those within an individual's own in-group and those without, or the out-group. Social cognitive theory suggests that individuals make decisions in social settings based on implicit social comparisons between these groups. Stereotypes are oversimplified beliefs about the members of a specific group and discrimination is the behavioral outcome based on held stereotypes. Discrimination based on race, ethnicity, age, and gender has dominated research in the realm of employee selection for the last twenty years. Researchers have demonstrated perceived and actual differences in various attributes by region of the United States (e.g., Kahle, 1986; Rentfrow et al., 2013). The present paper examines potential discrimination that may be occurring based on the geographic location indicated on an application blank. First, one group of participants rated all four regions on several attributes to gauge assumptions about personality and intelligence in each region. Next, a group of hiring managers reviewed one application blank from one of the four different positions that align with one of the four regional stereotypes (e.g., customer service positions align with the Southern stereotype of extraversion and kindness). These participants rated application blank on a hireability scale. Results indicate that stereotypes by region exist for some attributes, but these stereotypes do not seem to be influencing hiring decisions. Limitations and suggestions for future research are discussed, as are implications for these findings for both researchers and practitioners in the field.

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Author Brittani Blaisance

Date 4/12/18

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CHAPTER ONE

INTRODUCTION

Decisions are a part of everyone's daily life. More specifically, making assumptions and drawing conclusions about other people is a part of daily decision-making and social interaction. Tajfel, Billig, Bundy and Flament (1971) offer the following description of social interaction:

Social conduct is powerfully molded by conceptualizations of social causality in which inferences about interests, motives, intuitions, actions, and attributes of groups and of individuals are structured in terms of crisscrossing categorizations of the social world into a variety of in-groups and outgroups. (p.153)

The study of the interaction between social behavior and internal, mental processes is typically referred to as social-cognitive psychology. Individuals implicitly group personality traits together in order to form impressions about and expectations for behavior (Schneider, 1973). Individuals are influenced by implicit biases that are based on unconscious associations between various group members and certain characteristics (Staats, 2014). Generally, an individual's social world is categorized according to the other individuals within the person's own in-group and those within the out-group. Implicit associations held by individuals tend to favor their in-group and have an influence on an individual's choices and behavior. For example, the similar-to-me bias refers to the tendency for individuals to judge more favorably those parties that mimic

attributes and behavioral tendencies perceived as similar to their own. Barr and Hitt (1986) suggest that hiring managers may compare candidates against themselves, using their own characteristics and performance as benchmarks, to guide selection decisions. The typical behavioral result of these anchored perceptions is hiring preference for candidates similar in personality and performance tendencies to the hiring manager. Implicit biases can cause a lower salary offers for candidates that are different from the hiring manager (Barr and Hitt, 1986).

Social Categorization

Human social categorization has been studied in attempts to explain various social phenomena, such as group behavior, social norms, and identity formation. Tajfel and Turner (1979) performed an experiment in which they arbitrarily grouped strangers together and then asked participants to allocate points to the others. The participants did not know anything about the other people, only their group membership. The findings were surprising in that participants allocated the most points to their fellow group members and fewer points to other group members. This led to the proposal of social identity theory (SIT) by Tajfel and Turner (1979), which describes how individuals form both a personal group identity and categorize others based on group membership. Tajfel and Turner (1979) in their discussion of SIT suggest that individuals show preference and favoritism to in-group members with similar hobbies, experiences, values, ethnicity, age, or any of myriad other factors.

Typically, belonging to a group is not an arbitrary process; individuals may align themselves with others. Tajfel (1982) suggests that an individual's self-identity will partially derive from the self-image formed from group belonging. Oakes, Turner, and

Haslam (1991) developed a theory similar to SIT that is known as self-categorization theory (SCT). This theory suggests that self-categorization occurs as an interaction between the salience of certain social groups and how well the individual perceives his or her characteristics will fit in with the group members. These same authors suggest that an individual's in-group will provide norming information about how to behave, feel, and think appropriately. As individuals form identities as members of these groups, the norms will likely influence their behavior, opinions, and decisions. SCT also proposes that individuals represent social categories as prototypes, or a subjective mental picture of the defining member of that group (Oakes, Turner, & Haslam, 1991). The unconscious mental processes associated with categorization and the subsequent tangible elements, such as decisions, behaviors, or expressed opinions, fall into the cognitive psychology field of study. Individuals unconsciously assign group membership to both themselves and others in order to form judgments guiding behaviors and reactions to interactions with others (Tajfel & Turner, 1979). Cognitive psychology can assist in understanding the intangible representation and activation processes involved in the categorization of people. This branch of psychology focuses on exploring and studying mental processes such as attention, memory, and information processing.

Applying cognitive psychology concepts to social interactions involves seeking an understanding of how individuals perceive, store and access representations of, and make sense of other people. Categories of concepts are represented by prototypes, the most typical member associated with that category (Rosch, Mervis, Gray, Johnson, & Boyes-Brae, 1976). Socially, groups tend to be mentally represented by an individual's idea of the typical member of that group, the prototype. The various categories are

represented as cognitive networks, connected with characteristics, or schemata. These schemata serve to organize and connect social categories and information to assist in understanding the environment (Hodgkinson, 2003). Individuals expect incoming social information to be consistent with prototypical elements of the group to which the stimulus belongs. Categorization assists in decision-making by speeding up these constant comparison processes that would otherwise require far too many cognitive resources (Rosch et al., 1976). Individuals can quickly fit people into categories using mental shortcuts known as heuristics. Heuristics serve to reduce the cognitive resources required by a task, and many types have been described (Bodenhausen, 1990). For example, the availability heuristic suggests that when making decisions individuals will use information that easily comes to mind (Tversky & Kahneman, 1973). While heuristics are a necessary, helpful aspect of mental processing and social functioning, their existence and application is not fool proof. Using social categorizations to make decisions faster without depleting resources can mean sacrificing accuracy for speed, sometimes leading to inaccuracies and erroneous decisions (e.g., Park & Hastie, 1987).

Social categories lead people to form different perceptions regarding members classified into in-groups versus out-groups. Comparisons between social groups lead to perceptions and interactions based on an “us” and “them” mentality (Tajfel et al., 1971). Similarities between in-group members are the foundation of the group’s existence; however, individuals perceive out-groups as more uniform. Out-group homogeneity involves the overgeneralization of attributes, opinions, or behaviors to all members of a social group. Individuals tend to assume that an entire social group behaves in the manner of members with which they have had encounters (Park & Hastie, 1987). Alternatively,

in-group members are typically treated more favorably in terms of resource allocation and in likability, even at the expense of out-group members. Tajfel and colleagues (1971) assigned forty-eight men to two groups described as favoring one of two different artists, and the participants were then asked to select their preferences for two paintings presented. The subjects more frequently selected the painting associated with their assigned in-group preference as the more aesthetically pleasing piece. Tajfel et al. found that this in-group favoritism still occurs even if a subject's individual benefit is influenced. Also, if a mutually beneficial option to choose both paintings was offered, subjects still behaved in a way to benefit their in-group the most. The "us" versus "them" mentality seems to be resilient to other, more objective and fair conceptualizations of in- and out-groups.

The perceived differences between in-group members and out-group members and the resulting social comparison and decision-making are discussed further in the stereotype content model. Proponents of this theory suggest that individuals form four categories of individuals through comparing these people to themselves and their in-group (Fiske, Cuddy, Glick, & Xu, 2002). In order to fit others into these four categories, they are subconsciously judged on two characteristics. Individuals decide if others are high or low in both warmth and confidence, which then categorizes them into one of the four categories. These out-group categories include paternalistic (high warmth, low competence), admiration (high warmth, high competence), contemptuous (low warmth, low competence), and envious (low warmth, high competence). The paternalistic category includes elderly people or housewives perceived with pity, low status, and non-competitive. Examples falling in the admiration category include in-group members that

are perceived to have high status and are non-competitive others. Out-group members in the contemptuous category are met with resentment and are considered low status and not competitive (e.g., homeless people). The envious category includes celebrities and rich people perceived to be competitive and maintain a high status (Fiske et al., 2002). Each category is associated with certain dispositional assumptions and behavioral expectations that influence an individual's interactions with various members. This model provides a more specific depiction of how social categorization influences the organization of social information and how social comparison guides decision-making.

Individuals automatically and unconsciously categorize both themselves and others around them into social groups. Meaning is attached to this social identity of the self and others through schemata that cognitively connect various groups of ideas. Social categorization and meaning influence the expectations and attributes assumed to be possessed by group members (Tajfel & Turner, 1979). Through the application of heuristics, individuals are able to make quick, routine decisions about the people within their social environment (Bodenhausen, 1990). Typically, social groups are evaluated in terms of "us versus them," and the evaluation of in-group members tend to be more positive in many aspects. While these processes and social phenomena are common and necessary, social categorization and the attributions made to these groups can cause issues. When one assumes that each single member of a group is the same, error enters the discussion of social categorization and comparison (Tajfel et al., 1971). Unfair stereotypes, prejudice, and discrimination can result from these erroneous assumptions, and it is to these which the discussion turns now.

Stereotypes

Stereotypes are widely held, simplified assumptions or ideas about members of a certain social group (Allport, 1954). Stereotypes are not necessarily negative in nature, and they can sometimes be based upon real group differences. However, they can also be formed without consideration for actual group differences, which leads to ethical issues and shapes the foundation for most stereotype research attention (Hilton & von Hippel, 1996). All people implicitly hold stereotypes that guide decisions, little-by-little, long before the decision is necessary (Krieger, 1995). The cognitive processes that underlie stereotype formation are guided by information and motivations that come from implicit social categorizations. Abilities, motivation, and early life experiences tend to have decisive influences on the social perception of the self and of others (Heckman, 1998). Stereotypes can lead to discrimination because they influence how individuals process social information and decision-making. These stereotypes, like social categorization and heuristics based on social groups, make high-level cognitive functioning possible. Undifferentiated social contexts (as in, missing social categories) make very little sense and give no information to guide action or decisions (Tajfel et al., 1971). Plentiful research has been performed to demonstrate the existence and occurrence of stereotypes. In addition, several theoretical concepts have been suggested to explain why, when, and how stereotypes happen.

It is relatively simple to acknowledge that stereotypes exist in social contexts as most people have experienced stereotypical scenarios themselves. However, of interest to scientists investigating human behavior is the context, the reasons, or other elements that can lead to a deeper explanation of stereotypes. Jussim, Coleman, and Lerch (1987)

investigated the nature of stereotypes in terms of three different theoretical approaches. Participants were shown video recordings of applicants that the researchers varied by race, dress, and speech patterns. The findings support all three of the theories of interest that included complexity-extremity, assumed characteristics, and expectancy-violation. First, complexity-extremity theory suggests that judgments about out-group members will be more extreme, showing a wider range. The Caucasian participants in this study evaluated African American subjects more extremely. Second, assumed characteristics theory suggests that individuals will assume that in-group members have more favorable innate characteristics than out-group members. However, if an in-group and out-group representative are the same in performance relevant factors, other information carries more weight. Jussim and colleagues found that in evaluating applicants in this experiment, participants gave more weight to background information than to race. For example, providing job-relevant information equating the skills of white and black candidates can reduce the negative evaluations of African Americans by white individuals resulting from stereotypical thoughts. Third, expectancy violation theory proposes that when an individual does not demonstrate attributes or behaves in a way that is in opposition to the assumption, the evaluation of that individual by others will be extreme in the direction of that stereotype violation. The researchers concluded that a positive violation of a negative stereotype will lead to extreme judgments of a positive nature, even over one's in-group. Interestingly, this points to another kind of discrimination. Even when an extreme, positive judgment may be made toward members of an out-group, this is still a decision made based on factors that are not necessarily job-relevant. The findings of this study support this theory in that African Americans

received more favorable ratings than equally qualified Caucasian subjects due to a positive violation of a negative stereotype against African Americans.

Another theory through which stereotyping can be explained is with the concept of an illusory correlation. Schaller (1991) defines illusory correlations as assumed, unproven relationships between certain attributes and group membership. This researcher designed an experiment in which individuals were provided information about artificial social groups and assigned to these groups. Participants were told that one group was more prevalent than the other, and they were then told to which group they belonged (or were part of a non-assigned control group). Participants were then presented with statements illustrating members of both groups doing a variety of desirable and undesirable behaviors. Participants then rated the subjects of these statements on a likability scale and were asked to indicate the members of which group performed the different actions. Schaller's (1991) results indicate that the participants that were assigned to a social group formed illusory correlations favoring their in-group by scoring these individuals as more likable and indicating that in-group members performed more desirable behaviors. Additionally, the participants that were not assigned to social groups formed illusory correlations between the minority group and distinctive, infrequent behaviors. Applying this evidence, Schaller argues that an additional element of social categorization is not only to degrade the out-group, but to promote the in-group. These findings support the suggestion that social categorization is automatic and influences, sometimes erroneously, the decisions made and behaviors enacted by individuals. The participants in this study basically formed stereotypes about both their own and other, artificial, group members based solely on membership.

Another study performed by Hill, Lewicki, Czyzewska, and Schuller (1990) provides evidence for illusory correlations influencing the formation of stereotypes. These researchers varied the width of the nostrils on images of people and paired the wider nostrils with fake, socially undesirable personality traits. After several pairings, the participants unconsciously assumed this relationship always occurred. Furthermore, after the researchers ceased the pairings, the relationship prevailed and even strengthened. Generalizing this research, the findings provide some explanation for the continued strengthening of stereotypes through only a handful of encounters with individuals representing the stereotypic prototype. Associations are made quickly and with very little effort between certain characteristics and the judgments made to people with those characteristics, even without having any further information about disposition or behavioral tendencies.

Prejudice

Stereotypes can be considered the cognitive component of prejudice. Prejudice refers to a preconceived opinion about social groups, typically negative in nature, and the attributes associated with this opinion. Allport's (1954) classic definition states, "prejudice is an antipathy based on faulty and inflexible generalization" (p. 9). The negative nature of prejudice, by Allport's definition, is a result of splitting the social world into in-groups and out-groups. As previously mentioned, individuals tend to judge members of out-groups more harshly and negatively than members of their own social category (Tajfel et al., 1971). While stereotypes tend to be considered more innate, prejudice is systematic and cognizant differentiation by social categorization (Krieger,

1995). While negative attitudes are a major part of the concept of prejudice, individuals also tend to negatively pre-judge the behaviors of members of social groups (Hilton & von Hippel, 1996).

A common perspective taken by social phenomena researchers suggests that as long as stereotypes exist, prejudice will occur. Prejudice is generally known as preconceived beliefs or opinions about others that are not based in fact or experience. The idea of the inevitability of prejudice reflects the concept of a heuristic, a decision-making shortcut, in that stereotypes are believed to be automatic assumptions about group members (Devine, 1989). In contrast, endorsed or developed personal beliefs lead to conscious opinions about social groups and do not necessarily reflect a prevailing stereotype. In a series of studies, Devine (1989) strove to demonstrate this distinction between these two schools of thought. Study one focused on evaluating the subjects' knowledge of stereotypes that commonly prevail surrounding African Americans. This study demonstrated that both high and low prejudiced individuals (as scored on the Modern Racism Scale [McConahay, Hardee, & Batts, 1981]) hold personal beliefs about stereotyped groups. In study two, the researcher sought to evaluate the influence of stereotypical image-phrase pairing on subsequent judgments of behavior. The findings indicate that when unable to monitor their behavior, automatic stereotypes and prejudicial actions are just as powerful and prevalent for both high and low prejudiced individuals. In the third study, subjects were asked to generate labels and thoughts that they associated with African Americans. Low-prejudiced individuals reported less phrases that aligned with the common stereotype and were less willing to assign commonalities to the entire group. The authors interpreted this to indicate that controlled beliefs, demonstrated

by low prejudice subjects, can interfere with automatic stereotypes. These studies together provide further insight into the inevitability of prejudice idea and suggest that a lack of personal belief in a stereotype can reduce the occurrence of prejudice (Devine, 1989).

