IMPLICIT BIASES IN EVALUATING INFORMATION GATHERED DURING SOCIAL

NETWORK SCREENINGS

A Thesis

Presented to

The Faculty of the Department

of Psychology

University of Houston

In Partial Fulfillment

Of the Requirements for the Degree of

Master of Arts

By

Payton M. Stewart

May, 2019

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ABSTRACT

In recent years, an increasing amount (60%; Grasz, 2016) of human resource professionals have been turning to social media as a means to screen potential employees due to the vast amounts of information available on these sites (Brown & Vaughn, 2011; Grasz, 2006; Landers & Schmidt, 2016; Roth, Bobko, Van Iddekinge & Thatcher, 2013; Schmidt & O'Connor, 2016; Van Iddekinge, Lanivich, Roth, & Junco, 2016). Despite the rapid increase in the use of social networking sites as a screening tool, very little research has been done regarding how the information available on these sites is used to make decisions. I analyze how four specific types of information (health, family, social and political information) available about an applicant on these sites influences the likelihood that the applicant will be recommended to be hired. I hypothesize that implicit biases surrounding these four types of information will lead to a decrease in the hireability ratings of applicants that provide these types of information on their social networking sites. Implicit bias is an umbrella term commonly used in research on discrimination and employment law that encompasses both implicit attitudes and implicit stereotypes (Faigman, Dasgupta & Ridgeway, 2007; Greenwald & Kriefer, 2006; Jolls & Sunstein; 2006). Implicit biases are especially troublesome in employment practices because they can lead to unintentional discrimination (Bodensteiner, 2008; Macan & Merritt, 2011). I found that applicants that provide these types of information are social media are less likely to be recommended to be hired than applicants that do not post these types of information. This contributes empirically driven findings to the currently scarce literature on social networking sites as a screening tool by identifying how certain information is assessed during these screenings. Additionally, these results may help inform best practices regarding the use of social networking sites as screening tools and adhering to fair employment practices.

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Implicit Biases in Evaluating Information Gathered During Social Network Screenings

A recent survey of 2,186 hiring managers found that 60% of employers use social media to screen potential employees (Grasz, 2016). HR professionals are inclined to use social media to screen potential employees because social media offers vast amounts of information at a low cost that is viewed as potentially job-relevant (Roth, Bobko, Van Iddekinge & Thatcher, 2013). However, there is very little published research on how the information from social media is assessed. This study will use uncertainty reduction theory to explain why hiring managers turn to social media and the theoretical construct of implicit biases as a framework to study how employers use social media as a screening tool.

Uncertainty reduction theory was first conceptualized as a way to explain how individuals gather information within relationships (Berger & Calabrese, 1975). According to uncertainty reduction theory, individuals look for any information to help reduce uncertainty in their decisions about their relationships (Berger & Calabrese, 1975). There are four strategies through which individuals gather information: interactive, active, passive, and extractive (Berger, 1987; Rameriez, Walther, Burgoon, & Sunnafrank, 2002). There are different advantages and disadvantages associated with each type of information seeking. For example, interactive information seeking allows for the interviewer to adjust his or her behavior to encourage the candidate to share certain types information (Berger & Kellerman, 1983; Rameriez et al., 2002), while extractive information seeking might be more reflective of the individual's actual self since this information has not been subjected to impression management in the same way that information shared in a professional context is (Ruggs, Walker, Blanchard & Gur, 2016; Pew Research Center, 2015).

While uncertainty reduction theory explains why employers turn to social media to gather information about applicants, the theoretical construct of implicit biases lends understanding to how the information gathered from social network screenings can influence decisions. Implicit biases encompass both implicit attitudes and implicit stereotypes that lead to biased judgments of others (Faigman, Dasgupta & Ridgeway, 2007; Greenwald & Banaji, 1995; Greenwald & Kriefer, 2006; Jolls & Sunstein; 2006). Individuals are more likely to rely on implicit biases when making judgments are made without much conscious thought (Greenwald et al., 2000; Greenwald & Banaji, 1995; Greenwald & Kriefer, 2006). Employers might unconsciously rely on implicit biases due to lack of standardization surrounding social networking screening (Fiss, 1971; Hunter & Hunter, 1984; Schmidt & Hunter, 1998). Furthermore, employers might unconsciously rely on implicit biases because of the nature of information available on social media might not be directly related to the job so the employer is likely to be forced to make assumptions about the applicant (Gutman, Koppes & Vodanovich, 2011; Malos, 2005).

Although there is a large amount of information about applicants available on social media, much of this information is not job-relevant (Davidson, Maraist, Hamilton & Bing, 2012; Roth et al., 2013). Job-relevant information is information that is directly related to an applicant's suitability for a job, such as an applicant's educational background, professional certifications, or past work experiences (Davidson et al., 2012; Tommasi, Williams, & Nordstrom, 1998). Job-irrelevant information is information is not related to an applicant's suitability for a job, such as an applicant's gender, race, religious affiliation, or other private activities (Davidson et al., 2012; Tommasi, Williams, & Nordstrom, 1998). Since job-irrelevant factors are not linked to job performance, they should not be used to screen out

employees (Chambers & Winter, 2017; Barr & Hitt 1986; Davison et al., 2012; Gutman, Koppes & Vodanovich, 2011; Malos, 2005). Using job-irrelevant factors to screen applicants may cause employers to eliminate potential high performers, thus making the selection process less effective and less efficient (Barr & Hitt, 1986; Hunter & Hunter, 1984; Hunter, 1986).

Additionally, using job-irrelevant factors to screen applicants could lead to discrimination against protected groups due to the personal nature of information posted on social networking sites. For example, any discrimination based on disability status is prohibited by law (Americans with Disabilities Act, 1990). If the information an applicant posts on social media regarding his or her health is used by the employer when making the hiring decision, the employer may be illegally discriminating against the applicant. Further, the Americans with Disability Act (1990) has been extended to provide protection for applicants and employees that are recovering alcoholics (Equal Employment Opportunity Commission, 1992; Williams v. Wendall, 1996); therefore, screening out applicants based on the information they post about consuming alcohol may be illegal in certain situations. When using family or political factors to screen applicants, employers must ensure that individuals are judged uniformly to avoid adverse impact on protected groups such as women that are mothers (Equal Employment Opportunity Council, 2007; Lust v. Sealy, Inc, 2005; Santiago-Ramos v. Centennial P.R. Wireless Corp, 2000) or demographic groups that typically belong to certain political parties (Badgett, Lou, Sear & Hou, 2007; Corrnell et al., 2007; Tilcsik, 2011). This study will examine how certain types of job-irrelevant information is used by hiring managers to screen applicants. The factors included in the study are health factors (social media posts about having a chronic illness), family factors (social media post about

one's family responsibilities), social factors (social media posts about alcohol consumption), political factors (social media posts about political affiliation). These variables were selected because this information is often available through social media but not through traditional selection assessments such as interviews or background checks (Davidson et al., 2012; Roth et al., 2013; Van Iddekinge et al., 2016).

The job-irrelevant information that is available through social media might be hard to ignore when making employment decisions (Carr, 2014; Davison et al., 2012; Van Iddekinge, Lanivich, Roth & Junco, 2016). As such, this study will examine the how jobirrelevant information gathered through social media screening is used to screen applicants. In the following paragraphs, I will review the literature on social networking screenings, uncertainty reduction theory, fair employment selection practices and finally implicit biases in order to explore the current gap in the literature regarding on information gathered during social networking screenings is assessed and as frame my research question regarding how certain types if information are evaluated in a selection context.

Social Network Site Screenings

There are currently 2 billion active users on Facebook (Nowak & Spiller, 2017). Seventy-nine percent of American adults with internet access have Facebook profiles (Greenwood, Perrin & Duggan, 2016). Facebook was designed for individuals to share personal information through pictures and status updates. Users are encouraged to share information about themselves including their relationship status, political affiliation, interests, and life events (Facebook, 2017). Further, many individuals turn to social networking sites as a source of social support which causes some to post detailed information

about current health and personal struggles (Nadkarni & Hofman, 2015; Submanyam, Reich, Waechter & Espinoza, 2008).

Due to the nature of social networking sites, the information that individuals post is easily accessible to the public. Employers have started to use the large quantity of information available on social networking sites to screen applicants (Brown & Vaughn, 2011; Grasz, 2016; Landers & Schmidt, 2016; Roth et al., 2013). The aim of employers when looking at social networking sites is to gain valuable information about the applicant that is often not available through traditional selection methods (Guilfoyle, Bergman, Hartwell & Power, 2016; Urschel, 2012). Hiring managers believe they can assess job-relevant characteristics at an extremely low cost based on information individuals post on social networking sites.

While it is becoming increasingly common for employers to turn to social networking sites as a way to screen applicants, there has been very little empirical evidence provided to support this practice (Landers & Schmidt, 2016; Roth et al., 2013). In fact, the lack of validation and standardization in how social networking sites are used to screen applicants is the leading reason that researchers currently caution against this practice (Brown & Vaughn, 2011; Davison, Bing, Kluemper & Roth, 2016; Davison et al., 2011; Hidya & McDonald, 2013; Roth et al. 2013). One of the major concerns in the literature on social network screenings is employer's ability to disregard job-irrelevant information (Davison et al., 2012; Schmidt & O'Conner, 2016; Ruggs, Singletary, Blanchard & Gur, 2016; Van Iddekinge et al., 2016). This study aims to determine to the extent to which job-irrelevant information available on social networking sites is used to screen applicants.

Uncertainty Reduction Theory

Uncertainty reduction theory (URT) explains how individuals gather and process information in relationships (Berger & Calabrese, 1975). Berger and Calabrese (1975) theorized that an individual looks towards any information that they have access to in order to reduce the level of uncertainty in their decisions about their relationships. For example, if two people meet for the first time on a blind date, they might ask each other questions in order to get to know the other person. They also might observe how the other person interacts with those around them and ask any mutual friends for their opinion of the other person. In this example, the two individuals are making a decision about starting a relationship. They are gathering information about the other person in order to enhance their decision. As an individual gathers more information about another person, he or she is able to become more certain in the decisions that they make regarding the other person.

Types of Information Seeking

Berger (1987) identified three information seeking strategies that individuals engage in when aiming to reducing uncertainty. The first is interactive information seeking which involves information that is gathered through interacting directly with the target (Berger, 1987). Interactive information seeking allows for the individual to influence the type of information gathered from the target by altering his or her behavior based on feedback from the target (Berger & Kellerman, 1983; Rameriez et al., 2002). Therefore, this type of information seeking encompasses the verbal and nonverbal feedback provided by the target which increases the efficiency and effectiveness of this information seeking strategy. However, one of the concerns about information gathered through interactive information seeking is that it is often subject to impression management and, therefore, might not be entirely truthful (Rameriez, 2002). Information exposed during an interview is gathered

through interactive information seeking.

The second information seeking strategy is active information seeking which occurs when an individual gathers information by discussing the target with another person whom is familiar with the target (Berger, 1987). This type of information seeking allows for information to be gathered without the target's knowledge. Some believe that this information is beneficial because the target has not been able to filter it in the same way that he or she might filter information that they provide during interactive information seeking (Carr et al., 2014; Rameriez et al., 2002; Ruggs et al., 2016). An example of active information seeking is contacting a reference to gather information about an applicant.

The last information seeking strategy that Berger (1987) identified is passive information seeking. This includes information that is gathered by observing the target. Similar to active information seeking, the information gathered through passive information seeking may not be filtered in the same way as information gathered through interactive information seeking because the target may not be aware that they are being observed (Rameriez, 2002). Moreover, even if the target is aware that they are being observed, he or she may be more focused on the task that he or she is performing instead of managing the information he or she is providing (Rameriez, 2002). An example of this type of information seeking is observing an applicant perform a work sample.

As the popularity of the world-wide web increased, people turned to the internet as a source from which to gather information about others. This led to a new information seeking strategy coined extractive information seeking (Ramirez et al., 2002). Extractive information seeking involves gathering and sorting through information gathered via the internet (Ramirez et al., 2002). This is the type of information seeking that employers engage in when

screening applicant's social networking sites (Carr, 2014; Ramirez et al., 2002). Information gathered through extractive information seeking is publically accessible information that is provided directly by the target and is less susceptible to impression management than other types of information (Rameriez et al., 2002; Ruggs et al., 2016). Many employers believe that they are gathering information that reflects the true nature of the applicant when conducting social networking screenings because individuals express their actual self on these sites instead of a filtered version of themselves that is expressed through traditional selection procedures (Davidson et al., 2012; Roth et al., 2013). Additionally, gathering information online is less costly in terms of time and money than traditional selection methods, making extractive information seeking attractive to employers (Roth et al., 2013; Van Iddekinge et al., 2016).

However, the information gathered online may not be job-relevant because most social networking sites are designed for social purposes as opposed to professional purposes (Davidson et al, 2012; Roth et al., 2013). URT does not distinguish between relevant information, information that is directly related to the applicant's suitability for the job, and irrelevant information (Davidson et al., 2012; Tommasi, Williams, & Nordstrom, 1998), information that is not related to the applicant's suitability for the job (Davidson et al., 2012; Tommasi, Williams, & Nordstrom, 1998). Instead, URT posits that any information available is gathered by individuals in order to reduce the level uncertainty in the decision-making process (Berger & Calabrese, 1975; Berger 1987; Bradac, 2001; Kramer, 1999; Rameriez et al., 2002). Therefore, I believe that employers will not distinguish between job-relevant and job-irrelevant information that is available on social networks.