Researchers typically take the side either for or against the inevitability idea to explain prejudice. Gilbert and Hixon (1991) argue against the automaticity of stereotypes and suggest that stereotype activation can be impeded by an individual's cognitive resource availability, or busyness. A fragment completion task was used to reduce the cognitive resources available while participants were exposed to either an Asian American or Caucasian American female. The fragments could be completed using words typically associated with an Asian stereotype. Participants not partaking in this cognitive busyness task were more likely to complete the fragments with stereotypic words, while the experimental group did not. In a second study, participants who were not busy made more stereotypical judgments, but only if the stereotype had been activated in a previous stage. These researchers suggest that the findings of this study provide evidence that cognitive busyness can act as a control process impeding an individual's conscious awareness of stereotypes.

Bodenhausen (1990) does work that complicates this picture of cognitive resources influencing stereotypic judgments by examining the prevalence of stereotypes at non-ideal times of the day. Motivation and cognitive resources decrease during non-optimal times, such as the early morning for someone who prefers the evening. Participants were asked to read descriptions of two individuals, depicting one as a stereotypical accountant and the other as a stereotypical feminist, and then select phrases

about the two individuals that they felt were probable to occur. Selecting phrases that were aligned with the stereotype was considered stereotypical. Participants favoring the morning were more likely to select stereotypically in the evening (not their peak time) and the opposite occurred for those favoring evening. Further, participants read statements of alleged crimes and were asked the likelihood that certain individuals of various social groups had committed these crimes. Again, stereotypical judgments of guilt were more likely when made at the participants' non-optimal time of day. These findings support the idea that stereotypes are more likely to influence decisions when individuals are cognitively disadvantaged. This study, along with the Gilbert and Hixon (1991) study, point to a complex relationship between the availability of cognitive resources and the activation of stereotypes. The mechanisms at work here are different in that Gilbert and Hixon provide evidence that being cognitively overloaded can lead individuals to control the influence of an activated stereotype on decisions.

Bodenhausen's evidence suggests that stereotypes automatically influence decisions, and being cognitively overloaded makes this influence more prevalent. One suggests that individuals are more stereotypical in behavior when less busy or cognitively inhibited (Gilbert & Hixon, 1991). The other found that individuals exhibit more stereotypical behaviors when more cognitively disadvantaged (Bodenhausen, 1990). These two studies hint that there are forces that make the direction of this relationship different depending on various factors. While the relationship between the availability of cognitive resources and stereotyping behavior is complicated, perhaps the type of cognitive disadvantage was not equivalent. Maybe the time of day disruption is simply not providing the same level of cognitive disadvantage as participating in a task simultaneously.

Stereotype activation may be influenced by an individual's motivation to increase self-esteem through downward social comparison. Fein and Spencer (1994) evaluated stereotyping and prejudice and the relationship these concepts have with self-image threat and affirmation. In the first study, some participants completed a self-affirming task and were asked to rank values that were most important to them and write a short paragraph explaining why. Next, the participants were asked to evaluate fake job applicants, some who portrayed a prevalent stereotype and others who did not, on job suitability. Participants that had been self-affirmed tended to rate the stereotype representative less negatively than those who had no self-affirmation task. In the second study, some participants received fake, negative feedback on an intelligence test in order to threaten their self-image. Then, participants viewed a recording of a male confederate portrayed as either a homosexual or heterosexual and rated the confederate on several stereotype-relevant personality dimensions. The participants who had received the negative feedback rated the confederates' personality dimensions more in line with a homosexual stereotype. In study three, participants took an intelligence test followed by positive or negative feedback and a measure of self-esteem. The participants then evaluated a subject for job suitability (manipulated for the same stereotype as Study 1) and then were given the same measure of self-esteem. Participants receiving negative intelligence test feedback rated subjects more negatively. Participants also rated a subject portrayed in a stereotypical Jewish manner more negatively than a portrayed Italian subject. Most poignantly, participants who had received negative feedback rated the portrayed subject's qualifications more negatively if she was portrayed as Jewish. The gender of the participant was kept constant, but other factors such as sexuality, nationality, or age were

not considered in this study. Therefore, the effects observed in this situation may not generalize to other experiences with more variant individuals. Together these studies suggest a complex relationship between self-esteem and the application of stereotypes and prejudicial judgment (Fein & Spencer).

Prior experience influences the activation and adoption of various stereotypes. Category accessibility and priming influences the manner in which individuals process and interpret social information. Sedikides & Skowronski (1991) suggest in their work that earlier experiences can determine what individuals observe and hear, the way in which that information is interpreted, and how it is stored for later retrieval. In one study, priming the behavioral constructs of dependency influenced the evaluations of females while aggression influenced the evaluations of males, and not the other gender (Banaji, Hardin, & Rothman, 1993). Generally, these researchers suggest that daily personal interactions or media reports can influence and strengthen an existing stereotype when these events are congruent with the cultural stereotype. Also, widely known cultural stereotypes will influence evaluations even when behaviors are interpretable in more than one way (Devine, 1989). For example, if an African American male is observed performing some behavior that is kind, but unintelligent, the resulting evaluation by the observer is more likely to assume the actions were unintelligent. These findings indicate that life experience, cultural norms, and stimuli from the environment also influence what stereotypes are activated and when.

Tajfel (1982) suggests that intergroup discrimination can occur with minimal motivation (e.g., social competition) and very early in age. Children can identify underprivileged minority groups and tend to understand social norms and consensus at a

young age. Tajfel also proposes that this group categorization and the content of stereotypes serve several functions. These functions include justifying discriminatory behaviors toward others, providing explanatory causality for large-scale distressing events, and providing a positive differentiation above out-group members. Tajfel argues that social differentiation is driven by the differences in rewards or benefits for the in-group versus the out-group, even at a potential loss in gross reward for the in-group. This in-group favoritism may persist even when an individual has more in common with an out-group member than his or her own in-group (Allen & Wilder, 1975).

Discrimination

Stereotypes can lead to prejudice and both of these can influence an individual's potential to discriminate against certain social groups. Discrimination typically refers to the behavioral component that occurs based upon stereotypes and prejudicial attitudes that denies members of certain social groups the right and opportunities that other groups receive (Becker, 1957). This discrepancy can be based upon real differences between social groups or upon misguided perceptions and preferences. Becker (1957) proposed two different types of discrimination: statistical and taste-based. Statistical discrimination refers to an individual being judged based upon a group's characteristics or average behavior (Lahey, 2008). Taste-based discrimination refers to an individual judging another based on an opinion of disutility or a preference for one group over another (Lahey, 2008). These two concepts are ways by which discrimination can be understood, and offers some explanation to how various groups are differentially treated. Investigations into stereotypes and discrimination most commonly focus on differential

treatment based on weight, gender, attractiveness, ethnicity, and race. Discrimination can occur to anyone, anywhere, and at any time, but one area that receives much attention in the field of I-O psychology is the realm of employment selection decisions.

While hiring decisions are perceivable and straightforward (e.g., a candidate is hired or not hired), the underlying decision-making process and potentially influential biases are not as clear. Studying intangible or cognitive processes can be challenging due to the typically inferential nature of any findings or conclusions drawn. “Implicit bias refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner” (Staats, 2014, p. 16). Cognitive and social psychologists apply implicit association tests in order to gather evidence for the existence of unconscious biases and to depict the nature of these thoughts (Greenwald, McGhee, & Schwartz, 1998). These tests ask participants to categorize two different concepts by a certain attribute. In the world of social discrimination, an example of this would be to categorize black or white race by the characteristic of “violent.” First, names would be categorized as black or white followed by participants then associating these names with the tendency to be either more or less violent. The assumption is the faster these associations are made, the stronger the underlying relationship. Also, a portion asking participants to indicate levels of warmth or coldness toward the target concepts may follow the rapid association test (e.g., warmth or coldness toward white and black subjects). This can provide some insight into how unconscious these associations are, as some participants may explicitly state they have warm feelings toward black subjects

while implicitly associate them with unpleasant attributes (Greenwald et al., 1998). These types of investigations are commonly cited and described in the empirical research evaluating implicit biases and similar unconscious processes.

Implicit association tests are used to investigate the underlying linkages that point to observable discrimination. Typically, discrimination is studied through the design of audit or correspondence studies, which both equate two entities and manipulate the element suspected to incur discrimination. Audit studies involve sending a pair of confederates, trained to match in all aspects besides the manipulated variable, to a meeting or interview for a position (Bertrand & Mullainathan, 2002). Correspondence studies involve sending matched résumés and applications to hiring managers in response to posted job advertisements (Jowell & Prescott-Clarke, 1970). These résumés should be equivalent in all other factors other than the manipulation (e.g., ethnicity, gender). Correspondence studies have become more prevalent due to the high level of control over the manipulated information, awareness of all information provided to subjects (hiring managers), and the necessity of fewer resources compared to audit studies (Riach & Rich, 2002). Both of these experimental methods typically consider callback rates or other forms of progression through the hiring process as the outcome of interest.

The factors upon which discrimination may be based are many and have often been studied in the context of a hiring situation, likely due to the risk associated with such discrimination. In an organizational context, differential treatment and lower hiring ratios for minorities have tangible legal ramifications while discrimination in other settings may have less tangible consequences in terms of legal action. An individual is not typically sued for choosing to sit next to a member of one gender over another on a

train. Gender-, ethnicity-, age-, physical-attractiveness-, and weight-based discrimination are some topics that have been investigated in the context of employee selection. I discuss several examples of these research studies next.

Based on the idea that stereotypes and discrimination are the consequence of implicit biases, Rooth (2010) evaluated differences in recruiter attitudes toward Middle Eastern immigrants and native participants. First, the existence of stereotypical implicit attitudes was established through implicit association tests. Through the first implicit association test, participants demonstrated more negative attitudes toward individuals with Middle-Eastern-sounding names than toward those with Swedish-sounding names. In the second implicit association test, participants exhibited a tendency to associate Middle Eastern names with more negative sounding words and phrases. For example, incompetence, laziness, and inefficiency were associated more often with Middle Eastern-sounding names than with more typical Swedish names. Second in this study, the researcher sent matched applications, different only in name ethnicity, to online job postings. Strong, consistent, negative correlations were found between participant implicit association test scores and the likelihood of an immigrant progressing through the hiring process. Meaning, the stronger the negative attitudes, the less likely the Middle Eastern applicant will receive a callback for an interview by the participant. The results of this study are helpful in understanding how stereotypes and discrimination function both implicitly and explicitly. Often, underlying, innate attitudes are assumed to exist and manifest in a certain stereotypical behavior. This research design allows for a deeper understanding of the relationship between implicit attitudes and the behaviors assumed to result from these beliefs.

Implicit biases and automatic stereotypes are particularly prevalent in situations with time pressures, a large cognitive load, and with ambiguous components. Bertrand and Mullainathan (2002) suggest that hiring situations are typically described in this way, and investigated the prevalence of racial discrimination in employment decisions. These researchers answered posted job advertisements in Chicago and Boston for sales, clerical, administrative-support, and customer-service positions. Résumés were created from samples of actual documents posted online that were adjusted to portray white or African American candidates with either low- or high-quality information. The address included on the document was also manipulated for low- or high-status areas of both cities. White-sounding names received callbacks at a rate of 10% while black-sounding names had a rate of 6.7%. Furthermore, the callback rate for African Americans was not increased with a higher quality résumé. For both races, the callback rate increased for résumés with addresses from majority white, more educated, or richer neighborhoods. The main point the authors conclude from this research is that African Americans have little to gain in terms of callback probabilities by increasing the quality of their résumés.

Lahey (2008) evaluated gender and age employment discrimination in terms of both statistical and taste-based forms of differential treatment. Applying a correspondence method, functionally equivalent résumés were sent in response to posted job advertisements for entry-level positions in both Florida and Massachusetts. To investigate the role of statistical discrimination, Lahey included résumé items that hinted the applicant did not fit the stereotype (e.g., for older applicants a statement about being adaptable to change was included to counter the stereotype that older applicants are opposed to changing). Lahey hypothesized that organizations with a human resources

department would demonstrate less taste-based discrimination due to awareness, training, and legal concerns. Although evidence for neither type of discrimination was found in this research, differential treatment by age was uncovered. Younger applicants in Massachusetts were 42% more likely to be called for an interview and younger applicants in Florida were 46% more likely to be contacted. While statistical and taste-based discrimination failed to be supported, this research does provide evidence of age discrimination in two areas of the country.

Eriksson and Lagerstrom (2012) investigated several types of discrimination in Sweden, including hiring decision differences based on age, ethnicity, gender, and employment status. These researchers propose that employers evaluate applications and résumés for both direct influences of performance and pieces of information that hints at these direct influences. For example, reviewing the résumé of an older applicant may lead employers to assume the applicant will be slow to learn about required technology. With this theory in mind, the researchers evaluated résumés posted on an online job search tool for how often the individuals were contacted by employers according to the National Employment Service in the country. The results indicate that older applicants, especially those with lower education levels, were contacted less often. Also, women were contacted less than men even when females demonstrated higher skill levels. Job seekers with non-Nordic names were contacted less, especially if they were over forty years old or with low education. The authors suggest that employers are using this online tool are using these elements as proxies for qualities that are related to job performance, which is causing subgroup differences in employment rates in Sweden.

Another investigation in Sweden focused on gender-based discrimination applying a correspondence testing method. Carlsson and Rooth (2012) sent over 3,000 résumés, matched in all qualities but gender, to male-dominated (e.g., construction), female-dominated (e.g., accountant), and mixed (e.g., teacher) job postings. Women in this country experience a high rate of employment, but this researcher hypothesized that discrimination was specific to gender-stereotyped occupations. This discrimination was theorized to occur due to in-group favoritism and/or in response to cultural norms regarding which gender should hold certain positions. Carlsson and Rooth sent applications based on real résumés to jobs (categorized by majority gender) that demonstrated sufficient labor demand. Female applicants experienced a 10% drop in callback rates for construction jobs and significant increases in several female-dominated occupations. Callback rates for females increased by 11% for restaurant workers, 8% for accountants, 7% for preschool teachers, and 7% for business assistants. No significant differences were found in callback rates for males in any job category. While this study does not provide evidence for gender discrimination in general, these findings suggest that individuals hold assumptions about which sex should be employed in certain positions. Moreover, these assumptions can lead employers to demonstrate differential hiring rates between genders, regardless of job-related qualifications.

Another correspondence testing-style study provides evidence of gender-based discrimination in Australia. Riach and Rich (1987) sent pairs of applications carefully matched for required and desired job qualifications to job postings. The findings show differences in callback rates by gender; however, no information was found on whether these differences were based on prejudice or actual performance differences. Differential

treatment was demonstrated 28% of the time with women experiencing a 40% higher rate of discrimination than men. This differential callback rate against women was particularly evident for jobs such as computer analysts and gardeners. This study demonstrates that discrimination by gender is in fact problematic and is particularly troublesome in certain roles that are more typical for one gender than the other.