Fair Employment in Selection Practices

The key purpose of selection procedures is to identify the applicants that are most likely to perform well on the job. Fair employment practices aim to prevent intentional (explicit) and unintentional (implicit) discrimination during the selection process by ensuring that all job candidates and employees are treated uniformly throughout their application and employment (Fiss, 1971; Gutman, Koppes & Vodanovich, 2011). While there are laws that help dictate fair employment practices, there has yet to be any legal cases that specifically address how information gathered on social media can and should be used in the selection process. However, some current legislation, primarily the Title VII of the Civil Rights Act of 1964, may be relevant if there is disparate treatment of or adverse impact on protected groups due to social network screening (Chambers & Winter, 2017). Even though there is no current legislation dealing directly with social networking screening and fair employment, there are some basic fair employment practices that are applicable to social networking screenings.

Validating a selection procedure is one way to decrease the likelihood of intentional and unintentional discrimination (Fiss, 1971; Hunter & Hunter, 1984; Schmidt & Hunter .1998). Valid selection procedures both consistently and accurately predict performance at some level (Schmidt & Hunter, 1988). This means that not only are valid selection procedures in line with fair employment practices but also are necessary to select the applicants that are most likely to succeed on the job. The *Uniform Guidelines on Employee Selection Procedures* (Uniform Guidelines) emphasize three types of validity: criterionrelated validity, content validity and construct validity (Equal Employment Opportunity Commission (EEOC), Civil Service Commission, Department of Labor, & Department of Justice, 1978). Criterions-related validity is defined by the *Uniform Guidelines* using "empirical data [to demonstrate] that the selection procedure is predictive of or significantly

correlated with important elements of job performance" (EEOC et al., 1978, Section 5b). Content validity is defined as establishing that the "content of the selection procedure is representative of important aspects of performance on the job" (EEOC et al., 1978, Section 5b). Lastly, the *Uniform Guidelines* define construct validity as demonstrating that the selection procedure "measures the degree to which candidates have identifiable characteristics which have been determined to be important in successful performance in the job" (EEOC, et al., 1978, Section 5b). While all three types of validity are important in selection context, the way that the *Uniform Guidelines* defines and explains construct validity has made it challenging to use this type of validity as a legal defense, (McDaniel, Kepes &Banks, 2011). As such, only issues regarding the criterion-related validity and content validity will be discussed.

Criterion-related validation in social networking screenings involves establishing an empirical relationship between the information gathered from social networking sites and job performance. Van Iddekinge and colleagues (2016) address the issue of criterion-related validity by assessing how ratings of applicants' Facebook profiles relate to supervisor ratings of job, employee turnover intentions and actual turnover. They found that ratings of applicants' Facebook profiles not predict any of these outcomes (Van Iddekinge et al., 2016). To date, no studies have been able to establish the criterion-related validity of social networking screenings (Landers & Schmidt, 2016; Roth et al., 2012; Van Iddekinge et al., 2016).

Another way to establish the validity of a selection procedure is by demonstrating its content validity (Gutman, Koppes & Vodanovich, 2011; Malos, 2005). Social networking screening with content validity would show that the information gathered from social

networking sites is relevant of the important aspects of job performance. To date, no research has been able to establish the content validity of social networking screening. The concept of content validity is becoming increasing important because as it has become easier to gain access to big data researchers have been able to uncover statistical relationships between theoretically unrelated things (George, Haas & Pentland, 2014; Kitchin, 2014). This means that it is possible to establish criterion-related validity while having a low level of content validity. For example, researchers have found that hurricanes with female names are deadlier than hurricanes with male names (Jung, Shavitt, Viswanathan, & Hilbe, 2014), genetic markers can predict if a woman is more likely cheat on her husband (Garver-Apgar, Gangestad, Thornhill, Miller, & Olp, 2006) and hungry judges rule more negatively than judges that aren't hungry (Danziger, Levav, & Avnaim-Pesso, 2011). These relationships are often found due to the incredibly large sample sizes used in this type of research. The large sample size allows for very small relationships to become statistically significant even though these relationships are practically insignificant.

The concept of content validity is especially important regarding information gathered from social networking screening due to the extremely large amount of information available on these sites. For example, researchers have found that individuals that use Chrome or Firefox as internet browsers are more productive (RobotRecuriters, 2013) and the act of "liking" curly fries on Facebook predicts high levels of intelligence (Kosinski, Stillwell, & Graepel, 2013). While assessment using job-irrelevant information may be statistically shown to predict job performance and therefore have criterion-related validity, using job-relevant information makes the link between the selection tool and performance on the job much more clear and easier to defend in a court of law because assessments using

job-relevant information have content validity (Gutman, Koppes & Vodanovich, 2011; Malos, 2005).

Due to the lack of research on social networking as a screening tool, little is known about how employers use information about applicants that is available on these sites, making this practice hard to validate (Landers & Schmidt, 2016; Roth et al., 2013; Schmidt & O'Connor, 2016; Van Iddekinge et al., 2016). Additionally, there is a vast amount of information available which might lead employers to attempt to use job-irrelevant information to predict job performance (Fan & Bifet, 2013; George, Haas & Pentland, 2014; Gilfoyle et al., 2016). This study aims to lay the foundation for future research on the validity of social network screening by analyzing how job-irrelevant information that is available on social media is used to screen applicants.

Implicit Social Cognition

Although the legal system and fair employment practices have generally focused eliminating explicit biases from influencing employment decisions, recently there has been a shift towards combating discrimination that stems from implicit biases as well (Macan & Merritt, 2011). Implicit social cognition is the idea that an individual's perceptions, judgements and actions can be influenced by attitudes of which one is not consciously aware (Greenwald & Banaji, 1995). A key aspect of implicit social cognition is that individuals are introspectively unaware of the attitudes that influence their judgements (Greenwald & Banaji, 1995). Greenwald and Banaji (1995) identify three key psychological constructs that are influenced by implicit (or unconscious) processes: attitudes, self-esteem and stereotypes. For simplicity, only implicit attitudes and implicit stereotypes are discussed due to their particular relevance to discriminatory biases in employment as they are the basis of implicit

biases (Greenwald. Banaji, Rudman, Farnham, Nosek, & Mellott, 2002; Greenwald & Krieger, 2006).

Implicit Attitudes and Stereotypes

Attitudes are defined as positive or negative dispositions toward social objects (Greenwald & Krieger, 2006). While some correlations between explicit attitudes and observable behaviors are fairly strong, some past research with strong theoretical support have produced relatively weak correlations between explicit attitudes and observable behavior (Ajzen & Fishbein, 1997; Kraus, 1995). This indicates that something else, in addition to or in place of explicit attitudes, is contributing to the observable behaviors. Greenwald and Banaji (1995) concluded that this disconnect is due to implicit attitudes. Evidence to support implicit attitudes include halo effects, which are a tendency for positive characteristics to be associated with other positive characteristics (Greenwald et al., 2002; Greenwald & Banaji, 2002), such as positive assessments of individuals that are considered to be physically attractive (Eastwick et al., 2011; Van Leewen & Neil, 2004) or individuals of higher status (Jost, Pelham & Carvallo, 2002; Shariff & Tracy, 2009).

Stereotypes are socially shared sets of beliefs about traits that characterize societal groups (Greenwald & Krieger, 2006). Stereotypes can be either positive or negative and are used to guide judgements and actions based on assumptions that an individual possess certain traits included in stereotypes (Greenwald & Banaji, 1995; Greenwald et al., 2002). Evidence to support implicit stereotypes has found that even though individuals explicitly reject stereotypes, their observable behavior often reflects a reliance on stereotypes (Dovidio, Kawakami & Beach, 2001; Dovidio, Kawakami, & Gaertner, 2002; Greenwald, McGhee & Schwartz, 1998; McConnell & Leibold, 2000; Rudman & Killanski, 2000; White & White,

2006). For example, Rudman and Killanski (2000) found that even when individuals explicitly reject stereotypes regarding female authority, both men and women hold implicit negative stereotypes that influence how they perceive women in authority. There has been extensive research supporting implicit race stereotyping (Dovidio, Kawakami, & Gaertner, 2002; McConnell & Leibold, 2000; Sekaquaptew et al., 2003; Wittenbrink, Judd, & Park, 1997; Zeigert & Hanges, 2005) and implicit gender stereotyping (Banaji & Greenwald, 1995; Rudman, Greenwald & McGhee, 2001; Rudman & Killanski, 2000;White & White, 2006).

Implicit Biases in Employment

Implicit bias is an umbrella term commonly used in research on discrimination and employment law that encompasses both implicit attitudes and implicit stereotypes (Faigman, Dasgupta & Ridgeway, 2007; Greenwald & Kriefer, 2006; Jolls & Sunstein; 2006). Implicit biases are especially troublesome in employment practices because they can lead to unintentional discrimination (Bodensteiner, 2008; Faigman, Dasgupta & Ridgeway, 2007; Greenwald & Kriefer, 2006; Jolls & Sunstein; 2006; Macan & Merritt, 2011). For example, Ziegert & Hanges (2005) found that negative implicit attitudes relating to race can predict discrimination against Black applicants when there is a corporate climate that allows for racial biases (as opposed to a climate that promotes equality). Negative implicit attitudes regarding race have also been extensively tied to discrimination towards non-white individuals in a variety of other contexts including romantic relationships (LeBel & Campbell, 2009; Marner et al., 2009; Marner, Gailliot, & Miller, 2009), friendships (Aberson, Shoemaker & Tomolillo, 2004; Margie, Killen, Sinno & McGlothlin, 2005; Page-Gould, Mendoza-Denton, & Tropp, 2008), decisions of jurors and judges (Kang, Bennett & Carbado, 2011; Levinson, 2007; Smith & Levinson, 2011; Rachlinski, Johnson, Wistrich &

Guthrie, 2008), and physicians' assessments of patients' health (Cooper et al., 2012; Green et al., 2007; Johnson, Roter, Powe & Cooper, 2004; Sabin, Nosek, Greenwal & Rivara, 2009; Sabin, Rivara, & Greenwald, 2008). Likewise, negative implicit attitudes towards women have been found in a variety of contexts including physicians' assessments of patients' health (Chapman, Kaatz, Carnes, 2013; Sabin, Marini & Nosek, 2012), within classrooms (Cvencek, Meltzoff & Greenwald, 2011; Riegle-Crumb & Humphries, 2012), and employment decisions (Krieger & Fiske, 2006; Landy, 2008; Levinson & Young, 2010; Saul, 2013; Ziegert & Hanges, 2005).

Recently, implicit cognition research has extended into different settings than those traditionally studied. Implicit biases towards individuals with disabilities is one such situation that has gained attention from researchers as of late. Negative implicit attitudes towards individuals with physical disabilities (Dovidio, Pagotto & Hebel, 2011; Larson, 2008; Rojahn, Komelasky & Man, 2008; Wilson & Scior, 2014) and intellectual disabilities (Akrami, Ekehammar, Claesson & Sonnander, 2006; Hien, Grumm, & Fingerle, 2011; Wilson & Scior, 2014) have been empirically supported. Likewise, negative implicit biases towards obese individuals (O'Brien, Hunter & Banks, 2007; Puhl & Brownell, 2001; Teachman et al., 2003; Teachman & Brownell, 2001), parents (Faigman, Dasgupta, & Ridgeway, 2007; Williams & Bornstein, 2007)., LGBT individuals (Fallin-Bennett, 2015; Sabin, Riskin & Noesek, 2015) and drug users (van Hippel, Brener & van Hippel, 2008) have been found. The current study aims to further extend the research on implicit biases to the context of social networking screenings.

While uncertainty reduction theory explains why employers turn to social media to gather information about applicants, the concept of implicit biases lends understanding to

how the information gathered from social network screenings might affect employment decisions. Recently, the legal system starting shifting towards combating implicit biases in addition to explicit biases (Macan & Merritt, 2011). Although combating implicit biases is challenging in any employment context (Greenwald & Krieger, 2006; Jolls & Sunstein, 2003; Macan & Merritt, 2011), preventing implicit biases from influencing social networking screening is especially challenging due to the lack of understanding around how the information in social networking is used in making employment decisions (Landers & Schmidt, 2016; Roth et al., 2013; Schmidt & O'Connor, 2016; Van Iddekinge et al., 2016). This study aims to add to the limited understanding of how the information gathered through social networking is utilized to screen applicants in order to provide insight into how implicit biases can influence these screenings.

Variables Assessed in Social Network Screenings

The variables analyzed in this study will address the potentially inappropriate use of information commonly available on social media when evaluating job candidates. This information is often unrelated to the job or it's use violates fair employment practices. Using this information to screen applicants not only allows for potentially high performing applicants to be screened out for irrelevant reasons, but also makes the screening process more challenging to defend in court (Brown & Vaugh, 2011; Davison et al., 2011; Gatewood, Feild & Barrick, 2011; Schmidt & O'Connor, 2016; Weidner, O'Brien & Wynne, 2016). The four variables being assessed were selected because they contain types of information that are commonly posted on social networking sites (Facebook, 2017; Nadkarni & Hofman, 2015; Submanyam et al., 2008), are not directly indicative of job performance (Davison et al., 2012; Van Iddekinge et al., 2016; Schmidt & O'Conner, 2016; Ruggs et al., 2016) and

are not typically available through traditional selection procedures (Guilfoyle et al., 2016; Urschel, 2012). The four variables are: (1) health factors (e.g., social media posts about poor health or having a chronic illness), (2) family factors (e.g., social media post about one's children or spouse), (3) social factors (e.g., social media posts about alcohol consumption or partying), and (4) political factors (e.g., social media posts about political affiliation or activity).

Health Factors

Many individuals rely on social networking sites as a source of social support during times of distress (Nadkarni & Hofman, 2015; Submanyam, Reich, Waechter & Espinoza, 2008). By sharing information pertaining to personal struggles on these sites, individuals often get the emotional and social support that they seek, but in return are often making this information easily accessible to the public. Applicants that post information about their current health issues, such as disability status or current health struggles, might be hurting their chances for employment if an employer gains access to this information through a social networking screening.

Under the Americans with Disabilities Act (ADA; 1990) it is illegal for employers to discriminate against applicants on the basis of an individual's disability status. The ADA defines a disability as having a physical or mental impairment that interferes with a major life activity, having a record of such impairment, or being regarded as having such impairment (American with Disabilities Act, 1990). If health information is used to screen applicants, then employers are violating the rights of these applicants protected under ADA. For example, information relating to an individual's health that is posted to social networking sites might lead employers to screen out the applicant because they assume that the

individual has some sort of chronic illness that causes them to miss work. Considering this information in the applicant screening process prior to a job offer is illegal under ADA (*Alexander v Choate*, 1985; *Prewitt v. United States Postal Service*, 1981).

This study will assess how health information that an applicant posts on his or her social networking site might influence an employer's decision to hire the applicant. Previous research has established a negative bias towards individuals with specific health issues such as obesity (Kleges et al., 1990; Teachman, Gapinski, Brownwell, Rawlins & Jeyaram, 2003) diabetes (Kleges et al., 1990), back and head injuries (Gouvier, Sytsma-Jordan & Mayville, 2003) and paraplegics (Krefting & Brief, 1976; Ravaud, Madiot & Ville, 1992). The negative bias occurs due to the assumptions that these individuals with health issues are helpless (Teachman, Wilson & Komarovskaya, 2006), to blame for their health problems (Teachman et al, 2003; Teachman, Wilson & Komarovskaya, 2006), and overall less capable than healthy individuals (Colella & Varma, 1999; Krefting & Bried, 1976). In addition to research about the negative implicit bias against individuals with health issues everyday settings, this bias has been shown to occur in the context of the selection process. For example, a study by Klesges et al. (1990) found that both obese and diabetic applicants were less likely to be recommended to be hired than healthy applicants. Raters viewed both obese and diabetic applicants as having poorer work habits and as being more likely to be absent from work than the applicants without these health issues. Klesges and colleagues (1990) posited that the negative assessments of obese and diabetic applicants were due to the raters' implicit negative biases towards these groups of individuals.

Past research has shown a bias towards applicants that were identified as having specific health issues, such as obesity or diabetes. While some information available on

social networking sites might pertain to a specific health issues (e.g., membership in support group for individuals with learning disabilities or creating a profile posting about having anxiety), some information may allude to a general health issue without explicitly stating what that issue is (e.g., a picture in a hospital room with multiple IVs or creating a discussion thread about struggling with chronic pain). Even though nonspecific health issues have not been directly studied in a selection context, the variety of different health issues that have been studied in this context (Colella & Varma, 1999; Gouvier et al., 2003; Krefting & Brief, 1976) as well as research that supports notation of biases towards the general concept health issues and disabilities (Akrami, Ekehammer, Claesson & Sonnander, 2006; Teachman et al., 2006) support the idea that these biases could occur towards any information revealed regarding health issues, regardless of how specific the information is. Therefore, I hypothesize that an applicant that reveals information on social media about health problems will be less likely to be recommended for hire than an applicant that does not post this type of information due to the negative implicit bias regarding the capability of individuals with health issues.

Hypothesis 1: An applicant that reveals information on social media about health problems will be less likely to be recommended for hire than an applicant that does not post this type of information.

Family Factors

Individuals often post information about their relationship status and immediate family on social networking sites. An employer that has access to information about an applicant's family might screen out the applicant because the employer believes that the applicant's family responsibilities might negatively impact his or her job performance

(Williams, Alon & Bornstein, 2006; Williams & Bornstein, 2008). Family responsibly discrimination (FRD) has become an increasingly popular topic among legal scholars as cases regarding this subject matter have been brought to court in recent years (Equal Employment Opportunity Council, 2007; Locke, 2009; Standford, 2009; Williams & Bornstein, 2008; Williams, Bornstein, Reddy & Williams, 2006).

While there is currently no legislation that explicitly states that discrimination based on family responsibilities is illegal, there have been many successfully argued cases of family responsibility discrimination under Title VII of the Civil Rights Act of 1964 by proving that the discrimination was due to gender stereotyping and implicit biases about caregivers (Correll, Barnard & Paik, 2007; Equal Employment Opportunity Council, 2007; Williams & Bornstein, 2008). Most court cases involve female employees or applicants that were discriminated against due to the implicit bias that mothers will be less devoted to their work due to family responsibilities (*Lust v. Sealy, Inc, 2005; Phillips vs Martin Marietta Corp., 1997; Sigmon v. Parker, Chapin, Flattau & Kimpl, 1995; Santiago-Ramos v. Centennial P.R. Wireless Corp, 2000*). Still, male employees and applicants have also been able to prove that they were discriminated against due to gender stereotypes relating to their position as caregivers (*Knussman v. Maryland, 2001; Nev. Dep't of Human Res. v. Hibbs, 2003*).

For both men and women, the bias towards being a caregiver stems from gender role stereotyping. Gender role stereotyping is the set of socially designated attributes, traits and behaviors one is excepted to fulfill based on his or her gender (Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972; Rosenkrantz, Vogel, Bee, Broverman & Broverman, 1968). Early researchers determined that positively valued traits in men, also known as agentic traits, center around assertiveness and rationality, while positively valued

traits in women, also known as communal traits, center around warmth and expressiveness. Researchers also determined that male traits are viewed more positively than female traits (Broverman et al., 1972; Rosenkrantz et al., 1968). Gender-role stereotypes assumes that women are more communal and men are more agentic, making each gender more adept for certain societal roles such as men being the primary breadwinner and women being the primary caregiver (Eagely & Steffen, 1984). Traditionally, one reason for this bias against mothers as employees stems from assumption that an employee that is a mother is not as dedicated to her job as an employee that is a father due to the communal traits she inherently possesses and the agentic he inherently possesses (Broverman et al., 1972; Eagely & Steffen, 1984). Another reason for the bias against female caregivers is that mothers are fulfilling a stereotypical female role, and female roles are viewed as less valuable than stereotypical male roles (Broverman et al., 1972; Rosenkrantz et al., 1968).

In recent years, the bias against caregivers as started to encompass both male and female caregivers (Fuegen, Biernat, Haines & Deaux, 2004). While mothers are still thought of as less competent than fathers in the workplace, parents are viewed as lower in job commitment, achievement striving, dependability and competence than nonparents, regardless of gender (Heilman & Okimoto, 2008). Additionally, caregiving fathers have been found to experience more harassment at work than traditional fathers due to a perceived lack of masculinity by partaking in a stereotypically female role (Berdahl & Moon, 2013; Rudman & Mescher, 2013). I hypothesize that an applicant that reveals information on social media about parental obligations will be less likely to be recommended for hire than an applicant that does not post this type of information due to stereotypes regarding the competence of caregivers as well as the femininity associated with this role.

Hypothesis 2: An applicant that reveals information on social media about parental obligations will be less likely to be recommended for hire than an applicant that does not post this type of information.

Social Factors

While there is evidence to support the negative relationship between an employee's alcohol and drug use outside of work and job performance, this research has only been able to link the abuse of alcohol and drugs to lower levels of job performance (Frone, 2005; Mangione et al., 1997). There has been no research to support the relationship between posting information about alcohol and drug consumption on social networking sites and alcohol and drug abuse. In fact, the Americans with Disabilities Act (1990) also can protect alcoholics and drug addicts that are in remission in some situations (Equal Employment Opportunity Commission, 1992; Williams v. Wendall, 1996). If past postings include information regarding social factors such as using drugs or consuming alcohol but the individual is in recovery, this could potentially create a legal issue for the employer if this information is used to screen applicants or viewed during the screening process (Weidner et al., 2016). For example, a picture from five years prior of an individual that is clearly intoxicated and is holding drug paraphernalia may be found during a pre-employment screening of that individual's social networking site. However, the fact that this individual is in remission might not be evident through the social network screening.

Although there has been a lack of research linking posting information about alcohol and drug consumption on social networking sites to alcohol and drug abuse, there has been research supporting the existence of a negative implicit bias towards alcohol-related images (Thush & Wiers, 2007; Wiers, Van Woerden, Smulders, & De Jong, 2002; Van Boekel,

Brouwers, Van Weeghel, & Garretsen, 2013) and drug-related images (Wiers, Houben, & de Kraker, 2007; Van Boekel, Brouwers, Van Weeghel, & Garretsen, 2013; Van Hippel, Brener, & van Hippel, 2008). These biases primarily stem from the stigmas surrounding drug users as immoral and a risk to society (Ahern, Stuber & Galea, 2007; Kallen, 1989) and heavy drinkers as unpredictable and dangerous (Schomerus, Lucht, Holzinger, Matchinger, Carta & Angermeyer, 2011). Overall, the stigmas surrounding drug and heavy alcohol users are grounded in the idea these individuals are rebelling against societal norms which elicit negative reactions from those that follow societal norms (Keyes et al., 2010; Lloyd, 2013; Room, 2005). Furthermore, the lack of context, or additional information, surrounding this type of information when posted on social media increases the likelihood of reliance on these stigmas and biases when evaluating information pertaining to alcohol and drug use.

Bohnert and Ross (2010) found support for this bias in selection context. They asked participants to screen applicants resumes and social networking profiles. The social networking profiles where either family-oriented (picture with extended family), professionally-oriented (picture of at a company banquet), or alcohol-oriented (picture holding a beer in each hand). Applicants with alcohol-oriented profiles were more likely to be rated as less qualified, less likely to be recommended to be interviewed, and less likely to be offered to job (Bohnert & Ross, 2010). I plan to build upon these findings by assessing the relative importance of this type of information in comparison to the other types of information that I am studying. I hypothesize that an applicant that reveals information on social media regarding alcohol consumption or drug use will be less likely to be recommended for hire than an applicant that does not post this type of information. because

of the stigma and negative biases surrounding drugs user and heavy drinkers as societal rebels and outcasts.

Hypothesis 3: An applicant that reveals information on social media regarding alcohol consumption will be less likely to be recommended for hire than an applicant that does not post this type of information.

Political Factors

Many social networking sites serves as an outlet to express joy and frustration that the individual is experiencing (Nadkarni & Hofman, 2015; Submanyam, Reich, Waechter & Espinoza, 2008). This often leads to the expression of political beliefs, especially during an election. An individual might have posted statements that express his or her support or distain for a particular candidate. If the employer performing the social media screening does not agree with the individual, he or she might make negative assumptions about the applicant due to an implicit outgroup bias towards members that are not a part of one's group (Bluemke & Friese, 2008; Choma & Hafer, 2009; Iyengar, & Westwood, 2015; Jost, Banaji, & Nosek, 2004). Holding a negative outgroup bias against an opposing political party while viewing individuals in one's political party positively is an implicit negative bias against outgroup members and positive bias towards in-group members (Campbell, Converse, Miller & Stokes, 1960; Iyengar, & Westwood, 2015).

Iyengar and Westwood (2015) found that support for affective polarization using implicit association tests (IAT). These researchers also found that when asked to select an applicant for a hypothetical job, participants were more likely to select an applicant whose resume contained information about membership in the partisan groups that was aligned with the participants' political affiliation. In fact, Iyengar and Westwood (2015) found that

discrimination based on political affiliation exceeded discrimination based on race. Wade and Roth (2015) also studied how political affiliation influences hiring decisions. These researchers specifically focused on how information regarding political affiliation shared on social networking sites influences hireability evaluations. They also found that perceived similarity in political affiliation was positively related to hireability evaluations. Wade and Roth (2015) found that this relationship was stronger for evaluations based on information provided on Facebook than LinkedIn. I plan to build upon these findings by assessing the relative importance of this type of information in comparison to the other types of information that I am studying

This implicit bias towards applicants that hold different politic beliefs may cause employers to screen out applicants on the basis of the often potentially job-irrelevant information. As previously discussed, screening out applicants due to this type of information could cause potentially high performers to be eliminated from the selection process. I hypothesize that an applicant that posts information about his or her political beliefs will be less likely to be hired than an applicant that does not post this type of information.

Hypothesis 4: An applicant that posts information about his or her political affiliation will be less likely to be recommended for hire than an applicant that does not post this type of information if the applicant has a different political affiliation than the rater.

Method

Policy Capturing

Policy capturing allows for the exploration into how available information influences decisions (Zedeck, 1977). Specifically, policy capturing allows researchers to investigate

how decision makers combine and weigh certain information (Zedeck, 1977). This is done by presenting scenarios with varying levels of explanatory factors, or cues, to decision makers and asking them to judge these scenarios (Karren & Barringer, 2002). Reponses are regressed onto the explanatory factors to yield estimated coefficients that indicate which factors are most important to decision makers. Policy capturing has been used extensively in organizational settings to study topics such as compensation (Beatty, McCune & Beatty, 1988; Robinson, Wahlstrom & Mecham, 1974; Zhou & Martocchio, 2001), employment interviews (Dougherty, Ebert, & Callender, 1986; Grave & Karren, 1992; Podsakoff, Podsakoof & Mishra, 2011), and ratings of job applicants (Aiman-Smith, Bauer, & Cable, 2001; Reeve, & Schultz, 2004).