Unequal treatment of different genders is clearly a problematic social occurrence, and evidence suggests that this can lead to discrimination in hiring practices (Carlsson and Rooth, 2012, Riach & Rich, 1987). Nationality and ethnicity are also characteristics upon which discrimination may be based. Oreopoulos (2009) conducted an investigation of taste-based discrimination against immigrants occurring in organizational hiring practices in Canada. At the time of this study, immigrants to Canada were experiencing a lower employment rate than natives. Résumés with some information altered to make some seem to be immigrants were sent in response to job postings. Names, location of job experience, university name, and languages of fluency were altered to create the impression that the résumés belonged to immigrants from China, Britain, Pakistan, or India (or to Canadian natives). Oreopoulos found that résumés with traditional Canadian names were over three times more likely to be contacted for an interview, even when all other information provided was similar. Also, an applicant with job experience in Canada, rather than experience in other nations, was 11% more likely to be offered an interview. Although hiring rate differences based on experience in Canada were found, this applicant characteristic may in fact be job-related and therefore not discriminatory. If Canadian work experience is demonstrated to predict future success in the position of interest, then using this information as a decision-making factor makes sense. No

significant results were found by manipulating the applicant's university. Oreopoulos interprets this result as evidence that an applicant's name matters more than experience and education. He also suggests that employers may be statistically discriminating through drawing conclusions about an applicant's potential for success through his or her name. Or, these employers may be making decisions based on a preference to interview applicants with a similar history and lifestyle as their own. The main conclusion of this research is that regardless of why, the differential rate of callbacks for immigrants is problematic. The ethnicity of individuals, or the country from which they hail, can influence the employment opportunities offered regardless of factors suggesting future success in the job. While job experience in a specific country may be proven job-relevant, and therefore logical for use in employment decisions, using such biodata can still lead to differential hiring rates of certain groups (e.g., immigrants). Using such experience to make hiring decisions becomes ethically questionable, even when this experience is a job-related characteristic.

Carlsson and Rooth (2012) provide more evidence for ethnicity-based discrimination in hiring through their consideration of regional differences in hiring based on applicant ethnicity. These researchers evaluated the frequency of hiring discrimination by manipulating résumé name ethnicity and responding to real online job postings in Sweden. Traditional, native names experienced a 9.5% increase in callbacks as compared to those résumés presented with a Middle Eastern name. A nationwide attitude survey was also used to evaluate regional differences in callback rates for these applicants. Regions of Sweden with more-prevalent negative attitudes toward Middle Eastern individuals demonstrated more discrimination against this group through a

further reduction in callback rates. The researchers make the assumption that managers' hiring behavior will reflect the general attitude of an area. These findings further demonstrate the role of ethnicity in hiring differences and also hint at the possibility of geographic differences in attitudes and assumptions when it comes to hiring employees.

So, individuals may make assumptions about a candidate's ability to perform on the job based on his or her gender, ethnicity, and age. These assumptions are typically unfounded in actual differences or likelihood of success. Additionally, hiring managers may make assumptions about an individual's future job performance based solely on physical appearance, or more specifically, on weight. Roehling, Roehling, and Pichler (2007) evaluated the role of weight, as well as the influence of sex and race, in perceived and reported employment discrimination. These researchers defined perceived discrimination as the perception of differential treatment and the belief that this difference is unjust. The perception of discriminatory treatment (even without evidence of actual discrimination) is detrimental to an individual's mental health. Weight bias is particularly detrimental as research provides evidence that overweight individuals share the bias, accepting the differential treatment as deserved (Crandall, 1994). Roehling et al. (2007) used data gathered in 1995 through the MacArthur Foundation National Survey of Midlife Development in the United States (MIDUS). The random sample of participants from the MIDUS research was also asked additional questions about perceived experiences of discrimination. In general younger people, shorter people, women, and African Americans reported more occurrences of perceived weight-related discrimination after controlling for weight. More specifically, women were sixteen times more likely to report weight-based discrimination and differential treatment in the workplace.

Overweight respondents were twelve times more likely to report weight-related discrimination, and obese individuals were thirty-seven times more likely. Extremely obese individuals were over one hundred times more likely to perceive differential treatment based on weight. Making hiring decisions based on individual differences assumed to exist due to a person's weight is unlawful and concerning as there is no evidence of weight being related to performance on the job. Weight is not the only aspect of a person's appearance that can spur stereotypical assumptions about personality and behavior.

Physical appearance and perceived level of attractiveness are attached to certain assumptions about a candidate's job performance. Employment discrimination based on physical appearance has also been studied in terms of perceived levels of attractiveness of applicants. Attractiveness is influenced both biologically/genetically as well as influenced through an individual's efforts such as wearing makeup (Toledano, 2013). Dion, Berscheid, and Walster (1972) provided evidence that physical attractiveness is associated with more positive characteristics and success factors. This study involved presenting subjects with photographs of individuals previously judged as very attractive, moderately attractive, and unattractive. The subjects were asked to provide their impressions of the people in the photographs. The more-attractive individuals were said to be happier and more prestigious, desirable, and competent based only on the provided photographs. One might argue that perhaps individuals of greater physical attractiveness do actually possess all of these positive characteristics. Years later, research provides evidence that this is not the case. Feingold (1992) investigated differences between individuals judged to be attractive or unattractive, and found few real distinctions

between these two groups. Specifically, attractiveness did not relate to higher levels of sociability, mental health, intelligence, or leadership ability. The only differences were observed between a subject's own opinion of their own attractiveness and higher levels of these qualities. Although discrimination based on attractiveness seems to be a real concern, actual performance differences based on physical appearance do not exist. This research demonstrates that while differences by attractiveness are assumed, they are not actually occurring.

Other researchers have reiterated the idea that discrimination occurs based on physical attractiveness. A review by Toledano (2013) discusses the pervasiveness of hiring discrimination by physical attractiveness and the lack of legal means to address this differential treatment. The term "lookism" is used to describe the preferential treatment of attractive applicants, and is framed in terms of poor organizational strategy. More-attractive applicants are considered more likable, to have higher potential for success, are more likely to be hired, and are offered higher average starting salaries. This discrimination prevails even when hiring managers are provided with information relevant to successful job performance. However, overvaluing attractiveness that is not linked to higher intelligence or potential to perform successfully can cause an organization to potentially lose top-performing candidates. In sum, the level of perceived physical attractiveness of candidates can impact the job opportunities available.

As previously discussed, broad assumptions are formed based on many grouping factors such as age, ethnicity, or gender. Individuals also make assumptions about what factors explain group member behavior. Attribution theories provide various attempts to explain how and why individuals interpret behavior and occurrences and how they form

causal explanations for these observations (Weiner, 1985). Further, in making these causal explanations, people tend to overemphasize the role of personal disposition or internal characteristics, rather than aspects of the situation or external contexts. This phenomenon is known as the fundamental attribution error (Gilbert & Malone, 1995). Additionally, people exhibit the tendency to assume that the behaviors and actions of one out-group member reflect the tendencies of all members of that social group, known as the ultimate attribution error (Pettigrew, 1979). The combination of these two errors demonstrates how groups are stereotyped in a way reflecting the assumption that all out-group members maintain and exhibit the same internal characteristics and behavioral tendencies. This manner of cognitively organizing information and drawing conclusions can influence an individual's behavior and lead to stereotypical opinions, prejudicial actions, and discrimination toward particular social groups.

The phenomena resulting from the aforementioned cognitive errors have been empirically studied in general and in various arenas. Specifically, stereotypes, prejudice, and discrimination have been studied plentifully in the context of employee selection. These studies have focused on discrimination on the basis of gender, ethnicity, appearance, and age, and this differential treatment is considered to be the result of assumptions (e.g., stereotypes, bias) or categorizations made about particular social groups (e.g., women, African Americans). Individuals categorize themselves and others into social groups frequently and without conscious decision. This categorization tends to indicate a favoring of in-group members over out-group members, and fosters the assumption that all members of an out-group are the same. Additionally, judgments on the basis of warmth and competence are made with members of out-groups to determine

the level of competition or threat of these individuals. Through this categorization and grouping of assumed similar characteristics, individuals are able to make generalizations about their social world and make faster decisions. Sometimes social categorizations lead individuals to assume various levels of job-related skills or future potential based on unrelated characteristics such as attractiveness. These generalizations and mental shortcuts can also influence hiring decisions by shifting focus to non-job-related characteristics of applicants rather than critical knowledge, skills, and experiences. While plentiful research has investigated the role of age, gender, ethnicity, and physical appearance on stereotyping and discrimination, a gap exists in one area of growing concern.

Regions and Stereotypes

Individuals may hold some assumptions about the behavior of others based on their gender, ethnicity, age, and physical appearance. Are dispositional and behavioral assumptions also prevalent based on where an individual calls home? Krug and Kulhavy (1973) state, “few notions have had more universal acceptance among Americans than that the character of individuals from various regions of the country is distinctive” (p. 74). Specifically, assumptions about the experiences, intelligence, beliefs, and personalities of the residents hailing from these regions are typical. According to stereotype theory, individuals tend to form overgeneralizations about various groups of people, and these assumptions may or may not be based in real, factual differences. These regional assumptions can be particularly problematic in a hiring scenario, just like the assumptions connected to being older, female, or a member of a minority group.

The region from which an application or résumé hails, and the stereotypes associated with people in that region, can serve a similar biasing purpose as the more commonly discussed characterizations (e.g., gender, ethnicity). Upon meeting people from the West coast, an assumption may be that this individual holds liberal political views and supports the legalization of marijuana use and gay marriage. Similarly, a new acquaintance from a Southern state might trigger thoughts of anti-abortion beliefs, extreme religious practices, and racism. In terms of making hiring decisions, regional stereotypes regarding political views or religious beliefs are usually irrelevant as they are generally unrelated to future work performance. Using these characteristics, which are unrelated to the potential performance on the job, to make hiring decisions is illegal and/or sometimes perceived as unethical and can cause an organization to miss out on competitive candidates. Social experiences can support the existence and prevalence of such regional stereotypes; moreover, some empirical studies provide further support for both the formation of these geography-based assumptions and evidence for actual differences by geographic region (Rentfrow et al., 2013; Rogers & Wood, 2011). While some truth may substantiate the assumptions of regional differences, issues remain in allocating these beliefs to all members of certain groups. For example, while it may be true that Californians are as a whole more liberal, this will not be the case for every single person from the state. The previous section explored the cognitive basis of stereotypes and the various types of evidence available regarding the investigation of stereotypes based on individuals' characteristics. In this section, the discussion will turn to the concept of regions and the potential differences that may exist in the United States by geographic area.

Defining Region

The initial step in this exploration of regional differences and potential stereotypes is to define the concept of region. While a seemingly straightforward task, the literature in this area demonstrates the complexity involved in the definition of a region. The typical, general understanding of a region in the United States is likely that of a geographically-bound area within which individuals of shared values, similar dispositions, and other commonalities reside. It is obvious that regions exist, but what is meant by “region” is still somewhat ambiguous and open to individual interpretation (Jones & Paasi, 2013). More recently in light of a more globalized world, the generally-accepted definition of region has shifted focus from homogeneity and boundaries to a more interactive, social concept (Jones & Paasi, 2013). In very general terms, the definitions of regions in this review tend to include three elements. First, regions are defined as a physical area with boundaries and in certain recognized areas of the country. Second, regions have a function for existing such as economic (e.g., attracting tourists based on a specific culture’s prevalence) or political (e.g., using voting patterns to design campaign efforts). Third, regions are associated with a certain symbolic meaning, a social construct of identity. Another individual cannot define a region for someone because a regional definition has elements of a person’s identity and is a unique construction for everyone. Collectively, this regional identity defines the “us” and the “them” social groups. These three elements will guide the attempt to provide a solid understanding of region as a concept.

First, perhaps the most obvious defining factor of a region is the physical, geographic location and boundaries separating the area from others. Regions are typically

territorially, physically bound in order to maintain an internal, local world (Paasi, 2002). However, the regions in existence today are historically contingent, not naturally or implicitly present. Regions are “not waiting to be discovered, they are our own constructions” (Paasi, 2001, p. 16). Vayrynen (2003) cites a growing interest among those interested in regional collective identity in differentiating between the physical-definitional and the functional-definitional aspects of regions. While the physical territory of a region may be the most easily understood element, it does the least in terms of defining what it is that makes a region a separate entity or defines the area. A region is typically geographically bounded, but regions also typically have a function or offer some utility for their existence:

Second, a region is formed by the function(s) it serves, such as economic, political, cultural, or environmental, to name a few (Vayrynen, 2003). Scott (1998) suggests that regions are the functional building blocks of the entire system of a nation or larger distinctive body. So, regions are important for serving a function as well as serving as a bounded geographic territory. De Lombaerde, Soderbaum, Van Langenhove, and Baert (2010) discuss current debates over what functional commonality is most critical in terms of defining regions. Is it a common economical function, the goal to maintain a profitable, healthy economy in an area most important? Or is it the function of preserving an area’s exceptional history, society, and arts to foster a unique culture most critical? How about a political function for grouping similar voters together for simpler campaigning? Or what about a social function of forming a collective of like-minded

people with similar extracurricular interests? Regardless of which function is deemed most critical, the idea of a region can mean different things in different contexts and is likely not explainable by one, single function.

Third, a region is defined by a sense of identity, involving a distinct ethos, social consciousness, and symbolic meaning when comparing individuals within and outside of the area (Paasi, 2002). A distinction needs to be understood between the identity of a region (what signifies that region as a stand-alone element, such as government-drawn boundaries) and the regional identity (the collective, social consciousness that in-group individuals possess). This element focuses on the abstract, symbolic meaning attached to regional belonging. What is it that forms that understanding of “us” and “them” in terms of region? This regional identity serves to socially categorize individuals into “those who belong and outliers” (Paasi, 2001, p. 17). These categories serve to name and symbolize spaces and groups of people (Paasi, 2009). The concept of identity is not guaranteed to follow distinct spatial patterns, such as territorial boundaries. However, it does hint at a social cohesiveness or a group that is socially integrated together (Paasi, 2003). This identity is formed through both implicit (mental associations) and explicit (values and behaviors) factors (Kitayama, Conway, Pietromonaco, Hyekyung, & Plaut, 2010). Plaut, Markus, and Lachman (2002) state that “a person’s local world is saturated with meanings and implicit messages about what is real, good, proper, and what is the right way to be a person” (p. 161). Each individual forms his or her own, personal definition of a region’s identity, and especially, the region identified as “home” to the individual.

A region is geographic, serves one or more functions, and fosters an identity. The factors that go into defining a region are more complex than simple spatial proximity or

geographical boundaries. Understanding variations in individuals by region can aid in understanding how cultures emerge and influence people (Conway, Ryder, Tweed, & Sokol, 2001). This influence also goes in the other direction. An area's structure and culture influences the values and behaviors of individuals in the region (Rentfrow, Gosling, & Potter, 2008). Research has demonstrated that certain areas of the United States exhibit various commonalities, such as personality, shared values, and behaviors. Individual psychological characteristics can provide some explanatory information for the broader level factors. The discussion will now turn to some of these studies to demonstrate some evidence for perceptions of and actual differences between regions.

Perceptions of Regional Differences

In addition to empirical evidence of geographic differences in the prevalence of certain personality traits, research provides evidence for varying perceptions of regional personality. Rogers and Wood (2011) used self-report personality findings from a previous study to evaluate the accuracy of national perceptions of certain regional dispositions and tendencies. In 2008, Rentfrow and colleagues administered the Big Five Inventory measuring personality characteristics to a representative sample of online participants. These authors then evaluated the prevalence of these five characteristics within the nation. In this study, the personality traits reported by residents within the various regions were compared to common regional stereotypes that prevail in the United States. These researchers asked participants, first, to create their own regions. Then, they were asked to attribute certain personality descriptions to these regions. The results indicate that the participants in this study demonstrated some accuracy in matching the self-reported regional personality, with the exception of conscientiousness distributions.

Participants were most accurate in their perceptions of neuroticism and openness and moderately accurate in their perceptions of agreeableness and extraversion. Perceptions of conscientiousness varied more than the other four characteristics, but in general these findings suggest a kernel of truth in regional stereotypes, in Big Five traits at least.