There are many advantages to using policy capturing as opposed to other methods of assessing decision making. Policy capturing is a more realistic approach than having participants rank variables in order of importance because the scenarios are designed to emulate situations that decision makers face (Karren & Barringer, 2002). Additionally, when rank ordering individuals might change answers based on what they think is desirable (Aiman-Smith, Scullen & Barr, 2002; Karren & Barringer, 2002). This has caused concerns over the validity of rankings because there are differences in what is reported and what actually happens (Hitt & Middlemist, 1979; Sherer, Schwab, & Heneman, 1987; Stumpf & London, 1981). Policy capturing has been shown to be less susceptible to the desirability effect because the importance of the explanatory factors is judged indirectly (Arnold & Feldman, 1981; Judge & Bretz, 1992; Rynes, Schwab, & Heneman, 1983)

However, there are some challenges associated with policy capturing that must be considered when utilizing this method of research. The major challenges are threats to

external validity, respondent fatigue, statistical power and reliability (Karren & Barringer, 2002). The current study relies on best practices to lessen the potential impacts on validity and reliability. Twenty-eight scenarios were used to assess the four factors being studied. This includes four repeated scenarios to minimize start up effects and to test reliability (Aiman-Smith, Scullen & Barr, 2002; Karren & Barringer, 2002). The use of 28 scenarios to assess 4 factors falls within the ideal range for the ratio of scenarios to factors of 5:1 to 10:1 (Cooksey, 1996). Because the number of scenarios falls within the ideal range, reliability will not be threatened by respondent fatigue (Karren & Barringer, 2002). While a fully-crossed factorial design is the best option to maintain a high level of power (Aiman-Smith, Scullen & Barr, 2002), this was not done in this case because it is highly unrealistic that someone would post information indicating they are a member of both the Republican and Democratic parties. While not fully crossed, this experimental design is still able to analyze main and interactive effects.

Scenario Design

Due to the nature of social networking sites, the scenarios included both text and written cues. This level of realism is vital to maintaining validity in policy capturing (Karren & Barringer, 2002; Aiman-Smith et al., 2002). In some studies involving social network screening, actual Facebook profiles are used in order to maintain a high level of realism (Van Iddekinge et al., 2016) while other use simulated profiles (Bohnert & Ross, 2010). In this study, scenarios were designed to look like the information was taken from an actual for Facebook profile. Actual Facebook profiles cannot be used because of the need to manipulate specific variables and to eliminate potential confounding variables. The scenarios were designed in a manner so that the applicant's sex, race and socio-economic status are not

apparent in order to decrease the likelihood that these factors will influence the participants' ratings. While most policy capturing utilized only written scenarios, there has been some evidence that picture scenarios are as effective, if not more so (Gorman, Clover & Doherty, 1978).

Each mock Facebook profile had either a cue for the variable of interest (health, family, social and political) or a neutral cue. The cue for the variable of interest was information regarding that variable gathered from a mock Facebook profile in the form of a picture and caption. Multiple cues for each variable were used in order to prevent the participants from repeatedly assessing the exact same picture and caption. Six equivalent cues for each variable were identified by subject matter experts so that participants only saw each specific picture and caption twice. The subject matter experts were asked to rate how similar multiple cues were to one another. Cues were deemed equivalent if at least 80% of subject matter experts rated the cues as very similar or extremely similar. The cues for health, family and social variables were the same across all applicants. The cue for the political variable depended on the participant's political affiliation. This cue contained information that indicates the applicant is a member of the opposing political party of the participant because, as hypothesized, out-group membership is the basis of the implicit bias regarding political affiliation. Participants' political ideology was collected at the end of the survey to ensure that individuals are not primed with politics prior to assessing their attitudes. Therefore, participants were exposed to cues indicating the applicant is a member of the Democratic party and cues indicating the applicant is a member of the Republican party. After assessing all the scenarios, the participants' in-group and outgroup were determined by their reported political ideology. The outgroup for participants that said they are neither

liberal nor conservative was made up of all the political cues because they are not a member of either group.

Neutral cues were information gathered from a mock Facebook profile in the form of a picture and caption that were not related to hireability and had little potential to be subject to additional biases. This was done in hopes of minimizing the likelihood that participants' ratings were influenced by factors outside the scope of this study. Neutral cues were developed and selected based on input from experts and previous studies on regarding hireability (Rudman, 1994; Wade & Roth, 2015). The descriptions of the cues as they appeared on the mock Facebook profiles and examples of a mock Facebook Profiles are attached in Appendix A.

Procedure

Participants were asked to take on the role of a hiring manager in an organization. All participants were given the following paragraph to briefly describe their position in a fictional company as a hiring manager:

Assume you are a hiring manager for a local company tasked with filling an open position. You have already interviewed the applicants. You have decided to look at the applicants' Facebook profiles to help you make decisions about whether or not you will recommend that candidate to be hired. You will be presented with information gathered from an applicant's Facebook profile. Please answer the following question about each applicant profile. Make sure to read the captions that accompany any pictures.

Then participants were asked to read 28 policy capturing scenarios. These scenarios included four pictures with captions taken from the applicant's Facebook profile. Every

picture and corresponding caption contained either a cue for the variables of interest (health, family, social, and political) or a neutral cue. Participants were asked how likely they are to recommend the applicant to be hired based on the information with which they were presented. Participants did this for every scenario. Scenarios were almost fully crossed (exception is regarding to political affiliation as it is not realistic for an applicant to post information indicating membership in both political parties), so every participant rated all reasonable combinations of cues for the variables of interest and the neutral cues.

After participants completed the hireability ratings for all scenarios, participants were asked to provide demographic information include age, sex, race, and political ideology. Participants were asked to rate themselves as extremely liberal, liberal, somewhat liberal, somewhat conservative, conservative or extremely conservative. The participant's stated political affiliation will be used to determine their outgroup. If the participant identified as somewhat conservative, conservative of extremely conservative, the scenarios with a political cue indicating the applicant is a Democrat was used to assess the hypothesized implicit outgroup bias. If the participant identified as extremely liberal, liberal, or somewhat liberal, the scenarios with a political cue indicating the applicant is a Republican was used to assess the hypothesized implicit outgroup bias.

Participants

The survey was administered to individuals currently working in recruitment and/or hiring and individuals that have previous work experience in these areas. Additionally, students from a large, public, Southwestern university were recruited. To qualify for this study, participants must have had some previous experience with a hiring process (as an applicant or a hiring manager). Recruitment took place through email, word of mouth and

posting on discussion boards and forums of websites geared towards human resource professionals (i.e.- Society of Human Resource Management, LinkedIn, HR.com...) and through the UH SONA recruitment system. Data was collected from 39 working professionals and 183 students, totaling 222 participants. Of these participants, 176 (79.27%) were female, 43 (19.34%) were male and three (1.35%) participants did not specify a gender. Demographics of participants were as follows: 35.14% white, 24.77% Hispanic, 20.72% Asian, 8.11% black, 0.5% Native American, 7.66% biracial or multiracial and 3.15% other/not specified. Participants were from a wide range of industries and ages, furthering indicating the generalizability of the findings (Table 1).

Measures

Hireability. Hireability was assessed using a one-item scale. The item reads, "How likely would you be to recommend to hire this candidate?" The item is rated on a Likert-types response scale from 1 to 7 (1= "very unlikely", 7= "very likely").

Health issues. Participants were asked if they have any health issues that impact their daily life (1= yes, 0= no).

Parental Status. Participants were asked if they have any children (1=yes, 0=no).

Drinking habits. Participants were asked how many alcoholic drinks they consume in an average week.

Political ideology. Political ideology was collected in order to present each participant with the correct political cue. This information was collected using a one-item scale. The item reads, "Please select the item that most closely aligns with your political ideology." Responses from this item are: extremely liberal, liberal, somewhat liberal, neither liberal not conservative somewhat conservative, conservative or extremely conservative.
Results

Descriptive statistics are presented in Table 2 of Appendix B (means, standard deviation, and correlation). Health, family, social and political cues were dummy coded (presences of variable= 1; neutral variable= 0). Following Aiman-Smith and colleagues (2002) recommendation, I measured reliability using a test-retest reliability by repeating a behavioral scenario. As such, if the difference between the hireability ratings was greater than 2, then I dropped participants from the analysis. Additionally, participants that took less than 5 minutes to complete the survey were dropped from the analysis. After implementing these strategies to control for non-attentive responders, my final sample included 222 participants out of the 291 individuals from which data were collected. Of this final sample, 39 were working professionals and 183 were students. The test-retest reliability for the repeated scenario was more than adequate (r= 0.81) (Hinkin, 1995).

The results of the main analysis are presented in Table 3 of Appendix B. The intraclass correlation for hireablity (ICC(1)= 0.38; Appendix B, Table 3, Model 1) indicates that multilevel modeling is the appropriate analysis (Klein & Kozlowski, 2000). Multilevel modeling allows for the variance to be attributed to the correct source (within-person variance vs between-person variance) and allows for more stable results than general linear regression (Klein & Kozlowski, 2000). According to Mehta and Neale (2005), individuals should be considered variables as well. In this analysis, each participant represents the level 2 variable. Since the main interest of the study is to assess how each cue influences hireability ratings across participants, all slopes and intercepts were considered random effects and therefore allowed to vary (Snijders & Boskers, 2012). Additionally, the fit indices for the model that allowed all slopes and intercepts to vary (Appendix B, Table 3, Model 3)

improved upon the fit indices for the model that only allowed the intercept to vary (; Appendix B, Table 3, Model 2), providing further support for this decision. Furthermore, Snijders & Bosker (2012) suggest that when there is significant between-person variance, this might be due to the presence of level 2 variables or cross-level interactions between variables. Since there was significant between-person variance in Model 1, level 2 variables of rater health status, parental status and drinking habits were included in Models 2 and 3.

The following section outlines the findings of this study. First, I test the hypothesized relationships between types of information presented on social media and hireability ratings. Then, I explore how certain rater characteristics (health status, parental status and drinking habits) interact with the information applicants post on social media to influence hireability ratings. Lastly, I investigate any potential differences between the two subsamples of working professionals and students.

Test of hypotheses

Hypothesis 1 proposed that applicants who post information on social media indicating that they have health issues will be less likely to recommended to be hired than applicants that do not post this type of information. The presence of health information did not have a significant effect on hireability ratings (B = -0.04, p = 0.13; Appendix B, Table 3, Model 3). Therefore, hypothesis 1 was not supported.

Hypothesis 2 proposed that applicants that post information about having children on social networking sites will be less likely to be recommended to be hired than applicants that do not post this type of information. The presence of information indicating the applicant is a parent did have a significant and negative effect on hireability ratings (B = -0.46, p < 0.001; Appendix B, Table 3, Model 3). Thus, hypothesis 2 was supported.

Hypothesis 3 proposed that applicants that post information about consuming alcohol excessively on social networking sites will be less likely to be recommended to be hired than applicants that do not post this type of information. The presence of information about excessive alcohol consumption had a significant negative effect on hireability rating (B = -0.83, p < 0.001; Appendix B, Table 3, Model 3). Thus, hypothesis 3 was supported.

Lastly, hypothesis 4 proposed that applicants that post information indicating that they are a member of the opposing political party from the rater will be less likely to be hired than applicants that do not post this type of information. The presence of information indicating that the applicant is of the opposing political party was significantly and negatively related to hireability (B = -0.78, p < 0.001; Appendix B, Table 3, Model 3). Thus, hypothesis 4 was supported. Additionally, the presence of information indicating that the applicant is a member of the same political party as the rater was also significantly and negatively related to hireability ratings (B = -0.26, p < 0.001; Appendix B, Table 3, Model 3). This suggests that posting information indicating membership of either major political party is negatively related to hireability ratings.

Post hoc analysis

As previously stated, Snijders & Bosker (2012) suggest that when there is significant between-person variance, this might be due to the presence of level 2 variables or cross-level interactions between variables. Since there was still significant between-person variance in Model 3, which included level 2 variables, cross-level interactions between the level 2 rater variables and the corresponding level 1 applicant variables were assessed in Model 4. Estimates from the model including cross-level interaction are presented in Table 4 (Appendix B). Only one of the cross-level interactions was significant. The interaction

between the number of alcoholic drinks the rater consumes and applicants that post information about alcohol consumption on social media had significant effect on hireability ratings (B = 0.18, p < 0.01; Appendix B, Table 4). This suggests that raters that consume more alcoholic drinks judge applicants that post information about heavy drinking less harshly than raters that consume fewer alcoholic drinks (Appendix C, Figure 1). The crosslevel interaction between the rater's health status and the applicant posting information indicating that he or she has an health issue and the cross-level interaction between the rater's parental status and the applicant posting information indicating that he or she is a parent were both not significant (B = -0.03, p = 0.08; B = 0.03, p = 0.11, respectively; Appendix B, Table 4).

Differences in subsamples

Due to the use of two different samples (i.e., working professionals and college students), I conducted post-hoc analyses to assess if any significant between-group differences existed. To test for differences between the two subsamples, working status was entered into the model as control variable (0=student, 1=working professional). The results of this analysis are presented in Table 5. Since students were coded as 0, the first set of estimates is for the student subsample. The second set of estimates represent the additive effect of the working professional subsample on the estimate of the student sample. For example, the estimate for the intercept for the student subsample was 5.42. The estimate for the intercept of the working professional subsample was calculated by adding the estimate from the student subsample (B = 56/03, p < 0.001; Appendix B, Table 5) with the estimate from that of the working professional subsample (B = -0.61, p < 0.05; Appendix B, Table 5).

Because the estimate of the additive effect of the intercept for working professionals is significant, this suggests that the intercept of working professionals is significantly from the intercept of students.

The difference between the estimates was only significant for two of the variables. The estimate of the effect of applicants posting information about alcohol consumption was significantly different between the student subsample and the working professional subsample (B = 0.44, p < 0.05; Appendix B, Table 5). The effect of posting information about alcohol consumption on hireability ratings for the student subsample was greater than the effect of posting information about alcohol consumption on hireability for the subsample of working professionals (B = -0.89; B = -0.45, respectively; Appendix C, Figure 2). The estimate of the effect of applicants posting information about being a member of the opposing political party to that of the rater was significantly different between the student subsample and the subsample of working professionals as well (B = 0.46, p < 0.001; Appendix B, Table 5). The effect of posting information about opposing political beliefs on hireability ratings for the student subsample was greater than the effect of posting information about opposing political beliefs on hireability ratings for the subsample of working professionals (B = -0.88, B = -0.42, respectively; Appendix C, Figure 3). These estimates only differed in magnitude and not in direction. The effect of the applicant posting information about alcohol consumption and the effect of the applicant posting about being a member of the opposing political party than the rater remained negative for both subsamples but both of these effects were larger for the student subsample than the subsample of working professionals

Discussion

This study focused on how certain types of information posted on social networking sites were evaluated within the context of employee selection. Specifically, this study assessed how implicit biases towards information about an applicant's health, family, social habits and political affiliation negatively influenced hireability ratings. The findings from this study showed information related to an applicant's parental obligations, drinking habits, and political ideology are all negatively viewed by raters. Contrary to my hypothesis, posting information about health issues did not influence hireability ratings. One possible explanation for this finding is that hiring managers are aware that it is illegal to discriminate against employees on the basis of disability status. Since many of the health issues included in this study could be defined as a disability according to the Americans with Disabilities Act of 1990, this could be the reason that posting this type of information was not related to hireability ratings.

Information indicating that the applicant is a parent did have a small but negative effect on hireability ratings (Cohen, 1988). This supports past research on negative biases towards working parents (Williams, et al., 2006; Williams & Bornstein, 2008). Additionally, the raters own parental status did not change the way they judged applicants that post information about being a parent. One reason for this might be that the implicit biases one holds towards parents may not change when he or she becomes a parent because the negative bias towards parents stem from stigmas surrounding gender roles as opposed to group membership (Berdahl & Moon, 2013; Broverman et al., 1972; Eagely & Steffen, 1984; Fuegen et al., 2004; Rudman & Mescher, 2013). Past research suggest that both men and women hold these stereotypes (Jost & Kay, 2005; Koch, D'Mello & Sackett, 2015; Rudman & Glick, 2001), suggesting that these stereotypes are not influenced by group membership.

Therefore, it is understandable that there is not a favorable in-group bias from raters that are parents to buffer against the negative implicit bias towards working parents.

Information indicating that the applicant partakes in excessive alcohol consumption had a moderate negative effect on hireability ratings (Cohen, 1988). This supports past research that found a negative implicit bias towards individuals that drink heavily (Bohnert & Ross, 2010; Keyes et al., 2010; Lloyd, 2013; Room, 2005). This research suggests that the implicit bias stems from assumptions that individuals that consume alcohol heavily are immoral, unpredictable and dangerous (Ahern et al., 2007; Schomerus et al., 2011). While this study did not aim to identify the reasons behind the implicit bias, it did find evidence to suggest that there is a negative bias towards individuals that post information about excessive alcohol consumption on social media.

Alcohol consumption was the only type of applicant information in the study that had a significant interaction effect with a rater characteristic. This study found that (Appendix C, Figure 1). This might be because the rater views himself or herself as similar to the applicant, so they are less likely to make negative assumption about those that drink heavily. Past research on similarity has shown that individuals are less likely to negatively assess others that they view as similar to themselves (Brown, Barrick & Franke, 2002; Goldberg, 2005; Higgins & Judge, 2004). Since applicants that posted information about alcohol consumption were still negatively judged by all raters, the rater's level of alcohol consumption might act as a buffer against the severity of this effect but does not completely prevent this negative bias from influencing hireability ratings.

Information indicating that the applicant is a member of the opposing political party than that of the rater was moderately and negatively related to hireability ratings (Cohen,

1988). This supports past research that people hold negative biases towards members of an opposing political party (Iyengar & Westwood, 2015; Wade & Roth, 2015). Surprisingly, posting information that indicates that the applicant is a member of the same political party as that of the rater was also negatively related to hireability ratings albeit this effect was small (Cohen, 1988). The negative effect of information indicating the applicant is a member of the opposing political party was stronger than the effect of information indicating the applicant is a member of the same political party. This difference suggests that multiple biases might be influencing these judgements. As theorized, an out-group bias could be responsible for the negative effect of posting information about being a member of the same political party on hireability ratings. However, the negative effect of information about being a member of the same political party on hireability ratings contradicts the notion of a positive in-group bias towards applicants of the same political party as the rater.

One possible reason for the negative effect of information indicating the applicant is a member of the same political party as the rater on hireability ratings is that the current political climate could cause raters to be overly sensitive towards outspoken members of either political party. Hiring someone that openly expresses his or her political beliefs might be viewed as less desirable simply because of the tensions presently surrounding American politics (Johnson & Roberto, 2018; Petrillo, 2016; Roth, Goldberg, & Thatcher, 2017). Additionally, the outward expression of political values around people you do not know well violates an American social norm ("don't discuss politics or religion at a dinner party"; Winters, 2017). The rater might assume that the applicant will engage in conversations that would be considered inappropriate for the work setting and may associate this with social ineptness. Another possible reason for these findings is that raters are considering how the

applicant will interact with their coworkers. If raters know that current employees have a diverse range of political ideologies, they may not want to hire a new employee that could cause conflict by not fitting in with the work group. Past research of person-group fit suggest that hiring decisions are influenced by interviewer perceptions of how well the applicant will fit in with the group that the applicant would work with if he or she was hired (Cable & Judge; 1997; Kristoff-Brown, Zimmerman & Johnson; 2005). Raters might negatively rate applicants that voice opposing political opinions to those of the potential work group even if the rater holds similar political beliefs to those of the applicant.

Theoretical implications

This study advances the research on social networking as a screening tool by proposing a theoretical framework to understand how the information posted on these websites is assessed by hiring managers. The limited past research on social networking screenings has been devoid of theory, making it challenging to understand how raters are influenced by the information posted on social media. This study provides a basic theoretical framework as to how some of the information applicants make available on social networking sites is judged by extending the research on implicit biases (Bodensteiner, 2008; Faigman et al., 2007; Greenwald & Kriefer, 2006; Jolls & Sunstein; 2006; Macan & Merritt, 2011) to the context of social networking screenings. For example, past research on implicit biases found that hiring managers tend to hold negative implicit biases towards applicants with children (Williams et al., 2006; Williams & Bornstein, 2008). This study found that simply posting information on social networking sites about parental obligations has a negative effect on hireability ratings, thus furthering the research supporting a negative bias towards working parents.

This research also provides support for the existence of implicit biases towards drinking habits and political ideology in the context of employee selection. Past research has focused on negative biases towards individuals that drink alcohol excessively (Ahren et al., 2007; Keyes et al., 2010; Lloyd, 2013; Room, 2005; Schomerus et al., 2011) but the vast majority of this research has not been within the employee selection context. This study found that hireability ratings are lower for applicants that post information about alcohol consumption on social networking sites, extending the research regarding negative biases towards alcohol consumption to the context of employee selection. This study also furthers the research on negative out-group biases towards members of opposing political parties to the employee selection context (Iyengar & Westwood, 2015; Wade & Roth, 2015). Additionally, this study found that there is a negative bias towards individuals of the same political party. Future research needs to focus on the source of this bias as well as the prevalence of this bias in different contexts. The underlying mechanisms of the implicit biases were outside the scope of this study. Future research should focus on the underlying mechanisms of these all these implicit biases to add to the understand of how these biases operate.

Practical implications

While social networking screenings are becoming increasingly popular within organizations (Grasz, 2016), very little research has been done to help guide this practice (Landers & Schmidt, 2016; Roth et al., 2013). This study adds to the limited research on using social networking screenings as a selection tool by identifying how certain types of information posted on social media is viewed by hiring managers. Hiring managers should be cautious in how they use social networking sites to screen applicants as the might be relying

on negative biases to make decisions regarding the hireability of applicants. Furthermore, the information about the applicant that they are assessing through social networking screenings might not be related to job performance (Davison et al., 2012; Schmidt & O'Conner, 2016; Ruggs et al., 2016; Van Iddekinge et al., 2016). Since social networking sites were not developed with the intent of providing work related information, much of the information that is available on these websites is most likely not related to job performance. The types of information assessed in this study are commonly posed on social networking sites (Nadkarni & Hofman, 2015; Submanyam, et al., 2008) but have not been found to be related to job performance. Future research should focus on identifying how the information available through social networking sites relates to job performance in order to provide valuable guidance to organizations that use social networking sites to screen applicants

Organizations should caution hiring managers against using non-relevant information to screen applicants for two reasons. First, hiring manager might be screening out qualified candidates on the basis of information that is not related to the job. Potentially high performing applicants might be removed from the selection process because the non-job related information they posted on social networking sites is negatively rated by the hiring manager. Secondly, relying on these biases to screen applicants might leave the organization vulnerable to legal action. Validating a selection procedure is one way of the best ways to decrease the likelihood of intentional and unintentional discrimination (Fiss, 1971; Hunter & Hunter, 1984; Schmidt & Hunter .1998). To date, no studies have been able to establish the criterion-related validity or the content validity of social networking screenings (Landers & Schmidt, 2016; Roth et al., 2012; Van Iddekinge et al., 2016). If a protected class is being disproportionately screened out by this selection tool, the organization might have trouble

defending the use of social networking screenings if they cannot show that the information assessed in these screenings is job relevant (Gutman et al., 2011; Malos, 2005).

If an organization does use social networking sites to screen employees, I suggest providing training in order to minimize potential biases. Research shows that diversity training helps reduce biases (King, Dawson, Kravitz & Gulick, 2012; Rudman, Ashmore & Gary, 2001). The principles of this type of training could be applied to these reduce the biases found in this study. Instead of focusing on racial or gender diversity, training should focus on reducing the biases against parents, alcohol consumption and political affiliation by uncovering raters implicit biases in order to make them aware that they are relying on these biases and hopefully discourage this behavior.

Limitations and Future Directions

One potential limitation is that fake Facebook profiles were used instead of real ones. The information provided on the fake profiles might not accurately reflect all the information presented on real profiles. However, fake profiles were used in order to maintain control over the information participants were exposed to so the effects of certain types of information on hireability ratings could be accurately assessed. Future research should focus on how these types of information are assessed when they are available within real Facebook profiles. Furthermore, due to the number of scenarios needed to accurately assess the effect of each type of information, only a limited number of variables could be assessed. Coupled with the small to moderate correlations between the variables assessed and hireability ratings (Appendix B, Table 2; Cohen, 1988), future research should focus on how other types of information about the applicant are assessed during social networking screenings. For example, past research has found that an applicant's job qualification can buffer against

biases (Heilman, 1984; Renwick & Tosi, 1978). Future research should examine how the effects found in this study change at different levels of job qualifications in order to determine if an applicant's abilities can buffer against these effects.

Another limitation to this study is the significant amount of variance between participant's responses (Appendix B, Table 6). The effects of the type of information on hireability ratings varied across participants. Additionally, this study found that corresponding participant characteristics did not impact the effect of the type of information presented on hireability ratings (ie- a participant's parental status did not change how the participant assessed the information about an applicant's parental status) Follow-up studies should focus on identifying other factors that contribute to the variability among participant's hireability ratings.

Lastly, there were some differences in the way working professionals and students rated the hireability of the applicant's Facebook profiles. Due to the differences in the sizes of these subsamples, it was hard to determine if these differences were due to actual differences in how these groups assess the information presented on an applicant's Facebook profile or if these differences were a byproduct of sample size. Future research should replicate this study with a larger sample of working professionals in order to further investigate these potential differences.

In conclusion, this study aimed to determine how certain types of information from an applicant's Facebook profile is assessed in a hiring context. Applicants that post information about parental obligations, drinking habits, or political views received lower hireability ratings than applicants that did not post these types of information. This study added to the limited body of research on how social networking sites are used in a hiring context. It

further extended the theory of implicit biases to information presented on social networking sites. This study also added to the limited research on implicit biases based on information presented in picture form as well as implicit biases regarding family obligations, drinking habits and political views. While these characteristics have not been shown to relate to job performance, this study found that they are being used to screen applicants. Not only may organizations screen out potentially high performing applicants based on information that is not related to the job, but they also might open themselves up to litigation if this selection procedure has an adverse impact on a protected group.

References

- Aberson, C. L., Shoemaker, C., & Tomolillo, C. (2004). Implicit bias and contact: The role of interethnic friendships. *The Journal of social psychology*, *144*(3), 335-347.
- Aiman-Smith, L., Bauer, T. N., & Cable, D. M. (2001). Are you attracted? Do you intend to pursue? A recruiting policy-capturing study. *Journal of Business and psychology*, 16(2), 219-237.
- Aiman-Smith, L., Scullen, S. E., & Barr, S. H. (2002). Conducting Studies of Decision Making in Organizational Contexts: A Tutorial for Policy-Capturing and Other Regression-Based Techniques. *Organizational Research Methods*, 5(4), 388–414. https://doi.org/10.1177/109442802237117.
- Ahern, J., Stuber, J., & Galea, S. (2007). Stigma, discrimination and the health of illicit drug users. Drug & Alcohol Dependence, 88(2), 188-196.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological bulletin*, 84(5), 888.
- Alexander v Choate 469 U.S. 287, 105 S.Ct. 712 (1985) Retrieved July 31st from http://caselaw.findlaw.com/us-supreme-court/469/287.html
- Akrami, N., Ekehammar, B., Claesson, M., & Sonnander, K. (2006). Classical and modern prejudice: Attitudes toward people with intellectual disabilities. *Research in developmental disabilities*, 27(6), 605-617.