Another similar study investigated the accuracy of out-group perceptions compared to in-group self-reports of personality and found the opposite result: inaccuracy. Terracciano et al. (2005) created and applied the National Character Scale, which allows in-group members to describe their own culture. Additionally, observer ratings, serving as an out-group measure of culture, were collected and compared to the national character ratings. Perceived character traits by out-group members and average self-report personality traits did not correspond. Self-report measures can lead to questionable data quality due to the potential desire to only report positive aspects of personality. Despite this uncertain accuracy, the authors suggest that these findings indicate that regional stereotypes are not accurate generalizations about common personality characteristics in an area and are unfounded assumptions. These two investigations suggest contrasting implications, one that regional stereotypes have some basis in truth and the other that these assumptions do not correspond to actual differences. While the difference in findings is likely due to methodology, the results shed an interesting light on region-based personality.

Actual Regional Differences

Much research has been performed investigating various personality differences between America's regions and the resulting tangible outcomes, such as economic vitality, voting patterns, and health factors. Rentfrow and colleagues (2013) investigated

the idea that psychological characteristics can serve as a meaningful way to segment the country into regions, beyond segmentation by political affiliation, economic success, or health factors. These authors propose that the relationship between factors such as socioeconomic status or education and regional economic prosperity, voting patterns, or quality of life is influenced by stereotypes and discrimination. State-of-residence information was gathered for a sample of Americans representing all states in the nation, and a Big-Five personality inventory was administered to the same sample. Further, state-level wealth, human capital, innovation, social capital, social tolerance, violence, mobility, conservatism, religiosity, and health behaviors were collected. The results indicate that national differences in personality traits can be categorized into three different regions, and these individual characteristics are related to various state-level social, political, economic, and health factors. Cluster analyses indicate that three categories or personality regions can be formed: friendly and conventional, relaxed and creative, and temperamental and uninhibited. The first cluster of friendly and conventional personalities emerged in the South and in the Great Plains regions. In these areas aggregate levels of extraversion, agreeableness, and conscientiousness are high in comparison to other regions. The general tendency in this area is to be sociable, considerate, dutiful and to value tradition, family, and the status quo. These characteristics relate to low average wealth, low education status, a lack of social tolerance, and decreased economic innovation and migration. Second, along the West coast, in the Rocky Mountains and Sunbelt, individuals exhibit the characteristics depicting the relaxed and creative cluster. This means that people in this area tend to be lower in extraversion, neuroticism, and agreeableness and higher in openness. People in

these regions value open-mindedness, individualism, and happiness, and this translates to very high social tolerance, liberalism, a general health focus, higher average wealth, and economic innovation. The third cluster of temperamental and uninhibited was evident in the Mid-Atlantic States and New England as the population demonstrates low extraversion, agreeableness, and conscientiousness, and very high neuroticism. This group tends to be reserved, aloof, inquisitive, competitive, and passionate with high liberalism and migration rates. These three clusters of personalities provide some evidence for actual differences in disposition by area or region of the United States.

Evidence for differences in personality by geographic area are corroborated in another study of differences in the nation. Similarly, Krug and Kulhavy (1973) researched the trends of personality characteristics that might occur across the United States to explain regional differences. These researchers used a sample of individuals from 36 states that had been administered the 16 PF personality assessment (Cattell, Eber, & Tatsuoka, 1970). The sample was divided into six regions: Northeast, Southeast, Midwest, Western Mountains, Southwest, and West Coast. These divisions were drawn based on US Census Bureau data and with the aim of representing socioeconomic status and races. The analysis of personality differences by these six regions point to three facets or traits of personality that most consequentially and uniquely explain regional differences. The first facet is described as creativity and intelligence and influences regional levels of general productivity. Higher scores were seen in more metropolitan regions, including the West Coast, Midwest, and Northeast. The second facet is described by tough-mindedness, industriousness, and the tendency to trust easily. This facet was found to have the highest clustering in the Midwest region. The third facet refers to

introversion and social isolation with highest levels in the Southwest and Western Mountain regions and lowest in the Midwest and West Coast. The results of this study provide another example of how measured personality characteristics seem to point to real differences between regions of the United States.

In another evaluation of personality differences in the United States, Plaut et al. (2002) investigated how regional personality, quality-of-life indicators, and wellbeing are related. These authors acknowledge that place matters when it comes to quality of life and values regarding self-wellbeing. This research applies the nine regional divisions of the nation used by the Census Bureau, and census data combined with a measure of aggregate level well-being were used to investigate differences across regions. Only five of the nine regions are reported on in their publication. First, the region of New England included the states of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. This region demonstrated high autonomy, physical health, high social well-being, and is very outgoing and curious. Second, the Mountain region is described by environmental mastery, high autonomy, resourcefulness, personal growth, assertiveness, and dominance. Montana, Wyoming, Idaho, Colorado, Utah, Nevada, New Mexico, and Arizona make up this region. Third, the West South Central region is made up of Texas, Oklahoma, Arkansas, and Louisiana and is categorized by a focus on emotion. This region exhibited the highest level of positive affect (and lowest negative affect), high agreeableness and sociability, and is other-focused. Fourth, Minnesota, North Dakota, South Dakota, Nebraska, Iowa, Kansas, and Missouri make up the West North Central region. This area is classified by hard work, egalitarianism, responsibility, and helpfulness. Being average, stoic, and happy with what one has is valued here. Fifth,

the East South Central region finds value in imagination, Southern hospitality, collectivism, and charm. This region demonstrated the worst general health, lowest self-acceptance and social well-being, and high negative affect. Kentucky, Tennessee, Mississippi, and Alabama were the states included in this region for this analysis. Other than just typical personality traits, values and health and well-being tendencies also differentiate regions from one another.

Furthering the discussion on regional differences in both personality and social outcomes, another study provides evidence for differences in job types, social tolerance, religious orientation, and other factors. In empirical research modeling how individual personality can manifest at a geographic level, Rentfrow et al. (2008) provide more evidence for regional differences in personality and in macro-level outcomes. These researchers aimed to map regional personality differences geographically in the United States. The Big Five Inventory was administered to online participants and a variety of data on secondary factors was collected. Population statistics, such as density, income, and ethnicity makeup were collected through the Census Bureau, and state-level crime, health behavior, religiosity, occupational, and mortality statistics were gathered from various sources. States were ranked on each of the five personality traits based on mean levels of the dimensions. The personality dimension levels were then correlated with the various state-level social factors. The results indicate relatively clear regional differences in Big Five personality trait levels and, therefore, differences in secondary characteristics. First, neuroticism seemed to cluster in the Northeast and Southeast regions, and was associated with higher levels of criminal activity, less exercise, lower life expectancy, and inferior coping skills and behavior. Second, higher levels of aggregate extraversion

were seen in the Great Plains, Midwest, and Southeast regions. Higher extroversion levels were linked to more health-oriented behavior and community involvement, such as entertaining guests, attending club meetings, and spending time outside of the home. Third, agreeableness was higher in the Midwest, South Central, and Southeast regions and was associated with religiosity, higher rates of artistic occupations, and lower criminal activity. Fourth, levels of conscientiousness were higher in the Southwest, Midwest, and Southeast regions of the country, and this trait was associated with health-protective behavior, longer life expectancies, and religiosity. Fifth, cluster of higher levels of openness were seen in the New England, Mid-Atlantic, and Pacific areas. Openness was associated with social tolerance, more artistic occupations, and more per capita patents (a measure of innovation). These researchers suggest that these clusters of personality traits, and correlated secondary factors, demonstrate that individual-level personality influences behavior, which eventually influences group behavior and geographic representation of aggregate personality, social norms, and behavioral tendencies.

In addition to the already-discussed personality differences and social, macro-level outcomes, political affiliation measured via voting patterns also provides some insight into geographic differences. Rentfrow, Jost, Gosling, and Potter (2009) also investigated the relationship of aggregate-level personality traits and other characteristics evident in the area. Specifically, this research provided an evaluation of the relationship between state-level personality (in terms of the Big Five personality traits) and voting patterns. The Big Five Inventory data were gathered through a study in which participants were able to participate and complete the assessment online. These participants also were

asked to report the name of the state in which they resided. The authors also gathered each state's percentage of votes for either the Democratic, Republican, or third-party candidate in the 1996, 2000, and 2004 presidential elections. The results indicate that higher levels of conscientiousness were associated with voting Republican and openness levels with voting for the Democratic candidate. Rentfrow and colleagues interpreted these findings as empirical support for the suggestion that individuals tend to cluster in areas in which people share their cultural interests, values, and political beliefs. This idea of people living in areas with others of similar opinions and beliefs leads the discussion to the topic of relocation within the country.

Migration

The clustering of individuals with shared interests, values, and other qualities may provide some push and/or pull mechanisms guiding the migration of individuals around the nation. Creative class economic theory suggests that certain types of individuals cluster in more innovative, accepting, and diverse areas (Florida, 2002). Young professionals, employed in art, media, and technological industries, tend to value cultural diversity, progressive economies, and social tolerance and will migrate toward areas that foster these characteristics. Young, educated individuals provide opportunities for economic growth and increase the human capital of a region (Franklin, 2003). Over one third of migrants in 2003 were between the ages of 24 and 39, and over a quarter of these people were relocating from another state. This group of people is attracted to areas with tolerance, talent, and technology and they tend to cluster in these areas, such as Silicon

Valley in California. This theory is typically discussed as a method to enhance economic development in an area; however, it demonstrates some motivation for why individuals would migrate or select a certain region.

The migration of individuals across the United States plays an influential role in the formation of social dynamics, cultural groupings, and population differences between regions (Silventoinen et al., 2007). “Population change at every geographic level in the United States is strongly influenced by migration...” (Franklin, 2003, p. 1). In summarizing the possible explanations for regional differences, Krug and Kulhavy (1973) propose two hypotheses. First, perhaps individuals of similar interests, cultures, ethnicity, and values tend to move to the same areas. Or, second, maybe a certain area’s culture and demography attracts and retains a certain personality. Rentfrow et al. (2009) suggest three mechanisms by which regional variations are influenced and maintained. First, as suggested by Krug and Kulhavy, self-selection of individuals to a region that will meet their needs plays a role in regional differentiation. Second, repeated social interaction or social influence through local common values, beliefs, and opinions has an effect regional distinction. Third, regional differences are influenced through the environment, such as physical features, activities, or structure that foster the existing attitudes and cultures of the region. These three mechanisms suggest the influences that are aiding in the formation of different regions in the United States.

Even though it speaks to more than just migration, Rentfrow et al. (2008) provide additional context to the understanding of regional identification and how these regions are formed. Rentfrow et al. suggest three different push, pull, or stay factors for regional movement. First, those individuals located in a region with which they do not share

commonalities, and are uninterested in conforming to shared beliefs and values, may choose to relocate to another area. Second, the activities, culture, and personality of a certain region may attract migrants that share similar dispositions. Third, individuals that may not have originally had many commonalities with the general personality of the region may be socialized, conform, or acquire the “normal” traits of that region. This third factor is more of a “stay” factor and plays a larger role in the acculturation of individuals to a group or region. People raised in the South may be considered to be raised “Southernized.” When an outsider relocates to the South, they will go through a similar process of adopting the regional norms. In the regional differentiation and migration literature, it seems that the second of these tends to be the most popular theory to which to attribute the reason for relocation. Self-selection into regions that will satisfy lifestyle desires and bring individuals closer to groups with shared values seems to be a common way national migration is explained (Plaut et al., 2002; Rentfrow et al., 2013).

An individual’s personality also may have some influence on the likelihood of relocation. Jokela (2008) investigated the potential for personality characteristics to predict an individual’s residential mobility between and within states in America. Several thousand participants that were part of the MIDUS made up this longitudinal study sample. The selected participants were administered additional surveys in a follow-up study seven to eleven years after original participation in the MIDUS study. Migration information was gathered by evaluating current state and neighborhood in the original and in the follow-up study and by asking how long each participant lived in his or her current location. The participants were also asked to rate themselves on how well 25 adjectives associated with the big five personality traits described their disposition. For

example, the trait of conscientiousness is associated with adjectives such as organized or responsible. Results of regression analyses indicate that high openness to experience and low levels of agreeableness predicted migration between and within states. Extraversion predicted movement only within states while neuroticism and conscientiousness demonstrated no predictive power. The more surprising finding from this study is that low levels of agreeableness were associated with higher mobility rates. Jokela suggested that individuals with highly agreeable natures form strong relationships with individuals in their communities and are less likely to move. Although this study cannot provide information for migration patterns to or from specific regions, it provides some evidence for a relationship between personality traits and the general tendency to relocate.

The United States Bureau of Labor Statistics provides a variety of demographic and population data collected by the Census Bureau. In addition, and more specifically, migration and residential mobility data is collected through the Current Population Survey (CPS) as part of the Annual Social and Economic Supplement (ASEC). Demographic characteristics of those relocating, the type of move, reasons for migrating, and the rates of movement are gathered. These data can be evaluated by many variables, such as occupation, industry type, job tenure, or presence of children. According to a report created by the Census Bureau for the 2013-2014 year, 35.9 million Americans (11.7%) over a year in age relocated. Of these movers, 11.7 million moved from one county to another and a combined 4.6 million of these intercounty movers relocated over 200 miles from the original location. Further, more intercounty movers (34.8%) stated their reason for relocation was for job-related reasons rather than family-related reasons. Males more commonly than women tended to move for job-related reasons, and

individuals with higher levels of education were also more likely to relocate for job-related reasons. This data provides evidence that migration does occur in America, and a large segment of the population is moving for job-related reasons across large areas of the country.

Actual and perceived regional personality differences, the associated social factors that also vary by regions, and the migration of individuals across these regions are impactful in organizations' employee-selection practices. For many organizations, the applicant pool will likely contain a regionally-diverse population, and assumptions about applicants from these regions can potentially influence hiring decisions. These assumptions could lead to acceptable hiring decisions if they are based in true differences that are specific to that region. A good approach to selection occurs when an applicant possesses the characteristics for which he or she is being judged. If hiring decisions are made based on preference or stereotypical beliefs that are not based on real differences, employee selection becomes problematic. As a hypothetical example, consider that a hiring manager assumes an applicant is unfriendly because he or she is from the Northeast. Friendliness and warmth may be required to exhibit successful job performance, but the applicant may or may not demonstrate a lack of friendliness. Making a hiring decision using only an assumption of unfriendliness based on a regional stereotype would be prejudicial. Further, a hiring decision may be made based only on a person being from the Northeast, without any concern for job-related characteristics. This decision would be considered discriminatory and would pose a variety of potential issues for the organization.

Basing selection decisions on stereotypes and behavioral assumptions puts organizations at risk for issues with efficiency, legality, and ethics. Stereotypes operate as heuristics, or mental shortcuts that can help in decision-making, but heuristics are vulnerable to compromising accuracy for speed. Basing hiring decisions on stereotypes and assumed, rather than real, differences can potentially result in overlooking top candidates and/or hiring less desirable, low performers. In terms of efficiency, hiring the wrong employees or missing out on potential high performers can lead to a loss of productivity, decreased morale, or an overall inability to meet organizational goals. Ideally, employment decisions should be made based on characteristics needed to perform a job successfully. Legal action can follow if hiring choices are made based on likes and dislikes or by assuming an applicant has certain attributes based on membership to a certain group. Clearly, threat of lawsuit would have many negative consequences for an organization's bottom line, public image, and reputation amongst applicants. Ethically, a lack of focus on accuracy negatively impacts fairness and promotes prejudiced decisions. Organizational leaders should concern themselves with the equal treatment of their own employees and the applicants hoping to work for their organization. Applicant perceptions of fairness in the selection process have been connected to more favorable ratings of the experience, intention to accept employment offers, and willingness to recommend the organization to others (Hausknecht, Day, & Thomas, 2004). The perception of fair policies and treatment in organizations is related to higher satisfaction, organizational commitment, higher performance, and lower turnover (Colquitt et al., 2001). Concentrating on creating fair selection practices leading to decisions made with job-relevant information is a key area in which to uphold sound ethical policies.