Americans With Disabilities Act of 1990, Pub. L. No. 101-336, 104 Stat. 328 (1990).

Ames, G. M., Grube, J. W., & Moore, R. S. (1997). The relationship of drinking and hangovers to workplace problems: an empirical study. *Journal of studies on alcohol*, 58(1), 37-47.

- Arnold, H. J., & Feldman, D. C. (1981). Social desirability response bias in self-report choice situations. Academy of Management Journal, 24, 377-385.
- Badgett, M. V., Lau, H., Sears, B., & Ho, D. (2007). Bias in the workplace: Consistent evidence of sexual orientation and gender identity discrimination.
- Barr, S. H., & Hitt, M. A. (1986). A comparison of selection decision models in manager versus student samples. *Personnel Psychology*, 39(3), 599-617.
- Beatty, J. R., McCune, J. T., & Beatty, R. W. (1988). A policy-capturing approach to the study of United States and Japanese managers' compensation decisions. *Journal of Management*, 14(3), 465-474.
- Berdahl, J. L., & Moon, S. H. (2013). Workplace mistreatment of middle class workers based on sex, parenthood, and caregiving. *Journal of Social Issues*, *69*(2), 341-366.
- Berger, C. R. (1987). Communicating under uncertainty. In M. E. Roloff & G. R. Miller (Eds.), *Interpersonal processes* (pp. 39-62). Newbury Park, CA: Sage.
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human communication research*, 1(2), 99-112.
- Berger, C. R., & Kellerman, K. A. (1983). To ask or not to ask: Is that a question? Communication Yearbook, 7, 342-368.
- Bluemke, M., & Friese, M. (2008). Reliability and validity of the Single-Target IAT (ST-IAT): assessing automatic affect towards multiple attitude objects. *European Journal* of Social Psychology, 38(6), 977-997.

- Bodensteiner, I. E. (2008). The Implications of Psychological Research Related to Unconscious Discrimination and Implicit Bias in Proving Intentional Discrimination. *Mo. L. Rev.*, 73, 83.
- Bohnert, D., & Ross, W. H. (2010). The influence of social networking web sites on the evaluation of job candidates. *Cyberpsychology, Behavior, and Social Networking*, 13(3), 341-347.
- Bradac, J. J. (2001). Theory comparison: Uncertainty reduction, problematic integration, uncertainty management, and other curious constructs. *Journal of Communication*, 51(3), 456-476.
- Broverman, I. K., Vogel, S. R., Broverman, D. M., Clarkson, F. E., & Rosenkrantz, P. S. (1972). Sex-role stereotypes: A current appraisal. *Journal of Social issues*, 28(2), 59-78.
- Brown, V. R., & Vaughn, E. D. (2011). The writing on the (Facebook) wall: The use of social networking sites in hiring decisions. *Journal of Business and psychology*, 26(2), 219.
- Cable, D. M., & Judge, T. A. (1997). Interviewers' perceptions of person–organization fit and organizational selection decisions. *Journal of Applied psychology*, *82*(4), 546.
- Cable, D. M., & Judge, T. A. (1994). Pay preferences and job search decisions: A personorganization fit perspective. *Personnel psychology*, 47(2), 317-348.
- Carr, C. T., & Walther, J. B. (2014). Increasing attributional certainty via social media: Learning about others one bit at a time. *Journal of Computer-Mediated Communication*, 19(4), 922-937.

- Chambers & Winter. Society for Industrial and Organizational Psychology. (2017). Social media and selection: a brief history and practical recommendations. *SIOP White Paper Series*.
- Chapman, E. N., Kaatz, A., & Carnes, M. (2013). Physicians and implicit bias: how doctors may unwittingly perpetuate health care disparities. *Journal of general internal medicine*, 28(11), 1504-1510.
- Choma, B. L., & Hafer, C. L. (2009). Understanding the relation between explicitly and implicitly measured political orientation: The moderating role of political sophistication. *Personality and Individual Differences*, 47(8), 964-967.
- Civil Rights Act of 1964 § 7, 42 U.S.C. § 2000e et seq (1964)
- Cohen, J. (1988). Statistical power analysis for the behavioural sciences.
- Colella, A., & Varma, A. (1999). Disability-job fit stereotypes and the evaluation of persons with disabilities at work. *Journal of Occupational Rehabilitation*, *9*(2), 79-95.
- Cooksey, R. W. (1996). Judgment analysis: Theory, methods, and applications. San Diego, CA: Academic Press.
- Cooper, L. A., Roter, D. L., Carson, K. A., Beach, M. C., Sabin, J. A., Greenwald, A. G., & Inui, T. S. (2012). The associations of clinicians' implicit attitudes about race with medical visit communication and patient ratings of interpersonal care. *American journal of public health*, 102(5), 979-987.
- Correll, S. J., Benard, S., & Paik, I. (2007). Getting a job: Is there a motherhood penalty?. *American journal of sociology*, *112*(5), 1297-1338.
- Cvencek, D., Meltzoff, A. N., & Greenwald, A. G. (2011). Math–gender stereotypes in elementary school children. *Child development*, 82(3), 766-779.

- Danziger, S., Levav, J., & Avnaim-Pesso, L. (2011). Extraneous factors in judicial decisions. *Proceedings of the National Academy of Sciences*, 108(17), 6889-6892.
- Davison, H. K., Bing, M. N., Kluemper, D. H., & Roth, P. L. (2016). Social media as a personnel selection and hiring resource: Reservations and recommendations. In *Social Media in Employee Selection and Recruitment* (pp. 15-42). Springer International Publishing.
- Davison, H. K., Maraist, C., & Bing, M. N. (2011). Friend or foe? The promise and pitfalls of using social networking sites for HR decisions. *Journal of Business and Psychology*, 26(2), 153-159.
- Davison, H. K., Maraist, C. C., Hamilton, R. H., & Bing, M. N. (2012). To screen or not to screen? Using the Internet for selection decisions. *Employee Responsibilities and Rights Journal*, 24(1), 1-21.
- Dougherty, T. W., Ebert, R. J., & Callender, J. C. (1986). Policy capturing in the employment interview. *Journal of applied psychology*, *71*(1), 9.
- Dovidio, J. F., Kawakami, K., & Beach, K. R. (2001). Implicit and explicit attitudes: Examination of the relationship between measures of intergroup bias. *Blackwell handbook of social psychology: Intergroup processes*, *4*, 175-197.
- Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interactial interaction. *Journal of personality and social psychology*, *82*(1), 62.
- Dovidio, J. F., Pagotto, L., & Hebl, M. R. (2011). Implicit attitudes and discrimination against people with physical disabilities. In *Disability and aging discrimination* (pp. 157-183). Springer New York.

- Eastwick, P. W., Eagly, A. H., Finkel, E. J., & Johnson, S. E. (2011). Implicit and explicit preferences for physical attractiveness in a romantic partner: a double dissociation in predictive validity. *Journal of personality and social psychology*, *101*(5), 993.
- Eagly, A. H., & Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal of personality and social psychology*, 46(4), 735.
- Equal Employment Opportunity Commission. (2007). Enforcement guidance: unlawful disparate treatment of workers with caregiving responsibilities.
- Equal Employment Opportunity Commission. (1992). A technical assistance manual on the employment provisions (Title 1) of the Americans with Disabilities Act. ERIC Clearinghouse.
- Equal Employment Opportunity Commission (EEOC), Civil Service Commission, Department of Labor, & Department of Justice. (1978). Uniform guidelines on employee selection procedures. Federal Register, 43, 38290–39315.
- Facebook (2017). Your profile and settings. *Facebook Helpcenter*. Retrieved July 21st from https://www.facebook.com/help/239070709801747?helpref=popular topics.
- Faigman, D. L., Dasgupta, N., & Ridgeway, C. L. (2007). The Matter of Fit: The Law of Discrimination and the Science of Implicit Bias. *Hastings LJ*, 59, 1389.
- Fallin-Bennett, K. (2015). Implicit bias against sexual minorities in medicine: cycles of professional influence and the role of the hidden curriculum. *Academic Medicine*, 90(5), 549-552.
- Fan, W., & Bifet, A. (2013). Mining big data: current status and forecast to the future. ACM sIGKDD Explorations Newsletter, 14(2), 1-5.

- Fiss, O. M. (1971). A theory of fair employment laws. *The University of Chicago Law Review*, 38(2), 235-314.
- Frone, M. R. (2006). Prevalence and distribution of alcohol use and impairment in the workplace: a US national survey. *Journal of studies on alcohol*, 67(1), 147-156.
- Fuegen, K., Biernat, M., Haines, E., & Deaux, K. (2004). Mothers and fathers in the workplace: how gender and parental status influence judgments of job-related competence. *Journal of Social Issues*, 60(4), 737-754.
- Garver-Apgar, C. E., Gangestad, S. W., Thornhill, R., Miller, R. D., & Olp, J. J. (2006).
 Major histocompatibility complex alleles, sexual responsivity, and unfaithfulness in romantic couples. *Psychological science*, *17*(10), 830-835.
- Gatewood, R.D., Feild, H.S. and Barrick, M. (2011), *Human Resource Selection*, 7th ed., South-Western, Mason, OH.
- Giacobbe-Miller, J. K., Miller, D. J., & Victorov, V. I. (1998). A comparison of Russian and US pay allocation decisions, distributive justice judgments, and productivity under different payment conditions. *Personnel Psychology*, 51(1), 137-163.
- George, G., Haas, M. R., & Pentland, A. (2014). Big data and management. *Academy of Management Journal*, 57(2), 321-326.
- Goldberg, C. B. (2005). Relational demography and similarity-attraction in interview assessments and subsequent offer decisions: are we missing something?. *Group & Organization Management*, *30*(6), 597-624.
- Goldman, B. M., Gutek, B. A., Stein, J. H., & Lewis, K. (2006). Employment discrimination in organizations: Antecedents and consequences. *Journal of Management*, 32(6), 786-830.

- Gouvier, W. D., Sytsma-Jordan, S., & Mayville, S. (2003). Patterns of discrimination in hiring job applicants with disabilities: The role of disability type, job complexity, and public contact. *Rehabilitation psychology*, 48(3), 175.
- Grasz, J. (2016). Number of employers using social media to screen candidates has increased 500 percent over the last decade. *CareerBuilder Press Releases*. Retrieved June 17th from

http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?ed=12%2F31% 2F2016&id=pr945&sd=4%2F28%2F2016.

- Graves, L. M., & Karren, R. J. (1992). Interviewer decision processes and effectiveness: An experimental policy-capturing investigation. *Personnel Psychology*, 45(2), 313-340.
- Green, A. R., Carney, D. R., Pallin, D. J., Ngo, L. H., Raymond, K. L., Iezzoni, L. I., & Banaji, M. R. (2007). Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *Journal of general internal medicine*, 22(9), 1231-1238.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: attitudes, self-esteem, and stereotypes. *Psychological review*, *102*(1), 4.
- Greenwald, A. G., Banaji, M. R., Rudman, L. A., Farnham, S. D., Nosek, B. A., & Mellott,D. S. (2002). A unified theory of implicit attitudes, stereotypes, self-esteem, and self-concept. *Psychological review*, *109*(1), 3.
- Greenwald, A. G., & Krieger, L. H. (2006). Implicit bias: Scientific foundations. *California Law Review*, *94*(4), 945-967.

- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: the implicit association test. *Journal of personality* and social psychology, 74(6), 1464.
- Greenwood, S., Perrin, A., & Duggan M. (2016, November 21). Social media update 2016. *Pew Research Center*. Retrieved on July 29th from http://www.pewinternet.org/2016/11/11/social-media-update-2016/.
- Guilfoyle, S., Bergman, S. M., Hartwell, C., & Powers, J. (2016). Social Media, Big Data, and Employment Decisions: Mo'Data, Mo'Problems?. In *Social Media in Employee Selection and Recruitment* (pp. 127-155). Springer International Publishing.
- Gutman, A., Koppes, L. L. & Vodanovich, S. J. (2011). EEO Law and Personnel Practices. New York, NY: Psychology Press
- Heilman, M. E., & Okimoto, T. G. (2008). Motherhood: A potential source of bias in employment decisions. *Journal of Applied Psychology*, 93(1), 189.
- Heilman, M. E. (1984). Information as a deterrent against sex discrimination: The effects of applicant sex and information type on preliminary employment decisions.Organizational Behavior and Human Performance, 33(2), 174-186.
- Hein, S., Grumm, M., & Fingerle, M. (2011). Is contact with people with disabilities a guarantee for positive implicit and explicit attitudes?. *European Journal of Special Needs Education*, 26(4), 509-522.
- Hidya, K. & McDonald, M., (2013). Risky business: The legal implications of social media's increasing role in employment decisions. *Journal of Legal Studies in Business*, 18, 69.

- Higgins, C. A., & Judge, T. A. (2004). The effect of applicant influence tactics on recruiter perceptions of fit and hiring recommendations: a field study. *Journal of Applied Psychology*, 89(4), 622.
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of management*, 21(5), 967-988.
- Hitt, M. A., & Middlemist, R. D. (1979). A methodology to develop the criteria and criteria weightings for assessing subunit effectiveness in organizations. Academy of Management Journal, 22, 356-374.
- Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & Schmitt, M. (2005). A metaanalysis on the correlation between the Implicit Association Test and explicit selfreport measures. *Personality and Social Psychology Bulletin*, 31(10), 1369-1385.
- Hunter, J. E. (1986). Cognitive ability, cognitive aptitudes, job knowledge, and job performance. *Journal of vocational behavior*, *29*(3), 340-362.
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological bulletin*, *96*(1), 72.
- Iyengar, S., & Westwood, S. J. (2015). Fear and loathing across party lines: New evidence on group polarization. *American Journal of Political Science*, *59*(3), 690-707.
- Jaeger, R. M. (1995). Setting performance standards through two-stage judgmental policy capturing. *Applied measurement in education*, 8(1), 15-40.
- Johnson, A. F., & Roberto, K. J. (2018). Right versus left: How does political ideology affect the workplace?. *Journal of Organizational Behavior*.

- Johnson, R. L., Roter, D., Powe, N. R., & Cooper, L. A. (2004). Patient race/ethnicity and quality of patient–physician communication during medical visits. *American journal of public health*, *94*(12), 2084-2090.
- Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political psychology*, 25(6), 881-919.
- Jost, J. T., & Kay, A. C. (2005). Exposure to benevolent sexism and complementary gender stereotypes: consequences for specific and diffuse forms of system justification. *Journal of personality and social psychology*, 88(3), 498.
- Jost, J. T., Pelham, B. W., & Carvallo, M. R. (2002). Non-conscious forms of system justification: Implicit and behavioral preferences for higher status groups. *Journal of Experimental Social Psychology*, 38(6), 586-602.
- Judge, T. A., & Bretz, R. D., Jr. (1992). Effects of work values on job choice decisions. Journal of Applied Psychology, 77, 261-271.
- Jung, K., Shavitt, S., Viswanathan, M., & Hilbe, J. M. (2014). Female hurricanes are deadlier than male hurricanes. *Proceedings of the National Academy of Sciences*, 111(24), 8782-8787.
- Kallen, E. (1989). *Label me human: Minority rights of stigmatized Canadians*. Univ of Toronto Pr.
- Karren, R. J., & Barringer, M. W. (2002). A Review and Analysis of the Policy-Capturing Methodology in Organizational Research: Guidelines for Research and Practice. *Organizational Research Methods*, 5(4), 337–361. https://doi.org/10.1177/109442802237115.

- Kang, J., Bennett, M., Carbado, D., & Casey, P. (2011). Implicit bias in the courtroom. UCLA L. rev., 59, 1124.
- Keyes, K. M., Hatzenbuehler, M. L., McLaughlin, K. A., Link, B., Olfson, M., Grant, B. F., & Hasin, D. (2010). Stigma and treatment for alcohol disorders in the United States. *American journal of epidemiology*, *172*(12), 1364-1372.
- King, E. B., Dawson, J. F., Kravitz, D. A., & Gulick, L. M. (2012). A multilevel study of the relationships between diversity training, ethnic discrimination and satisfaction in organizations. *Journal of Organizational Behavior*, 33(1), 5-20.
- Kitchin, R. (2014). Big Data, new epistemologies and paradigm shifts. *Big Data & Society*, *1*(1), 2053951714528481.
- Klein, K. J., & Kozlowski, S. W. (2000). Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions. Jossey-Bass.
- Klesges, R. C., Klem, M. L., Hanson, C. L., Eck, L. H., Ernst, J., O'Laughlin, D., ... & Rife,
 R. (1990). The effects of applicant's health status and qualifications on simulated
 hiring decisions. *International Journal of Obesity*, 14(6), 527-535.
- Koch, A. J., D'mello, S. D., & Sackett, P. R. (2015). A meta-analysis of gender stereotypes and bias in experimental simulations of employment decision making. *Journal of Applied Psychology*, *100*(1), 128.Kraus, S. J. (1995). Attitudes and the prediction of behavior: A meta-analysis of the empirical literature. *Personality and social psychology bulletin*, *21*(1), 58-75.
- Krefting, L. A., & Brief, A. P. (1976). The impact of applicant disability on evaluative judgments in the selection process. *Academy of Management Journal*, 19(4), 675-680.

- Krieger, L. H., & Fiske, S. T. (2006). Behavioral realism in employment discrimination law:Implicit bias and disparate treatment. *California Law Review*, 94(4), 997-1062.
- Kristof-Brown, A., Barrick, M. R., & Franke, M. (2002). Applicant impression management: Dispositional influences and consequences for recruiter perceptions of fit and similarity. *Journal of Management*, 28(1), 27-46.
- Kosinski, M., Stillwell, D., & Graepel, T. (2013). Private traits and attributes are predictable from digital records of human behavior. *Proceedings of the National Academy of Sciences*, *110*(15), 5802-5805.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals'fit at work: a meta-analysis of person–job, person–organization, person–group, and person–supervisor fit. *Personnel psychology*, *58*(2), 281-342Knussman v. Maryland, 272 F.3d 625, 630 (4th Cir. 2001).
- Landers, R. N., & Schmidt, G. B. (2016). Social media in employee selection and recruitment: An overview. In *Social Media in Employee Selection and Recruitment* (pp. 3-11). Springer International Publishing.
- Larson, D. (2008). Unconsciously regarded as disabled: Implicit bias and the regarded-as prong of the Americans with Disabilities Act. UCLA L. Rev., 56, 451.
- LeBel, E. P., & Campbell, L. (2009). Implicit partner affect, relationship satisfaction, and the prediction of romantic breakup. *Journal of Experimental Social Psychology*, 45(6), 1291-1294.
- Levinson, J. D. (2007). Forgotten racial equality: Implicit bias, decision making, and misremembering. *Duke Law Journal*, 345-42

- Levinson, J. D., & Young, D. (2010). Implicit gender bias in the legal profession: An empirical study.
- Lloyd, C. (2013). The stigmatization of problem drug users: A narrative literature review. *Drugs: education, prevention and policy, 20*(2), 85-95.
- Lust v. Sealy, Inc., 383 F.3d 580, 583 (2004). Retrieved August 1st from http://caselaw.findlaw.com/us-7th-circuit/1235855.html.
- Macan, T., & Merritt, S. (2011). Actions speak too: Uncovering possible implicit and explicit discrimination in the employment interview process. *International Review of Industrial and Organizational Psychology 2011, Volume 26*, 293-337.
- Malos, S. (2005). The Importance of Valid Selection and Performance Appraisal. Employment discrimination litigation: Behavioral, quantitative, and legal perspectives, 16, 373.
- Mangione, T. W., Howland, J., Amick, B., Cote, J., Lee, M., Bell, N., & Levine, S. (1999). Employee drinking practices and work performance. *Journal of studies on alcohol*, 60(2), 261-270.
- Margie, N. G., Killen, M., Sinno, S., & McGlothlin, H. (2005). Minority children's intergroup attitudes about peer relationships. *British Journal of Developmental Psychology*, 23(2), 251-270.
- Maner, J. K., Gailliot, M. T., & Miller, S. L. (2009). The implicit cognition of relationship maintenance: Inattention to attractive alternatives. *Journal of Experimental Social Psychology*, 45(1), 174-179.

- McConnell, A. R., & Leibold, J. M. (2001). Relations among the Implicit Association Test, discriminatory behavior, and explicit measures of racial attitudes. *Journal of experimental Social psychology*, 37(5), 435-442.
- Mehta, P. D., & Neale, M. C. (2005). People are variables too: Multilevel structural equations modeling. *Psychological methods*, *10*(3), 259.

Nev. Dep't of Human Res. v. Hibbs, 538 U.S. 721 (2003)

Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook?. *Personality and individual differences*, *52*(3), 243-249.

Nowak, M., & Spiller, G., (2017, June 27). Two Billion People Coming Together on Facebook. *Facebook newsroom*. Retrieved July 19th from https://newsroom.fb.com/news/2017/06/two-billion-people-coming-together-onfacebook.

- O'Brien, K. S., Hunter, J. A., & Banks, M. (2007). Implicit anti-fat bias in physical educators: physical attributes, ideology and socialization. *International Journal of Obesity*, *31*(2), 308.
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: reducing anxiety in intergroup contexts through cross-group friendship. *Journal of personality and social psychology*, 95(5), 1080.

Petrillo, L. (2016, October 6). Presidential Election Is Stressing Out Workers, Hurting Productivity. Retrieved from https://www.shrm.org/resourcesandtools/hrtopics/employee-relations/pages/politics-at-work-.aspx Peeters, G., & Czapinski, J. (1990). Positive-negative asymmetry in evaluations: The distinction between affective and informational negativity effects. *European review of social psychology*, 1(1), 33-60.

Phillips v. Martin Marietta Corp., 400 U.S. 542, 544 (1971)

- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Mishra, P. (2011). Effects of organizational citizenship behaviors on selection decisions in employment interviews. *Journal of Applied Psychology*, 96(2), 310.
- Prewitt v. United States Postal Service. 662 F2d 292 (1981) Retrieved July 31st from http://openjurist.org/662/f2d/292/prewitt-v-united-states-postal-service
- Puhl, R., & Brownell, K. D. (2001). Bias, discrimination, and obesity. Obesity, 9(12), 788-805.
- Rachlinski, J. J., Johnson, S. L., Wistrich, A. J., & Guthrie, C. (2008). Does unconscious racial bias affect trial judges. *Notre Dame L. Rev.*, 84, 1195.
- Ramirez, A., Walther, J. B., Burgoon, J. K., & Sunnafrank, M. (2002). Information-seeking strategies, uncertainty, and computer-mediated communication. *Human communication research*, 28(2), 213-228.
- Ravaud, J. F., Madiot, B., & Ville, I. (1992). Discrimination towards disabled people seeking employment. Social Science & Medicine, 35(8), 951-958.
- Reeve, C. L., & Schultz, L. (2004). Job-seeker reactions to selection process information in job ads. *International Journal of Selection and Assessment*, 12(4), 343-355.
- Renwick, P. A., & Tosi, H. (1978). The effects of sex, marital status, and educational background on selection decisions. *Academy of Management Journal*, 21(1), 93-103.

- Riegle-Crumb, C., & Humphries, M. (2012). Exploring bias in math teachers' perceptions of students' ability by gender and race/ethnicity. *Gender & Society*, 26(2), 290-322.
- Robert Walters, (2015). Using social media in the recruitment process. *Insight Series*. U.K.: Robert Walters plc.
- Robinson, D. D., Wahlstrom, O. W., & Mecham, R. C. (1974). Comparison of job evaluation methods: A" policy-capturing" approach using the Position Analysis Questionnaire. *Journal of Applied Psychology*, 59(5), 633.
- RobotRecruiters (April 6th, 2013). *The Econominst*. Retrieved July 28th from http://www.economist.com/news/business/21575820-how-software-helps-firms-hireworkers-more-efficiently-robot-recruiters
- Rojahn, J., Komelasky, K. G., & Man, M. (2008). Implicit attitudes and explicit ratings of romantic attraction of college students toward opposite-sex peers with physical disabilities. *Journal of Developmental and Physical Disabilities*, 20(4), 389-397.
- Room, R. (2005). Stigma, social inequality and alcohol and drug use. *Drug and alcohol review*, *24*(2), 143-155.
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D. M. (1968). Sex-role stereotypes and self-concepts in college students. *Journal of consulting and clinical psychology*, 32(3), 287.
- Roth, P. L., Bobko, P., Van Iddekinge, C. H., & Thatcher, J. B. (2013). Social media in employee-selection-related decisions: A research agenda for uncharted territory. *Journal of Management*, 42(1), 269-298.
- Roth, P., Goldberg, C., & Thatcher, J. (2017). I vote left, you vote right: How can we work together?. USApp-American Politics and Policy Blog.

- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: a policy-capturing approach. *Journal of applied psychology*, 87(1), 66.
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: the costs and benefits of counterstereotypical impression management. *Journal of personality and social psychology*, 74(3), 629.
- Rudman, L. A., Ashmore, R. D., & Gary, M. L. (2001). "Unlearning" automatic biases: the malleability of implicit prejudice and stereotypes. *Journal of personality and social psychology*, 81(5), 856.
- Rudman, L. A., & Mescher, K. (2013). Penalizing men who request a family leave: Is flexibility stigma a femininity stigma?. *Journal of Social Issues*, 69(2), 322-340.
- Rudman, L. A., Greenwald, A. G., & McGhee, D. E. (2001). Implicit self-concept and evaluative implicit gender stereotypes: Self and in-group share desirable traits. *Personality and Social Psychology Bulletin*, 27(9), 1164-1178.
- Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of social issues*, *57*(4), 743-762.Rudman, L. A., & Kilianski, S. E. (2000). Implicit and explicit attitudes toward female authority. *Personality and social psychology bulletin*, *26*(11), 1315-1328.
- Ruggs, E. N., Walker, S. S., Blanchard, A., & Gur, S. (2016). Online Exclusion: Biases That May Arise When Using Social Media in Talent Acquisition. In *Social Media in Employee Selection and Recruitment* (pp. 289-305). Springer International Publishing.