Primary Hypotheses

Theories and research from the domains of cognitive psychology and social categorization provide a framework by which behavior can be understood. Individuals compare the information from their social worlds to the mental representations that form their expectations for that interaction or situation. These comparisons form heuristics that are helpful in making decisions quickly and preserving cognitive resources for other more cumbersome activities. Regarding social interactions, these mental processes sort the individuals (including the person doing the processing) involved into categories. Social categories separate social interactions into in-groups and out-groups, 'us' and 'them' categories. While all of this subconscious, implicit processing and categorizing occurs to help humans make efficient, faster decisions, the decisions are not guaranteed to be accurate or impartial (although neither is non-heuristic decision-making). The categorizations are often associated with the assignment of attributes and characteristics to the members of these groups. Assuming these characteristics apply to all members of the perceived group and making decisions based on this assumption can lead to inaccurate and problematic outcomes. Stereotypes can lead to discriminatory behaviors, which is troublesome in a hiring situation, regardless of whether the applicant is advantaged or disadvantaged by the stereotype. When organizations are making employee-selection and employee-promotion decisions, basing choices on stereotyped characteristics (in a positive or negative direction) that are unrelated to success on the job is often perceived as unethical and may lead to legal issues. Employment discrimination based on gender, age, weight, appearance, and ethnicity has been researched extensively;

however, research is lacking regarding how an applicant's geographic location may influence selection decisions. Therefore, I pose the 17 hypotheses.

Hypotheses Regarding Overgeneralizing Personality Attributes at a Regional Level

Implicit assumptions and categories that are evident for such factors as gender or ethnicity also exist for regions of the United States. Note that the empirical studies that review differences between regions do not use a common way of dividing up the country; due to this lack of a benchmark to follow, the simplest division of the country will be applied in this study, and thus four broad regions will be used to summarize the empirical research and form specific hypotheses. Studies have demonstrated both perceived and actual regional differences in attributes in various areas of the country (e.g., Rentfrow et al., 2013; Rogers & Wood, 2011). First, Rentfrow et al. (2013) administered the Big-Five personality inventory and found that in the South, individuals tend to be higher in extraversion, agreeableness, and conscientiousness, indicating that people in the region tend to be more sociable, friendly, conventional, considerate, and family-oriented. In terms of quality of life and other social indicators, the South is associated with higher levels of positive affect, higher neuroticism, poorer coping skills, and lower social tolerance (Plaut et al., 2002; Rentfrow et al., 2013). Accordingly, I proposed Hypothesis 1.

Hypothesis 1

Individuals will attribute higher levels of friendliness to individuals in the South than in the other three regions in the country.

Second, Rentfrow et al. (2013) found that individuals in the Northeast were lower in extraversion, agreeableness, and conscientiousness, yet higher in neuroticism. People in this region tend to be more aloof or cold, competitive, and inquisitive. Accordingly, I proposed Hypothesis 2.

Hypothesis 2

Individuals will attribute higher levels of coldness to individuals in the Northeast than in the other three regions in the country.

Third, for individuals in the Midwest, Krug and Kulhavy (1973) found that traits such as tough-mindedness, industriousness, and trustiness were prevalent. Plaut et al. (2002) suggest that individuals in this region are resourceful, assertive, autonomous, responsible, and focused on hard work. Also, people in the midwestern section of the nation were found to be higher in agreeableness and extraversion. Therefore, I proposed Hypotheses 3, 4, and 5.

Hypothesis 3

Individuals will attribute higher tendencies to trust easily to those in the Midwest than in the other three regions in the country.

Hypothesis 4

Individuals will attribute higher levels of industriousness to individuals in the Midwest than in the other three regions in the country.

Hypothesis 5

Individuals will attribute higher levels of trustworthiness to individuals in the Midwest than in the other three regions in the country.

Fourth, Rentrow and colleagues (2013) found that people on the western coast of the country are higher in openness to experience, pointing to more individualism, open-mindedness, social tolerance, and economic innovation. Krug and Kulhavy (1973), following administration of the 16PF (Cattell et al., 1970), attributed higher levels of creativity to individuals in the northeast section of the country. Rentfrow et al. (2008) found that the higher scores in openness were related to more artistic occupations and more patents per capita. Based on these findings, I proposed Hypotheses 6 and 7.

Hypothesis 6

Individuals will attribute higher levels of creativity to individuals in the West than in the other three regions in the country.

Hypothesis 7

Individuals will attribute higher levels of open-mindedness to individuals in the West than in the other three regions in the country.

Hypotheses Regarding Overgeneralizing Intelligence Levels at a Regional Level

Regional distinctions in intelligence seem to operate differently from those in personality attributes. Like personality characteristics, some research has pointed to the occurrence of both actual and perceived differences in intelligence by region. Krug and Kulhavy (1973) used data available following an administration of the 16PF personality inventory (Cattell et al., 1970) to over 5,000 participants as part of the inventory's national standardization sample. Using discriminant analysis to parse out factors to explain regional differences, the authors found that one factor was more prevalent in the northeastern and western regions of the country. This factor, referred to by the

researchers as intelligence, is predominantly based upon the imaginative and forthright scales of the 16PF. The researchers, while qualifying this as an intelligence factor, admit that this pattern may not be outright intelligence, but aspects of creativity. Additionally, Plaut et al. (2002) evaluated regional variation in well-being and personality characteristics in the MIDUS survey results and US Census data. These researchers, considering openness to experience as a proxy for intelligence, found that participants in the southern regions considered themselves much lower on this construct than individuals in other regions. Lastly, Rentfrow and colleagues (2013) evaluated regional differences in terms of personality and social characteristics, including educational attainment. The results of this analysis indicate that individuals in the South have lower levels of education. Rindermann (2008) found that level of education is associated with the intelligence of an area (e.g., IQ, achievement tests), meaning that lower education levels in the South will likely lead to perceptions of lower intelligence in the region. While none of these researchers directly measured intelligence or the perception of intelligence, the proxies evaluated and the measures used lead to a hypothesis that perceptions of intelligence may vary according to region of the United States. Therefore, I proposed Hypotheses 8, 9, and 10 regarding perceived intelligence by region.

Hypothesis 8

Individuals will attribute lower levels of intelligence to individuals in the South than to those in the Midwest.

Hypothesis 9

Individuals will attribute higher levels of intelligence to individuals in the Northeast than to those in the Midwest.

Hypothesis 10

Individuals will attribute higher levels of intelligence to individuals in the West than to those in the Midwest.

Due to a lack of research evidence indicating stereotypical intelligence perceptions about residents of the Midwest, the perceptions of intelligence in this region are assumed to be neutral.

Hypotheses Regarding Differences in Likelihood to Hire by Region

Three situations may occur when it comes to organizational employee selection. One, a perfect, ironclad selection practice may be implemented in the organization in which perfectly valid assessments are used to make choices completely objectively. Two, hiring managers may use only irrelevant factors such as personal preference or appearance to select employees, a completely invalid form of selection. And three, the most realistic practice may prevail in which error eventually enters the selection decision, regardless of a strict, validated protocol (e.g., applicants are administered an assessment but the supervisor makes the final decision based on a personal bias against male applicants). In this case as in the one prior to it, flawed information can enter the scenario either through stereotype-based assessment results or through flawed individual biases of the hiring decision-maker. When it comes to employee selection, much research and awareness surrounds the prevalence of biased decisions based on such characteristics as gender, ethnicity, or appearance. In addition to these perceived differences between social categories that can then translate into biased decisions, regional differences in prevalent personality characteristics and social outcomes (e.g., quality of life indicators, political

affiliation) exist (Rentfrow et al., 2013). Perceptions of variation in attributes by region also exist, not necessarily based in fact (Terracciano et al., 2005). These personality characteristics may help or hinder an individual in achieving success on the job; however, assuming personality based upon only an applicant's location is ill advised. Depending on the job in question, a region's stereotypical personality may influence the selection decisions made. First, customer service representative positions require a large percentage of contact with others and a consistent search for how to help others (National Center for O*NET Development). The formation of social relationships and these characteristics are similar to those stereotyped to the South (e.g., friendliness, extraversion); therefore, I proposed Hypothesis 11.

Hypothesis 11

Candidates from the South will be rated more hireable for customer-oriented positions (e.g., customer service representative).

Second, software developers work mainly with information and computers with little required social interactions. This job does not necessarily require friendliness or the formation of social relationships, but it does typically require higher levels of critical thinking, the ability to solve complex problems and higher educational achievement (National Center for O*NET Development). The typical characteristics of this position are aligned with those commonly attributed to individuals in the Northeast. Based on this information, I formulated Hypothesis 12.

Hypothesis 12

Candidates from the Northeast will be rated more hireable for jobs of an analytical, less-social nature (e.g., software developer).

Third, construction leaders are expected to plan and coordinate a team and inspect project progress. Individuals in this role are expected to be responsible for the accomplishment of tasks and to make decisions. This role requires the formation of more business-focused or transactional relationships and high levels of integrity and independence, which is similar to the qualities associated with individuals in the Midwest. Hypothesis 13 was formulated regarding selection preferences.

Hypothesis 13

Candidates from the Midwest will be rated more hireable for jobs requiring unwavering dependability and skill at building and maintaining work relationships (e.g., construction leader).

Fourth, a creative-director position requires originality, creative thinking, innovation, and a desire to achieve (National Center for O*NET Development). The characteristics of people holding these positions align closely to the West Coast stereotypes of open-mindedness and higher levels of creativity, so I proposed Hypothesis 14.

Hypothesis 14

Candidates from the West will be considered more hireable for jobs of a relaxed, creative nature requiring innovation and broad-minded thinking (e.g., creative director).

Taking these perceived and evidenced regional differences in personality and social trends together, higher levels of intelligence are associated in the northeastern and western regions of the nation. Southerners are perceived to have lower levels of intelligence, while little mention of perceived intelligence is made for individuals in the

Midwest. Generally, hiring decisions favor more intelligent individuals (or those perceived to be more intelligent). For this reason, I proposed Hypotheses 15, 16, and 17.

Hypothesis 15

Individuals in the Northeast will be rated more hireable in general than individuals in the Midwest.

Hypothesis 16

Individuals in the West will be rated more hireable in general than individuals in the Midwest.

Hypothesis 17

Individuals in the South will be rated less hireable in general than individuals in the Midwest.

CHAPTER TWO

METHOD

This study tested the hypotheses using data from two different samples. The first sample was drawn widely from individuals of diverse employment backgrounds; I asked these individuals to give their perceptions of regional characteristics by rating the prevalence of various attributes in the four designated regions of the country. The second sample included only individuals responsible for making hiring decisions, and they were asked to review an application blank and rate the candidate on a hireability scale. I judged that two samples were necessary to avoid biasing the results; if one sample was used for both pieces of this study, the first task might have given away the research question for the second task.

Participants

Group One

This first sample consisted of 130 participants from a variety of backgrounds across the United States recruited using Amazon Mechanical Turk. MTurk is an online tool available for users to gather data by compensating participants for completion of posted tasks. This tool provides a quick, low cost participant pool with quality management structures built in, such as, pre-set qualifications or requirements for prior MTurk performance (e.g., successful completion percentage). Participants were able to

search for and opt into participation in this study. Research participants from this system have been demonstrated to produce responses of equal, if not better, quality than convenience samples (Casler, Bickel, & Hackett, 2013). I did not include any qualifications for participation or select only a specific tier of participants from MTurk.

Group Two

The second group of participants consisted of 182 participants in a position responsible for making personnel decisions (e.g., promotions, hiring) from a variety of backgrounds and in a variety of industries across the United States. This group was also recruited using Amazon Mechanical Turk, and participants could search for and opt into participation in this study. Prior to accepting the Human Intelligence Task (MTurk's name for a user's survey), participants were asked if they are involved in hiring decisions. I did not include any qualifications for participation or select only a specific tier of participants from MTurk beyond asking this preliminary question.

Instruments

Perceived Attributes

The International Personality Item Pool (IPIP) is an open-source collection of personality scales and items (Goldberg, 1999). The 300-item IPIP form of the NEO Personality Inventory provides the IPIP user with 10-item versions of each of the subscales (Costa & McCrae, 1992). Johnson (2014) offers a psychometrically tested, 120-item version of the IPIP NEO with each subscale using only four items. Various scales from this research, providing items for measuring the attributes of interest in this study, were used. All scales were scored on a sliding scale of 1 to 100 with a lower score indicating a lower attribute level. This scale was used to offer a wider range of response

options and variation (Schraw & Dennison, 1994). Some research criticizes Likert-type response scales for offering categorical response options, rather than interval responses (Cummins & Gullone, 2000; Treiblmaier & Filzmoser, 2009). In his guide for creating self-efficacy scales, Bandura (2006) suggests avoiding scales with only a few response options as they can be less sensitive, omitting differentiating information about participants.

The regional reliability of each attribute scale was assessed using coefficient alpha, a measure of the average of the correlations between the items in the scale (e.g., how well the items hang together). This value can range from 0 to 1, with higher values indicating a more consistent relationship between items, and acceptable alpha values falling higher than .70 (Kline, 1999). I present the regional reliabilities, rather than an overall scale reliability, as the same items were administered essentially four times. For example, participants were asked to score the same friendliness item for each of the four regions. An overall scale alpha would provide an inflated reliability coefficient; therefore, the scale reliabilities are reported by region. These alphas, along with the scale means and standard deviations, are reported in Table 1. Attributes measured include the following:

Friendliness

The attribute of friendliness refers to the propensity to engage in outgoing, gregarious, and agreeable behaviors (Barrick and Mount, 1991). Table 1 presents the Cronbach alphas for the scale split by region. Sample items in this four-item scale included “feel comfortable around others” and “make friends easily.” See Appendix B for a full list of items.

Table 1

Descriptive Statistics and Internal Consistency by Region

Region	Scale	M	SD	α
Northeast	Friendliness	204.42	78.21	0.79
	Intelligence	260.02	72.80	0.80
	Altruism	194.86	85.84	0.85
	Trust	173.43	88.10	0.90
	Achievement Striving	266.45	66.54	0.74
	Morality	169.97	76.58	0.90
	Open-Mindedness	256.63	64.90	0.55
	Creativity	529.31	130.44	0.86
South	Friendliness	265.38	65.97	0.74
	Intelligence	176.84	76.93	0.82
	Altruism	266.34	70.57	0.76
	Trust	240.49	71.58	0.79
	Achievement Striving	235.90	81.48	0.82
	Morality	190.14	73.21	0.91
	Open-Mindedness	157.55	61.74	0.53
	Creativity	381.98	145.32	0.88
Midwest	Friendliness	241.42	65.19	0.76
	Intelligence	203.40	69.19	0.82
	Altruism	253.27	68.29	0.78
	Trust	236.17	68.51	0.82
	Achievement Striving	266.87	68.44	0.77
	Morality	197.23	67.07	0.92
	Open-Mindedness	183.25	59.67	0.53
	Creativity	424.78	126.73	0.85
West	Friendliness	242.64	65.50	0.73
	Intelligence	241.92	69.83	0.76
	Altruism	223.85	69.08	0.78
	Trust	209.04	63.48	0.77
	Achievement Striving	244.80	65.04	0.75
	Morality	175.32	70.88	0.89
	Open-Mindedness	259.07	57.53	0.49
	Creativity	505.28	124.76	0.84

Note: Total $n = 520$ for each scale, $n = 130$ per region

Perceived Intelligence

This attribute refers to the perceived level of knowledge and education the individuals in a particular region are assumed to hold. In general, how smart are they? The intellect scale was selected for this study. Table 1 presents the Cronbach alphas for the scale split by region. Sample items in this four-item scale included “have a rich vocabulary” and “avoid philosophical discussions (reverse-scored).” See Appendix B for a full list of items.

Coldness

This attribute refers to the propensity to engage in unfriendly and unemotional behavior that signals that an individual is unapproachable (Asch, 1946). The altruism scale was selected on the shortened version of the IPIP NEO to represent this attribute, and Table 1 presents the Cronbach alphas for the scale split by region. Example items in this four-item scale included “am indifferent to the feelings of others” and “take no time for others.” See Appendix B for a full list of items.

Easily Trusting

The tendency to be easily trusting refers to a predisposition to be gullible or naïve (Rotter, 1967). Table 1 presents the Cronbach alphas for the scale split by region. Sample items in this four-item scale included “trust what people say” and “trust others.” See Appendix B for a full list of items.

Industriousness

This attribute refers to the propensity to engage in tenacious, hard-working, and determined behavior (Johnson, 2014). The achievement-striving subscale of the shortened IPIP NEO or was selected for use in this study, and Table 1 presents the

Cronbach alphas for the scale split by region. Example items in this four-item scale included “do more than what is expected” and “work hard.” See Appendix B for a full list of items.

Trustworthiness

This attribute refers to the propensity to be truthful, sincere behavior that does not draw questioning of one’s integrity (Priester & Petty, 2003). The morality subscale scale was selected on the shortened IPIP NEO to represent this attribute. Table 1 presents the Cronbach alphas for the scale split by region. Example items in this four-item scale included “cheat to get ahead” (reverse-scored) and “take advantage of others” (reverse-scored). See Appendix B for a full list of items.

Open-Mindedness

The attribute of open-mindedness refers to the propensity to be open to new experiences, to be generally accepting of new and different ideas, and to be socially tolerant (Stanovich and West, 1997). Table 1 presents the Cronbach alphas for the scale split by region. This alpha value falls within the unacceptable range; however, removing participants or items did not improve the scale’s alpha. Johnson (2014) reports an average alpha of 0.54 for the items in this scale, which is similar to the results in my data. The four items used in this scale also seem to be measuring different aspects of open-mindedness (i.e., imagination, liberalism, and artistic interests). This may be contributing to a lower than ideal reliability. For these reasons, I went forward with the study as normal, keeping this in mind as a limitation. Sample items in this 10-item scale included “enjoy hearing new ideas” and “love to think up new ways of doing things.” For this

study, four unique items from across the subscales of the domain were used. See Appendix B for a full list of items.

Creativity

The attribute of creativity refers to the propensity to think more broadly and imaginatively to produce novel ideas and ways of accomplishing tasks (Csikszentmihalyi, 1996). Table 1 presents the Cronbach alphas for the scale split by region. Sample items in this 10-item scale included “like to solve complex problems” and “believe in the importance of art.” See Appendix B for a full list of items.

Materials

Application Blanks

Four job positions were included in Hypotheses 11 through 14: customer service representative, software developer, construction leader, or creative director. For each of these positions, four application blanks were created to plausibly represent individuals applying for the job. Information on the application blanks included first initial, last name, current location (street address, city, state), phone number, and the position sought. On each of the four application blanks for the position, the contact address and the location of current job were manipulated to fall within one of the four regions. All other factors remained functionally equivalent, meaning that they were not identical but close in terms of all other information provided on the application. Names were randomly chosen from the top five most common first and last names in the United States (Lahey, 2008). See Appendix B for several sample application blanks.

Hireability

The participants in Group Two indicated how likely they would be to hire a candidate based on the review of the application blank using a sliding scale of 1 to 100 with a lower score indicating a lower agreement with the item. Sample items in this 18-item scale included “this is a very strong candidate for the position” and “I would choose to interview the applicant for the job.” See Appendix B for full scale used in (Hoyt, 2012). Seven items from this full scale were used in this study. I needed an indication of how preferable participants found a certain candidate; therefore, I selected several items from Hoyt (2012) to use in my study. While this was done to shorten the items required for participants to complete, prior analyses on the psychometric properties of these items had not been performed. Perhaps it would have been a better choice to use the complete scale of items. However, to ensure the items used in the scale in this study were measuring hireability, I conducted a confirmatory factor analysis of the scale split by position (See Table 2). This analysis indicated adequate fit.

Table 2

Hireability Scale Fit Indices

Position	CFI	RMSEA	SRMR
CSR	0.98	0.10	0.03
Soft	0.96	0.15	0.03
Creat	0.96	0.13	0.03
Const	0.96	0.08	0.03

Note. All fit indices exhibited acceptable fit based on the cut offs described by Hu and Bentler (1999) except for the RMSEA.

Low sample sizes and models with a small number of degrees of freedom artificially inflate RMSEA

(Kenny, Kaniskan & McCoach, 2014). RMSEA was reported for the sake of thoroughness)

Procedure

Group One

Participants were asked to take an online questionnaire taking approximately 20 minutes. Participation in this study was voluntary, and the results were sent straight to the researcher. Participants were asked to rate the regions of the United States on various attributes. For the purposes of this study, the nation was divided into four regions: the South, the Northeast, the Midwest, and the West Coast. Participants were asked to rate a specific region's population on a sliding scale of 1 to 100 on a specific characteristic (e.g., friendliness). Participants were able to search for and opt into participation in this study. Barger, Behrend, Sharek, and Sinar (2011) addressed the difficult decision of payment for Mechanical Turk participants. These researchers cited a range of as high as \$1 per 10 minutes or as low as \$.50 per hour of work. Due to the minimal time and resources required for completing this task, participants were paid \$.50 upon completion.

Following completion of the previous items, a map indicating the four regions used in this study was displayed and participants were asked to indicate in which region they reside and with which region they most identify. Participants were asked "In which region have you spent the majority of your adult life?" and "Which region do you most identify as home?" They then selected one of the four regions as their answer.

Group Two

Participants could search for and opt in to participate in the research and were asked to indicate if they are involved in hiring decision-making in their current position. The participants in Group Two were also paid \$.50 upon completion of this task.

This group of participants were first asked to review one of four job descriptions: customer service representative, software developer, construction leader, or creative director. This group was then asked to review an application blank for the previous position and indicate how hireable they found the candidate based on the application blank's information. This was repeated for all four positions. The application blanks were created to be specific to a position, requiring a specific set of characteristics (e.g., a customer service representative position requires friendliness).

Following completion of the previous items, participants were asked to indicate in which region they reside, with which they most identify, and if they have worked as any of the four positions involved in this study. Participants were asked "In which region have you spent the majority of your adult life?" and "Which region do you most identify as home?" They then selected one of the four regions as their answer. Additionally, the participant was asked, "Please indicate which positions, if any, in which you have been or are currently employed." They were asked to select any of the four positions in which they have worked or are working. Completion of this exercise required approximately 20 minutes.

The percentages of participants from each region in both samples is reported in Table 3.

Table 3

Regional Percentages in Final Samples

Part A Region ($N = 130$)	Percentage
Northeast	33.08%
South	26.15%
Midwest	22.31%
West	13.85%
Other	4.62%
Part B Region ($N = 182$)	Percentage
Northeast	29.12%
South	26.37%
Midwest	16.48%
West	18.68%
Other	9.34%

CHAPTER THREE

RESULTS

I performed a series of preliminary analyses to screen the data for missing cases prior to conducting the analyses addressing hypotheses and research questions.

Assumptions of Analyses of Variance (ANOVA)

An ANOVA was performed to test each of the 17 hypotheses. Individual ANOVA were performed rather than a single multivariate ANOVA (MANOVA) that would incorporate all measured variables in one test and remove the need for any corrections in significance values. However, MANOVA is ideally used when a researcher is interested in how the outcome variables in combination might distinguish participants. Field (2009) states that all variables should be tested in a MANOVA only when a theoretical reason. I did not expect that a given region's score on one attribute (e.g., South friendliness score) would relate to another regional attribute score (e.g., South altruism score). The same strategy existed for regional hireability by position. Therefore, I applied individual ANOVA tests in this study. After preliminary data cleaning and removal of cases with missing data ($n = 39$ cases in the first part and $n = 46$ cases in the second part of the study), I checked the assumptions of homogeneity of variance using Levene's tests and normality using the Shapiro-Wilk test.

Homogeneity of Variance

This assumption refers to how equal the variance is throughout the data sample and is tested using Levene's test. If this test is significant, the assumption of homogeneity of variance is violated. I tested this assumption for each ANOVA run in this study (eight in Part A and five in Part B). Out of all of the ANOVA run in Part A, one Levene's test was significant; for trust, the variances were significantly different in the groups $F(3, 516) = 7.10, p < .01$. This means that for all of the attributes, excluding trust, the variances between the study groups were equal. Since ANOVA tests are robust to violations of this assumption, especially when group sizes are equal (as they are in this study), I moved forward with the research and did not alter my data to correct this violation (Budescu, 1982, Budescu & Appelbaum, 1981, Glass, Peckham, & Sanders, 1972). Table 4 presents the results of the Levene's test for each ANOVA in Part A of this study.

Table 4

Part A ANOVA Homogeneity of Variance

Scale	Levene Statistic	df1	df2	Sig.
Friendliness	1.065	3	516	.364
Altruism	2.333	3	516	.073
Trust	7.097	3	516	.000
Achievement Striving	1.579	3	516	.193
Morality	0.685	3	516	.562
Open-Mindedness	1.219	3	516	.302
Creativity	1.434	3	516	.232
Intelligence	2.546	3	516	.055

Note: p -values significant at $< .05$

For each ANOVA run in Part B, no Levene's tests for homogeneity of variance was significant, indicating no violations of this assumption. Table 5 presents the results of these tests for Part B.

Table 5

Part B ANOVA Homogeneity of Variance

Position	Levene Statistic	df1	df2	Sig.
Customer Service Rep	1.522	3	173	.211
Software Developer	1.191	3	173	.315
Construction Leader	1.634	3	173	.183
Creative Director	2.267	3	173	.082

Note: p-values significant at $< .05$

Normality

This assumption refers to the distribution of the data and is tested using the Shapiro-Wilk test. If this test is significant, the data are not normally distributed and the assumption of normality is violated. For ANOVA, researchers should test normality for each factor, meaning I tested the normality of the data for each of the four regions. I tested this assumption for each level of each ANOVA run in this study (32 in Part A and 20 in Part B). Appendix D presents the results of Shapiro-Wilk tests in this study. According to the results of the normality tests, the assumption of normality was violated several times in this study. I chose not to transform or alter the data to correct for this violation for several reasons. First, when group sizes are equal, ANOVA are robust to violations of normality assumptions (Donaldson, 1968; Glass et al., 1972; Lunney, 1970). Second, researchers have demonstrated that tests of normality can be very dependent on

sample size and have suggested less reliance on the results presented by these tests (Ahad, Yin, Othman, & Yaacob, 2011). Further, the larger a sample size gets, the easier it becomes to reject the null hypothesis when using normality tests.

Outliers

The two sets of data had several univariate and multivariate outliers. I defined a univariate outlier as a score falling outside of three standard deviations from the mean in each group. In the first part of the study, $n = 4$ participants were identified as outliers and $n = 3$ in the second part of the study. I used Mahalanobis distance to identify multivariate outliers (MVOs). This test in SPSS evaluates the distance of a participant's response from the means of all of the predictor variables and provides the researcher with a new variable, Mahalanobis distance (Field, 2009). Running outlier analyses on this new variable provides a value of this new variable that beyond which scores are considered MVOs. In the first part of the study, participants with a distance value greater than 22 were considered MVOs and $n = 18$ participants were identified as multivariate outliers. In the second part of the study, participants with a distance value of 11.5 were considered MVOs, and $n = 11$ participants were considered outlying. I chose not to remove these outliers for a few reasons. First, removal of each of these outliers did not influence the assumptions or significance testing within the models. Second, my preliminary data cleaning involved removing any participants with evident data errors or careless responding (e.g., all responses were the same or zero). Third, I wanted to preserve my sample sizes in each group and removing outliers would decrease my available sample. Fourth, in investigating the extreme values identified as outlying responses, the values seem to represent a large range rather than problematic responses. Fifth, issues may arise

with interpreting transformed data sets. For example, it would be difficult to define the logarithmic value of a personality characteristic (Tabachnick & Fidell, 2007). For these reasons, I did not remove any outliers and moved forward with the analyses.

Perceived Attributes of Members of Regions (Part A)

I ran several ANOVA to test Hypotheses 1 through 7. I used these ANOVA to examine whether participants attributed certain characteristics to individuals in one region significantly more than they did to individuals in the other three regions. Multiple ANOVA were used rather than one MANOVA due to a lack of a theorized relationship between the independent variables (Field, 2009). The independent variables were the four regions of interest and the dependent variables were the levels of each attribute (1 to 100 with higher values indicating higher levels of the attribute) for each of the four regions. I examined significance statistics and reported effect sizes (partial η^2) in the paragraphs that follow. Cohen (1988) suggested the following guidelines for effect sizes: 0.01, 0.059, and 0.138 are small, medium, and large, respectively. I used *post hoc* comparisons applying the Tukey HSD test to evaluate differences in perceived levels of attributes that may differ by region. Using multiple ANOVA can lead to an inflation of Type-I error resulting significant findings when they are not truly a result of the study's manipulation (Field, 2009). When performing statistical analyses, using a .05 acceptable level of significance would mean a comparison has a 5% chance of producing significant results when they do not actually exist, or a 95% chance that the significance is actual. When performing multiple comparisons using the same group, this 5% chance of error occurs in each test, inflating the error rate across the tests. Therefore, a Bonferroni correction was applied to the significance tests for these ANOVA by dividing the generally accepted

level of acceptance for alpha ($\alpha = .05$) by the number of comparisons (I have $n = 8$ comparisons in this study). This means that to achieve significance, p -values must be equal to or less than $p = .00625$.

Hypothesis 1

Regions differed to a statistically significant degree in levels of assumed friendliness as determined by a one-way ANOVA, $F(3, 516) = 17.40, p < .001$, partial $\eta^2 = .09$. Attributed levels of friendliness were significantly higher in the South ($M = 265.38, SD = 66.00$) than in the Northeast Northeast ($M = 204.42, SD = 78.21$) as demonstrated using a Tukey post-hoc test. No differences were found between the South and Midwest ($M = 241.20, SD = 65.19$) or West ($M = 242.64, SD = 65.50$). Table 6 presents the results of these analyses.

Table 6

Regional Mean Differences in Personality Ratings

Scale	Reference Region	Comparison Region	M Difference	<i>p</i>
Friendliness	South	Northeast	60.95	0.000
		Midwest	24.18	0.029
		West	22.74	0.048
Altruism	Northeast	South	-71.48	0.000
		Midwest	-58.41	0.000
		West	-28.99	0.009
Trust	Midwest	Northeast	62.74	0.000
		South	-4.32	0.965
		West	27.13	0.016
Achievement Striving	Midwest	Northeast	0.42	1.000
		South	30.97	0.003
		West	22.07	0.058
Morality	Midwest	Northeast	27.26	0.013
		South	7.09	0.857
		West	21.91	0.069
Creativity	West	Northeast	-24.02	0.459
		South	123.3	0.000
		Midwest	80.51	0.000
Open-Mindedness	West	Northeast	2.44	0.988
		South	101.52	0.000
		Midwest	75.82	0.000

Note: *p*-values significant at $< .00625$

Hypothesis 2

Regions differed to a statistically significant degree between regions in levels of assumed coldness (measured by an altruism scale) as determined by a one-way ANOVA, $F(3, 516) = 24.27, p < .001$, partial $\eta^2 = .12$). A Tukey post-hoc test revealed that the levels of altruism assigned were significantly lower in the Northeast ($M = 194.86$, $SD = 85.84$) than in the South ($M = 266.34$, $SD = 70.57$) and Midwest ($M = 253.27$, $SD = 68.29$). No significant differences were found between the Northeast and West ($M = 223.85$, $SD = 69.08$). Table 6 presents the results of these analyses.

Hypothesis 3

Regions differed to a statistically significant degree in level of assumed tendencies to trust easily as determined by a one-way ANOVA, $F(3, 516) = 22.95$, $p < .001$, partial $\eta^2 = .12$). The attributed trusting tendency levels were significantly higher in the Midwest ($M = 236.17$, $SD = 68.51$) than in the Northeast ($M = 173.43$, $SD = 88.10$) as demonstrated by a Tukey post-hoc test. I found no statistically significant difference between the Midwest and the South ($p = .97$) or the Midwest and the West ($p = .02$). Table 6 presents the results of these analyses.

Hypothesis 4

Regions differed to a statically significant degree in level of assumed industriousness (measured using the achievement-striving scale) as determined by a one-way ANOVA, $F(3, 516) = 6.35$, $p < .001$, partial $\eta^2 = .04$). The attributed industriousness levels were significantly higher in the Midwest ($M = 266.87$, $SD = 68.40$) than in the South ($M = 235.90$, $SD = 81.48$) as demonstrated by a Tukey post-hoc test. I did not find a statistically significant difference between the Midwest and the Northeast ($p = 1.00$) and West ($p = .058$). Table 6 presents the results of these analyses.

Hypothesis 5

Regions did not differ to a statistically significant degree between regions in level of assumed trustworthiness (measured using the morality scale) as determined by a one-way ANOVA, $F(3, 516) = 4.02$, $p = .008$, partial $\eta^2 = .02$). I did not perform any post-hoc analyses due to this lack of significance. Table 6 presents the results of these analyses.

Hypothesis 6

Regions differed to a statistically significant degree in level of assumed creativity as determined by a one-way ANOVA, $F(3, 516) = 35.24, p < .001$, partial $\eta^2 = .17$). The attributed creativity levels were significantly higher in the West ($M = 505.28, SD = 124.76$) than in the South ($M = 381.98, SD = 145.32$) and Midwest ($M = 424.78, SD = 126.73$) as demonstrated by a Tukey post-hoc test. I found no statistically significant difference between the West and the Northeast ($p = .46$) region. Table 6 presents the results of these analyses.

Hypothesis 7

Regions differed to a statistically significant degree in level of assumed open-mindedness as determined by a one-way ANOVA, $F(3, 516) = 92.89, p < .001$, partial $\eta^2 = .35$). The attributed open-mindedness levels were significantly higher in the West ($M = 259.07, SD = 57.53$) than in the South ($M = 157.55, SD = 61.74$) and Midwest ($M = 183.25, SD = 59.67$) as demonstrated by a Tukey post-hoc test. I found no statistically significant difference between the West and the Northeast ($p = .99$) region. Table 6 presents the results of these analyses.

Perceived Intelligence of Members of Regions

Hypotheses 8 through 10

One ANOVA tested Hypotheses 8 through 10. This ANOVA examined whether participants attributed intelligence to individuals in one region significantly more or less than to individuals in the neutral Midwest region. I hypothesized that participants would attribute higher levels of intelligence to individuals from the Northeast and to the West regions, while attributing lower levels of intelligence to individuals from the South, all in

comparison to the neutral Midwest region. The independent variable was region and the dependent variables were the levels of perceived intelligence (on a scale of 1 to 100) for each of the four regions. I examined significance statistics and report effect sizes (partial η^2). I evaluated differences in perceived levels of intelligence using the Tukey post-hoc test.

Regions differed to a statistically significant degree in level of assumed intelligence as determined by a one-way ANOVA, $F(3, 516) = 35.02$, $p < .001$, partial $\eta^2 = .17$). Attributed intelligence levels were significantly higher in the Northeast ($M = 260.02$, $SD = 72.80$) and West ($M = 241.92$, $SD = 69.83$) than the Midwest ($M = 203.40$, $SD = 69.19$) as revealed using a Tukey post hoc test. No significant differences were found for attributed intelligence levels between the South ($M = 176.84$, $SD = 76.93$) and Midwest ($M = 203.40$, $SD = 69.19$) region. Table 7 presents the results of these analyses.

Table 7

Regional Mean Differences in Intelligence Ratings

Scale	Reference Region	Comparison Region	M Difference	<i>p</i>
Intelligence	Midwest	Northeast	-56.62	0.000
		South	26.56	0.017
		West	-38.52	0.000

Note: *p*-values significant at $< .00625$

Part A Summary

In order to clarify and summarize both the hypothesized and significant results from Part A, I created Table 8. The reader should move down the columns, rather than across the rows. This figure depicts each attribute in the columns with the regions on the

rows, and for each attribute the comparison region is bolded. The letters indicate if the region was expected to be higher or lower than the comparison region and asterisks indicate significant findings.

Table 8
Summary of Part A Hypotheses

Region	Friendliness	Altruism	Trust	Achvmt_Strvg	Morality	Open - Minded	Creativity	Intelligence
South	H	H*	L	L*	L	L*	L*	L
Northeast	L*	L	L*	L	L	L	L	H*
Midwest	L	H*	H	H	H	L*	L*	N
West	L	H	L	L	L	H	H	H*

Note: Comparison region is bolded. H = higher; L = lower; N = neutral.

*Significant findings

Differences in Hireability (Part B)

Hypotheses 11 through 14

Several ANOVA were used to test Hypotheses 11 through 14. I used these analyses to examine whether hiring decision-makers rated candidates in one region significantly more hireable than candidates from any of the other regions for a given position. The independent variables were the positions of interest (e.g., software developer) and the dependent variables were the hireability score for each application blank representing each of the four regions. Significance statistics are reported. A Bonferroni correction is also applied to the significance tests for these ANOVAs. This means that to achieve significance, p -values must be equal to or less than $p = .0125$.

Hypothesis 11

I found no significant differences by region in the hireability ratings of the customer service representative application blanks as determined by a one-way ANOVA,

$F(3, 173) = 1.07$, $p = .36$). Follow up tests were not conducted due to the lack of significance. The sample sizes, means, and standard deviations of each region for this position appear in Table 9.

Table 9

Regional Means in Hireability by Position

Position	Region	<i>n</i>	M	SD
Customer Service Rep	Northeast	42	386.95	113.28
	South	43	344.09	94.55
	Midwest	46	350.20	140.55
	West	46	355.09	125.87
Software Developer	Northeast	45	378.04	113.30
	South	44	372.43	143.56
	Midwest	43	362.60	125.84
	West	45	346.16	110.06
Construction Leader	Northeast	44	379.82	136.10
	South	44	337.52	131.84
	Midwest	43	370.63	109.66
	West	46	400.85	96.33
Creative Director	Northeast	45	366.13	124.49
	South	43	372.33	150.23
	Midwest	47	350.91	124.49
	West	44	401.41	119.14

Hypothesis 12

I found no significant differences by region in the hireability ratings of the software developer application blanks as determined by a one-way ANOVA, $F(3, 173) = .573$, $p = .63$). Follow up tests were not conducted due to the lack of significance. The sample sizes, means, and standard deviations of each region for this position appear in Table 9.

Hypothesis 13

I found no significant differences by region in the hireability ratings of the construction leader application blanks as determined by a one-way ANOVA, $F(3, 173) = 2.18, p = .09$). Follow up tests were not conducted due to the lack of significance. The sample sizes, means, and standard deviations of each region for this position appear in Table 9.

Hypothesis 14

I found no significant differences by region in the hireability ratings of the creative director application blanks as determined by a one-way ANOVA, $F(3, 173) = 1.28, p = .28$). Follow up tests were not conducted due to the lack of significance. The sample sizes, means, and standard deviations of each region for this position appear in Table 9.

Hypotheses 15 through 17

Additionally, an ANOVA tested Hypotheses 15 through 17. This test was used to examine whether participants rated individuals in one region significantly more hireable than individuals in the neutral Midwest region. The independent variable was the region manipulated on the application blank and the dependent variables were the hireability ratings. A Bonferroni correction was also applied to the significance tests for these ANOVAs. This means that to achieve significance, p -values must be equal to or less than $p = .0125$. Regions did not differ to a statistically significant degree in level of overall hireability as determined by a one-way ANOVA, $F(3, 706) = 1.47, p = .22$. The overall sample sizes, means, and standard deviations for each region are presented in Table 10.

Table 10

Overall Means in Hireability

Region	<i>n</i>	M	SD
Northeast	176	377.57	116.87
South	174	356.57	131.72
Midwest	179	358.27	125.08
West	181	375.56	115.25

CHAPTER FOUR

DISCUSSION

The purpose of this research was to add to the existing literature surrounding biases in the hiring process by evaluating a new potential biasing factor: region of applicant. Prior research provides evidence for age, gender, and ethnicity influencing hiring decisions (Lahey, 2008; Rooth, 2010), but the potential influence of location had not previously been explored. A necessary first step was to demonstrate that people living in the United States hold assumptions about those individuals living in certain regions of the country. Researchers have demonstrated that assumptions of coldness and friendliness exist for those people residing in the Northeast and South regions, respectively (Rentfrow et al., 2013). Additionally, individuals in the Midwest are assumed to be hard working and trustworthy, according to previous studies (Rentfrow et al., 2013). Researchers have also demonstrated that people living in the West region of the United States are assumed to be more creative and open-minded than people of other regions (Krug & Kulhavy, 1973). I asked participants to rate the individuals from these four regions on a variety of characteristics to determine and confirm the prevalence of these assumptions.

My results indicate that in many cases participants ascribe different levels of personality characteristics to the four regions. Participants demonstrated a belief that individuals in the South are friendlier than those in the Northeast. They also rate

Northeastern individuals as colder (less altruistic) than people in the Midwest and South regions. The participants rated people in the Midwest as more trustworthy than those in the Northeast and more achievement striving than those in the South. Lastly, participants rated people in the West region of the country more open-minded and more creative than individuals in the South or Midwest. In addition to personality, participants ascribed different levels of intelligence to the regions when compared to a neutral (for the purposes of this study) Midwest region. Participants considered individuals in the Northeast and West more intelligent than those in the Midwest. No differences were found between the perceived intelligence of individuals in the South and Midwest. While these results do not exactly mirror assumed regional differences presented in prior research, they do add to the evidence that regional stereotypes exist.

Several previously reported findings regarding assumed regional personality differences were not replicated in this study. I hypothesized that people in the Midwest would be rated more easily trusting, more accountable, and more trustworthy than all other regions; however, I did not find evidence for these differences. Midwesterners were not considered to be more easily trusting than people in the South, nor were they considered more driven than people in the Northeast or West. Participants only rate the Midwest significantly more trustworthy (by the morality scale) than the Northeast. Based on existing research, I hypothesized that the West region would be rated as more open-minded and creative than the other three regions, but I did not find evidence for this difference between Westerners and Northeasterners. While these findings were not replicated, study limitations could offer a potential explanation and will be discussed later in this section. Alternatively, the hypothesized differences in assumptions about regional

personality may simply not exist. The lack of significance may indicate a true lack of the existence of these assumptions.

Secondly, I wanted to determine if these stereotypes about regions influenced the decisions made to hire or decline a job candidate. Depending on the job in question, a region's stereotypical personality may influence the selection decisions made. I investigated this by mapping the assumed characteristics of a region to a job type. For example, because the South is assumed to be friendlier than other regions, a customer-service position was mapped to the South. I used this mapping approach in order to further investigate the role of assumed characteristics of individuals in hiring situations. Participants were asked to consider the job description, review an application blank, and rate the candidate on a scale of hireability. I hypothesized that the region to which the job was mapped would indicate the candidate region with highest hireability rating for that position. So, the application blank hailing from the South would be rated higher than those from the other regions for the customer service position, and so on. The results show a lack of significance in any of these hypotheses, meaning that hireability decisions were not significantly influenced by changes in the geographical location on the application blank (indicated through candidate address). Additionally, I hypothesized and tested for an overall difference in hireability by region, regardless of job type. The results indicate that hireability decisions were significantly influenced by region of candidate in this case. However, no further analyses were significant indicating lack of meaningful between the individual regions.

Prior research shows the hiring biases exist, but this study suggests that region of candidate may not be a factor influencing hiring decisions. Researchers have centered

their evaluation of discrimination in hiring by identifying underlying biases and stereotypes. Studies have applied implicit association test to provide evidence that individuals hold various stereotypes and biases, often subconsciously (Greenwald et al., 1998). The existence of these biases led researchers to investigate in what manner these biases influence hiring decisions. Through the use of equivalent applications and actors portraying equivalent candidates, with a biasing factor manipulated (e.g., ethnicity), researchers suggest that biases held by individuals can and do influence the hiring rates of different groups. For example, Bertrand and Mullainathan (2002) altered names on equivalent applications to sound either Caucasian or African American. They found through this manipulation that white-sounding names had a significantly higher callback rate than ethnic-sounding names. With the availability of this body of evidence, one might guess that if stereotypes exist specific to various regions of the United States, these stereotypes may lead to discrimination in hiring candidates from specific areas.

Participants in this study did indicate assumed differences in some characteristics by region. Based on the body of literature regarding bias and hiring, I guessed that these differences would cause some discrimination in hireability ratings for candidates applying to a given position from the four different regions. However, the regional differences reported by these participants did not translate into any significant differences in hiring rates by region.

Devine (1989) has suggested that awareness of a personal bias can mitigate the influence that bias may have on behaviors. The participants, and perhaps the population in general, may be aware of these regional stereotypes and, therefore, consciously keep them from affecting their behavior. However, much research provides evidence that even

with an awareness of a bias, individuals cannot always correct action. For example, the fundamental attribution error is the process in which people form causal explanations for behavior. According to this theory, people tend to overemphasize the role of personal disposition or internal characteristics, rather than aspects of the situation or external contexts (Gilbert & Malone, 1995). Additionally, the anchoring and adjustment heuristic places emphasis on an original value influencing decisions and behavior, rather than complete information. Future research should consider whether or not individuals are aware of any regionally-based stereotypes.

Perhaps the regionally-based stereotypes are irrelevant in a hiring capacity or so low in priority when evaluating a candidate that these personality stereotypes rarely cause differences in hiring practices. Candidate fit is an important concept to consider when evaluating applications in terms of fitting in to the job, the other employees, and the organization's culture. Perhaps no differences in hiring arise due to regional stereotypes because individuals tasked with hiring are more concerned with fit. Meaning, that although a person from the Northeast may be assumed to be unfriendly (whether it be true or not true), this assumption does not weigh into the hiring decision overall. That person may still be considered a good fit for the job and considered a good hire. Perhaps if the design of the study simply asked about hireability without the four positions, differences would be found because fit would play a lesser role. Other methodological limitations discussed in the next section may have led to this lack of significance and should be considered.

Although I performed power analyses prior to data collection, the sample sizes of the participant groups may have influenced my findings and made it more difficult to find

significance. In addition to the size, the sample of participants was taken from MTurk, a platform on which a researcher can gather data from participants that opt into a posted study for a certain monetary amount of compensation. While Casler, Bickel, & Hackett (2013) demonstrate that samples from this source are equally as trustworthy as college and convenience samples, paying participants for their involvement raises concern. These concerns include a lack of policy and guidelines surrounding reimbursement practices or ethical concerns regarding consent to participate being driven by reimbursement. Another limitation resulting from my use of an MTurk sample may be that I offered too little compensation to motivate subjects to participate conscientiously. Additionally, incorporating qualifications imbedded in the MTurk task structure or using only top tier participants may have provided me with a more motivated sample. Also, the participants in the second part of my study could have lied about being involved in hiring decisions and therefore not had any experience in hiring practices and making these decisions. This could be remedied by applying this research method to a sample of known hiring managers or including more strenuous verifications for inclusion in the sample. The participants could have simply answered without consideration for the questions posed and not taken the study very seriously. Meade and Craig (2011) suggest that up to 15% of survey responders are carelessly responding when completing lengthy surveys. This study involved 12 pages with 50 items each; however, my study only included a total of 27 items in Part A and 28 items total in Part B (the participants only completed Part A or B). Due to recommendations for a clean dataset, in my data analysis, I removed any participants with data that reflected this kind of response (e.g., no variation in answers; Tabachnick and Fidell, 2007). By asking the participants to rate all four regions at once

on all of the personality attributes, I may have revealed my hypotheses. The participants may have guessed that I was looking for differences by the four posed regions and given them different scores accordingly. This would mean that participants did not necessarily hold the opinions that personality and intelligence levels differ between people in different regions, even though the hypotheses tests were significant. However, some of my null hypotheses were rejected, so I am hesitant to suggest that this is a critical limitation. One way in which to avoid this issue might be to present participants with one region to rate on all of the characteristics, rather than presenting all four regions to all participants. This would perhaps better conceal the overall research question attempting to confirm differences between the four regions. As previously mentioned, the position types could have muddled the findings through introducing extraneous elements into the relationships. Future attempts to answer these research questions should exclude position type from the method and simply ask for hireability ratings based on the limited information provided. Additionally, applying a response scale of 100 points might have been too large for participants to aptly choose the appropriate score. Lastly, the lower than ideal alpha scores on the open-mindedness scale may have contributed to non-significant findings on this attribute. This scale consisted of four items and removing any of these four items did not increase my alpha scores. For this reason, I did not address the low alphas for this scale and moved forward with the study. Scales with more items can provide researchers with larger reliability coefficients and more options for removing bad items.

Unlike age-based, race-based, gender-based, and attractiveness-based bias, bias based on region of applicant is not apparent in hiring based on the findings in this study.

Individuals do believe that differences in the personalities and intelligence of people in different regions exist for some personality characteristics. However, these assumed differences in regional personality did not significantly influence hireability ratings. Based on the findings of this study, locational stereotypes should not be added to the list of concerning biases influencing hiring decisions. However, hiring managers should be aware that regardless of whether the locational personality differences are real, individuals in the workplace may assume that coworkers from different regions hold certain personality patterns. Though assumptions based on region of a candidate may not be influencing hiring decisions, these stereotypes may exist among employees. Diversity awareness and acceptance should be promoted to assist coworkers and managers in working together inclusively and without differential treatment based on the perceptions of personality and intelligence levels among people from certain region.

My findings in this study also pose some implications and directions for future research. Combined with previous findings, the results of this study further demonstrate the existence of assumptions surrounding personality differences by location. Researchers interested in these locational differences might replicate this study using different regional divisions or dividing by state. I chose to apply the four-way division of the country based on previous research and census divisions, but there are other ways in which to divide the nation into regions. Researchers could divide the country into more, specific regions (e.g., West Coast, Mountain Region, Central) or between rural and urban areas, or into regions split by the Mason Dixon line, the figurative line between north and south. Or, perhaps the divisions could be drawn by state and the perceived attributes of individuals residing in each state could be investigated. Perhaps assumed personality

traits are more differentiated between more specific regional splits (i.e., by state) or between less specific distinctions (i.e., north versus south). These findings would shed additional light onto the prevalence and nature of perceptions individuals may have regarding the personality and intelligence of people living in various areas of the country.

I also suggest replicating this study with various, larger samples. For example, recruiting an organization's current employees who make hiring decisions might give a more realistic understanding of how these stereotypes influence (or do not influence) behavior. Also, industry-specific samples may provide an interesting additional element to this study. In replicating this study, I recommend excluding the detail of position type (e.g., creative director) and simply manipulating the region of application. Different measures of personality may provide additional information regarding levels of assumed regional attributes, so this should be considered in any future similar research. While my findings do not point to hiring bias based on region of applicant, researchers in this area should aim to replicate these findings and verify that regional stereotypes are not playing a role in personnel decisions.

Categorization and heuristics are essential to our daily functioning and efficient decision-making. However, sometimes social categorization of other people can form biases and stereotypes leading to negatively impactful discrimination against various groups. While this is always concerning, discrimination is particularly worrisome in a hiring context. Researchers have provided evidence for hiring discrimination based on various factors such as gender and ethnicity; however, no one has considered location in the country as a potential source of discrimination. There is also plentiful evidence for the existence of both actual and assumed differences in personality among people of different

regions in the United States. The goal of my study was to determine whether applicant region should be added to the list of factors that may be influencing a hiring manager's decision. I found no evidence that any such discrimination is occurring based on applicant region. Though this is good news, more research should be performed to replicate and confirm this finding. The sources of discrimination in hiring practices are critical areas for both practitioners and academics alike, and focus should remain on studies such as this one. Awareness is always preferable to ignorance, so investigating any and all potential causes for discrimination is critical to the field of industrial psychology.

APPENDIX A

HUMAN USE APPROVAL LETTER



LOUISIANA TECH
UNIVERSITY

MEMORANDUM

OFFICE OF UNIVERSITY RESEARCH

TO: Ms. Brittani Plaisance and Dr. Steven Toaddy
 FROM: Dr. Stan Napper, Vice President Research & Development
 SUBJECT: HUMAN USE COMMITTEE REVIEW
 DATE: May 10, 2016

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

“The Influence of Regional Stereotypes in Employee Selection”

HUC 1428

The proposed study’s revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. *This approval was finalized on May 10, 2016 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond May 10, 2017.* Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

If you have any questions, please contact Dr. Dr. Mary Livingston at 257-2292 or 257-5066.

A MEMBER OF THE UNIVERSITY OF LOUISIANA SYSTEM

P.O. BOX 3092 • RUSTON, LA 71272 • TEL: (318) 257-5075 • FAX: (318) 257-5079

AN EQUAL OPPORTUNITY UNIVERSITY

HUC

Title: The Influence of Regional Stereotypes in Employee Selection

Date Study Expires: May 10, 2017

Please select/initial one course of action:

- 1) REP **I do not wish to renew my study.** All data collection and analysis are complete. The study has been completed.

OR

- 2) _____ **Future use is only analysis of de-identified data and paper preparation. All data has been collected and completely de-identified** such that all information that appears alone or in combination with other information would not reveal anyone's identity and anonymity is assured. All links to the identities of the subjects have been completely removed. For example: There are no names, no addresses, no phone numbers, no email addresses, no Web Universal Resource Locators (URLS), no Internet protocol (IP) addresses, no fax numbers, no school identification numbers, no employee numbers, no social security numbers, no birth dates, or other identifiable information that could possibly connect the data to an individual.

If a medical chart or record is involved, the De-identification and Confidentiality Forms are required for submission to the Louisiana Tech IRB. Data should not include biometric identifiers, including finger and voice prints or photographs. No biologic specimens, whether "de-identified" or not, are involved. For guidance on biologic specimens see the following URL: <http://www.hhs.gov/ohrp/policy/cdebiol.html>. Information not required in or approved for the approved study has been expunged.

- 3) The only continuation of research is analysis of de-identified data and article preparation as previously approved.

Data that is to be reanalyzed for a purpose other than that originally approved should be resubmitted for expedited review or exemption. Any use of data is subject to the approval of all of the original investigators. Note: Consent forms will be required to be kept on file for a minimum of 3 YEARS after data usage is complete.

My signature certifies data has been de-identified and will only be used for previously approved purposes.

Brittani Plaisance

Researcher's Signature

7/16/18

Date

APPENDIX B

HIREABILITY SCALE

NEO items

1. E1: Friendliness (.81)
 - a. Makes friends easily
 - b. Feel comfortable around people
 - c. Avoid contact with others (R)
 - d. Keep others at a distance (R)
2. O5: Intellect (.75)
 - a. Love to read challenging material
 - b. Avoid philosophical discussions (R)
 - c. Have difficulty understanding abstract ideas (R)
 - d. Am not interested in theoretical discussions (R)
3. A3: Altruism (Calmness; .76)
 - a. Love to help others
 - b. Am concerned about others
 - c. Am indifferent to the feelings of others (R)
 - d. Take no time for others (R)
4. A1: Trust (.86)
 - a. Trust others
 - b. Believe that others have good intentions
 - c. Trust what people say
 - d. Distrust people (R)
5. C4: Achievement-Striving (Industriousness; .80)
 - a. Work hard
 - b. Do more than what's expected
 - c. Do just enough work to get by (R)
 - d. Put little time and effort into work (R)
6. A2: Morality (Integrity; .76)
 - a. Use others for my own ends (R)
 - b. Cheat to get ahead (R)
 - c. Take advantage of others (R)
 - d. Obstruct others' plans (R)
7. Openness to Experience (.83)
 - a. Have a vivid imagination
 - b. Do not enjoy going to art museums (R)
 - c. Tend to vote for liberal candidates
 - d. Tend to vote for conservative candidates (R)

Hogan Personality Inventory

8. Creativity (HPI: Intellectance)
 - a. Like to solve complex problems.
 - b. Love to read challenging material.
 - c. Love to think up new ways of doing things.
 - d. Have a vivid imagination.
 - e. Know how things work.
 - f. Am not interested in abstract ideas (R).
 - g. Am not interested in theoretical discussions (R).
 - h. Avoid difficult reading material (R).
 - i. Try to avoid complex people (R).
 - j. Do not have a good imagination(R).

Hireability Scale (Hoyt, 2012)

- This is a very strong candidate for the position
- This candidate would be a dedicated employee.
- I respect the applicant.
- I would choose to interview the applicant for the job.
- Many people would have respect for this applicant.
- I would hire the applicant for the job.
- I hope the applicant finds employment soon.
- This candidate deserves to make a good salary.
- This candidate would work well with others.
- The applicant would likely be hired for the job.
- This candidate would be committed to the job.
- This candidate would sacrifice a lot for the job.
- The applicant deserves this job.
- Once hired, this applicant would rise quickly within the organization's hierarchy.
- Once hired, I would quickly promote this applicant.
- I would offer this candidate top salary.
- I would entrust this candidate with important projects.
- This candidate would be a good team player.

APPENDIX C

EMPLOYMENT APPLICATIONS

APPLICATION FOR EMPLOYMENT

Applicant Information			
Full Name:	Brown	M.	R.
	<i>Last</i>	<i>First</i>	<i>M.I.</i>
Date:	April 2016		
Address:	7765 Park St.		
	<i>Street Address</i>		<i>Apartment/Unit #</i>
	Irvine	California	92612
	<i>City</i>	<i>State</i>	<i>ZIP Code</i>
Phone:	(xxx) XXX- 8546	Email	XXXXXXXX@gmail.com

Date Available: **May 2016** Social Security No.: **NA** Desired Salary: **\$ NA**

+

Position Applied for: **Software Developer**

Are you a citizen of the United States? YES NO If no, are you authorized to work in the U.S.? YES NO

Have you ever worked for this company? YES NO If yes, when? _____

Have you ever been convicted of a felony? YES NO

If yes, explain: _____

APPLICATION FOR EMPLOYMENT

Applicant Information			
Full Name:	Johnson	B.	S.
	<i>Last</i>	<i>First</i>	<i>M.I.</i>
Date:	April 2016		
Address:	7765 Oak St.		
	<i>Street Address</i>		<i>Apartment/Unit #</i>
	Athens	Georgia	30605
	<i>City</i>	<i>State</i>	<i>ZIP Code</i>
Phone:	(xxx) XXX- 9987	Email	XXXXXXXX@gmail.com

Date Available: **May 2016** Social Security No.: **NA** Desired Salary: **\$ NA**

Position Applied for: **Software Developer**

Are you a citizen of the United States? YES NO If no, are you authorized to work in the U.S.? YES NO

Have you ever worked for this company? YES NO If yes, when? _____

Have you ever been convicted of a felony? YES NO

If yes, explain: _____

APPLICATION FOR EMPLOYMENT

Applicant Information

Full Name: **Smith** **P.** **E.** Date: **April 2016**
Last First M.I.

Address: **5403 Elm St.**
Street Address Apartment/Unit #

Cambridge **Massachusetts** **02139**
City State ZIP Code

Phone: **(xxx) XXX- 6754** Email **XXXXXXXX@gmail.com**

Date Available: **May 2016** Social Security No.: **NA** Desired Salary: **\$ NA**

Position Applied for: **Software Developer**

Are you a citizen of the United States? YES NO If no, are you authorized to work in the U.S.? YES NO
 X

Have you ever worked for this company? YES NO If yes, when? _____
 X

Have you ever been convicted of a felony? YES NO
 X

If yes, explain: _____

APPLICATION FOR EMPLOYMENT

Applicant Information

Full Name: **Williams** **J.** **L.** Date: **April 2016**
Last First M.I.

Address: **7765 Fourth St.**
Street Address Apartment/Unit #

Columbus **Ohio** **43205**
City State ZIP Code

Phone: **(xxx) XXX- 2243** Email **XXXXXXXX@gmail.com**

Date Available: **May 2016** Social Security No.: **NA** Desired Salary: **\$ NA**

Position Applied for: **Software Developer**

Are you a citizen of the United States? YES NO If no, are you authorized to work in the U.S.? YES NO
 X

Have you ever worked for this company? YES NO If yes, when? _____
 X

Have you ever been convicted of a felony? YES NO
 X

If yes, explain: _____

APPENDIX D

ANOVA NORMALITY

Part A ANOVA Normality

Scale	Region	Shapiro-Wilk Statistic	df	Sig.
Friendliness	South	.990	130	.450
	Northeast	.982	130	.090
	Midwest	.977	130	.027
	West	.972	130	.009
Altruism	South	.969	130	.004
	Northeast	.976	130	.021
	Midwest	.973	130	.011
	West	.950	130	.000
Trust	South	.982	130	.081
	Northeast	.979	130	.045
	Midwest	.986	130	.229
	West	.975	130	.016
Achievement Striving	South	.970	130	.005
	Northeast	.951	130	.000
	Midwest	.970	130	.006
	West	.948	130	.000
Morality	South	.956	130	.000
	Northeast	.971	130	.007
	Midwest	.960	130	.001
	West	.976	130	.020
Open-Mindedness	South	.989	130	.379
	Northeast	.979	130	.041
	Midwest	.985	130	.158
	West	.958	130	.001
Creativity	South	.967	130	.003
	Northeast	.962	130	.001
	Midwest	.951	130	.000
	West	.964	130	.002
Intelligence	South	.971	130	.002
	Northeast	.966	130	.002
	Midwest	.940	130	.000
	West	.984	130	.129

Part B ANOVA Normality

Position	Region	Shapiro-Wilk Statistic	df	Sig.
Customer Service Rep	South	.850	43	.000
	Northeast	.943	42	.037
	Midwest	.912	46	.002
	West	.923	46	.005
Software Developer	South	.905	44	.002
	Northeast	.915	45	.003
	Midwest	.963	43	.174
	West	.874	45	.000
Construction Leader	South	.950	44	.054
	Northeast	.940	44	.023
	Midwest	.810	43	.000
	West	.972	46	.327
Creative Director	South	.985	43	.851
	Northeast	.963	45	.165
	Midwest	.906	47	.001
	West	.882	44	.000

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