- Rynes, S. L., & Lawler, J. (1983). A policy-capturing investigation of the role of expectancies in decisions to pursue job alternatives. *Journal of Applied Psychology*, 68(4), 620.
- Rynes, S. L., Schwab, D. P., & Heneman, H. G., III. (1983). The role of pay and market pay variability in job applicant decisions. Organizational Behavior and Human Performance, 31, 353-364.
- Rynes, S. L., Weber, C. L., & Milkovich, G. T. (1989). Effects of market survey rates, job evaluation, and job gender on job pay. *Journal of Applied Psychology*, *74*(1), 114.
- Sabin, J. A., Marini, M., & Nosek, B. A. (2012). Implicit and explicit anti-fat bias among a large sample of medical doctors by BMI, race/ethnicity and gender. *PloS one*, 7(11), e48448.
- Sabin, D. J. A., Nosek, D. B. A., Greenwald, D. A. G., & Rivara, D. F. P. (2009). Physicians' implicit and explicit attitudes about race by MD race, ethnicity, and gender. *Journal* of Health Care for the Poor and Underserved, 20(3), 896.
- Sabin, J. A., Rivara, F. P., & Greenwald, A. G. (2008). Physician implicit attitudes and stereotypes about race and quality of medical care. *Medical care*, *46*(7), 678-685.
- Sabin, J. A., Riskind, R. G., & Nosek, B. A. (2015). Health care providers' implicit and explicit attitudes toward lesbian women and gay men. *American journal of public health*, 105(9), 1831-1841.
- Santiago-Ramos v. Centennial P.R. Wireless Corp., 217 F.3d 46, 55 (2000). Retrieved August 1st from http://caselaw.findlaw.com/us-1st-circuit/1432934.html
- Saul, J. (2013). Implicit bias, stereotype threat, and women in philosophy. *Women in philosophy: What needs to change*, 39-60.

- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological bulletin*, 124(2), 262.
- Schmidt, G. B., & O'Connor, K. W. (2016). Legal concerns when considering social media data in selection. In *Social Media in Employee Selection and Recruitment* (pp. 265-287). Springer International Publishing.
- Schomerus, G., Lucht, M., Holzinger, A., Matschinger, H., Carta, M. G., & Angermeyer, M.
 C. (2010). The stigma of alcohol dependence compared with other mental disorders: a review of population studies. *Alcohol and Alcoholism*, 46(2), 105-112.
- Sekaquaptewa, D., Espinoza, P., Thompson, M., Vargas, P., & von Hippel, W. (2003). Stereotypic explanatory bias: Implicit stereotyping as a predictor of discrimination. *Journal of Experimental Social Psychology*, 39(1), 75-82.

Sigmon v. Parker Chapin Flattau & Klimpl, 901 F. Supp. 667, 678 (S.D.N.Y. 1995)

- Shariff, A. F., & Tracy, J. L. (2009). Knowing who's boss: Implicit perceptions of status from the nonverbal expression of pride. *Emotion*, *9*(5), 631.
- Sherer, P. D., Schwab, D. P., & Heneman, H. G., III. (1987). Managerial salary-raise decisions: A policy-capturing approach. Personnel Psychology, 40, 27-38.
- Smith, R. J., & Levinson, J. D. (2011). The impact of implicit racial bias on the exercise of prosecutorial discretion. *Seattle UL Rev.*, 35, 795.
- Snijders, T. A. B., & Bosker, R. J. (2012). *Multilevel analysis: an introduction to basic and advanced multilevel modeling*

- Spence, J. R., & Keeping, L. M. (2010). The impact of non-performance information on ratings of job performance: A policy-capturing approach. *Journal of Organizational Behavior*, 31(4), 587-608.
- Stanford, H. B. (2009). Do You Want to Be An Attorney or a Mother-Arguing for a Feminist
 Solution to the Problem of Double Blinds in Employment and Family
 Responsibilities Discrimination. *Am. UJ Gender Soc. Pol'y & L.*, *17*, 627.
- Stoughton, J., Thompson, L., Meade, A., (2011). Examining applicant reactions to the use of social networking websites in pre-employment screening.
- Stumpf, S. A., & London, M. (1981). Capturing rater policies in evaluating candidates for promotion. Academy of Management Journal, 24, 752-766.
- Subrahmanyam, K., Reich, S. M., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: Use of social networking sites by emerging adults. *Journal of applied developmental psychology*, 29(6), 420-433.
- Teachman, B. A., & Brownell, K. D. (2001). Implicit anti-fat bias among health professionals: is anyone immune?. *International journal of obesity*, 25(10), 1525.
- Teachman, B. A., Gapinski, K. D., Brownell, K. D., Rawlins, M., & Jeyaram, S. (2003). Demonstrations of implicit anti-fat bias: the impact of providing causal information and evoking empathy. *Health Psychology*, 22(1), 68.
- Teachman, B. A., Wilson, J. G., & Komarovskaya, I. (2006). Implicit and explicit stigma of mental illness in diagnosed and healthy samples. *Journal of Social and Clinical Psychology*, 25(1), 75-95.
- Thush, C., & Wiers, R. W. (2007). Explicit and implicit alcohol-related cognitions and the prediction of future drinking in adolescents. *Addictive behaviors*, *32*(7), 1367-1383.

- Tilcsik, A. (2011). Pride and prejudice: Employment discrimination against openly gay men in the United States. *American Journal of Sociology*, *117*(2), 586-626.
- Tommasi, G. W., Williams, K. B., & Nordstrom, C. R. (1998). Letters of recommendation: What information captures HR professionals' attention?. *Journal of Business and Psychology*, 13(1), 5-18.
- Urshel, H. (2012). How employers view your online presence. *Job-Hunt*. Retrived July 20th, 2017 from https://www.job-hunt.org/job-search-mindset/how-employers-view-youronline-presence.shtml.
- Van Boekel, L. C., Brouwers, E. P., Van Weeghel, J., & Garretsen, H. F. (2013). Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: systematic review. *Drug and alcohol dependence*, 131(1), 23-35.
- Van Iddekinge, C. H., Lanivich, S. E., Roth, P. L., & Junco, E. (2016). Social media for selection? Validity and adverse impact potential of a Facebook-based assessment. *Journal of Management*, 42(7), 1811-1835.
- Van Leeuwen, M. L., & Neil Macrae, C. (2004). Is beautiful always good? Implicit benefits of facial attractiveness. *Social cognition*, 22(6), 637-649.
- van Hippel, W., Brener, L., & van Hippel, C. (2008). Implicit prejudice toward injecting drug users predicts intentions to change jobs among drug and alcohol nurses. *Psychological Science*, 19(1), 7-11.
- Wade, J., & Roth, P. (2015). Social Media and Personnel Selection: How Does New Technology Change an Old Game?.
- Weidner, N., O'Brien, K. E., & Wynne, K. T. (2016). Social Media Use: Antecedents and Outcomes of Sharing. In *Social Media in Employee Selection and Recruitment* (pp. 79-101). Springer International Publishing.
- Wiers, R. W., Houben, K., & de Kraker, J. (2007). Implicit cocaine associations in active cocaine users and controls. *Addictive behaviors*, 32(6), 1284-1289.
- Wiers, R. W., Van Woerden, N., Smulders, F. T., & De Jong, P. J. (2002). Implicit and explicit alcohol-related cognitions in heavy and light drinkers. *Journal of abnormal psychology*, 111(4), 648.
- Williams, J. C., Alon, T., & Bornstein, S. (2006). Beyond the 'Chilly Climate': Eliminating bias against women. *Thought & Action*, 79.
- Williams, J. C., & Bornstein, S. (2007). Evolution of FReD: Family ResponsibilitiesDiscrimination and Developments in the Law of Stereotyping and ImplicitBias. *Hastings LJ*, 59, 1311.
- Williams, J. C., Bornstein, S., Reddy, D., & Williams, B. A. (2006). Law Firms as Defendants: Family Responsibilities Discrimination in Legal Workplaces. *Pepp. L. Rev.*, 34, 393.
- Williams v. Widnall. 79 F.3d 1003 (1996). Retrieved July 29th from http://caselaw.findlaw.com/us-10th-circuit/1155691.html
- Wilson, M. C., & Scior, K. (2014). Attitudes towards individuals with disabilities as measured by the Implicit Association Test: A literature review. *Research in developmental disabilities*, 35(2), 294-321.
- White, M. J., Jackson, V., & Gordon, P. (2006). Implicit and explicit attitudes toward athletes with disabilities. *Journal of Rehabilitation*, 72(3), 33.

- White, M. J., & White, G. B. (2006). Implicit and explicit occupational gender stereotypes. *Sex roles*, *55*(3-4), 259-266.
- Zedeck, S., & Cascio, W. F. (1982). Performance appraisal decisions as a function of rater training and purpose of the appraisal. *Journal of Applied Psychology*, 67(6), 752.
- Zedeck, S., & Kafry, D. (1977). Capturing rater policies for processing evaluation data. Organizational Behavior and Human Performance, 18, 269-294.
- Zhou, J., & Martocchio, J. J. (2001). Chinese and American managers' compensation award decisions: A comparative policy-capturing study. *Personnel Psychology*, 54(1), 115-145.
- Ziegert, J. C., & Hanges, P. J. (2005). Employment discrimination: the role of implicit attitudes, motivation, and a climate for racial bias. *Journal of Applied Psychology*, 90(3), 553.

Appendix A

Facebook Scenarios: 4 predictors at two levels (present vs. neutral); 16 scenarios total.

Table 1

Variable	Presence of cue	Neutral cue
Health	Picture and caption about having from an auto-immune disease	Picture and caption about weather
Family	Picture and caption about coming home to a house with messy children's rooms	Picture and caption about flowers
Social	Picture and caption about drinking a large amount of alcohol	Picture and caption about coffee
Political		Picture and caption about a sunset
Identified as a Conservative	Picture and caption about being a member of Young Democrats	
Identified as a Liberal;	Picture and caption about being a member of Young Republicans	

Cues for presence of the variables of interest and neutral cues

Health Presence of variable:







Thank you for the constant support! We must continue to fight for a cure!



...





..











Family Presence of variable:



This is living with toddlers! It feel like I will never come home to a clean house again.





•••







Neutral cue:



80





Social Presence of variable:







Neutral cue:

•••



Look at this great latte from my local coffee shop!







Political Presence of variable:

Press Enter to post.

Participant identi	fies as conserva	tive:
This is a great group that Larr	n proud to have been a men	aber of in college!
		IG ATS
★ of A © Like	MERIC , Comment	A \star
Write a comment		
Press Enter to post.		0200
An Applicant Just now • 11 +		
	great party!	E
🖒 Like	Comment	⇔ Share
Write a comment Press Enter to post.		© @ @ @



An Applicant		•••
Vote responsibly!		
Ľ Like	Comment	A Share
Write a comment		
Press Enter to nost		
2 mins - 11 -		
Get involved with a chan	ge that matters!	CRATS
🖒 Like	Comment	⇔ Share
Write a comment.		
Press Enter to post.		

Participant identifies as liberal:

•••

An Applicant

This is a great group that I am proud to have been a member of in college!







Neutral cue:

•••



What a beautiful sunset!







Table 1.	
Demographic characteristics of the sample.	
Age	
Under 18	2
18-24	156
25-34	32
35-44	20
45-54	5
55-64	5
65-74	1
85+	1
Industry	
Accommodation or food services	19
Admin, support, waste management or	
remediation services	4
Arts, entertainment or recreation	11
Construction	1
Educational Services	34
Finance or insurance	10
Health care or social assistance	34
Information	4
Management of company or enterprises	6
Manufacturing	2
Not specified	1
Other services	41
Professional, scientific or technical services	28
Retail trade	17
Transportation or warehousing	2
Unclassified Establishments	7
Wholesale trade	1

Appendix B

Note: N=222

Table 2.

Sample, Means, Standard	Deviations,	Intercorre	elations, and	Reliabilities		
Variable	M	SD	1	2	3	4

Variable	M	SD	1	2	3	4	5	6	7	8	9	10.
1. Hireability	4.70	1.53	1.00									
2. Alcoholic drinks per	1.29	2.23	0.03*	1.00								
week												
3. Political beliefs	4.51	1.39	0.04**	-0.14***	1.00							
4. Individuals with health	0.14	0.35	-0.02	-0.05***	0.08***	1.00						
issues												
5. Individuals with	0.15	0.35	0.04**	0.19***	-0.20***	0.07***	1.00					
children												
6. Heath Cue	0.50	0.50	-0.01					1.00				
7. Social Cue	0.50	0.50	-0.27***						1.00			
8. Family Cue	0.50	0.50	-0.15***							1.00		
9. Political cue- opposing	0.22	0.41	-0.15***	0.01	0.10***	0.00	0.01				1.00	
10. Political cue- similar	0.22	0.42	0.05***		0.10***							1.00

Note: N= 222. *p < .05; **p < .01; ***p < .001.

Variable 1 was rated of on Likert type scale from 1-7 (extremely unlikely to extremely likely).

Variable 3 was coded such that extremely conservative=1, conservative=2, slightly conservative=3, moderate=4, slightly liberal=5, liberal=6, extremely liberal=7.

Variable 4-9 were dummy coded such that the absences of the variable = 0 and the presences of the variable = 1.

	Null model (Model 1)		Random inter fixed slopes (Random intercept and fixed slopes (Model 2)		cept and es (Model 3)
	Coefficient	SE	Coefficient	SE	Coefficient	SE
Level 1						
Intercept	4.70***	0.07	5.60***	0.09	5.64***	0.09
Health Cue			-0.04	0.03	-0.04	0.03
Family Cue			-0.46***	0.03	-0.46***	0.04
Social Cue			-0.83***	0.03	-0.83***	0.06
Political Cue-Opposing beliefs			-0.82***	0.04	-0.78***	0.07
Political Cue- Similar beliefs			-0.24***	0.04	-0.26**	0.05
Level 2						
Individual with health issues			-0.04	0.19	-0.05	0.18
Individual with children			-0.21	0.19	-0.29	0.18
Alcoholic drinks per week			0.07	0.07	0.02	0.07
Cross-level interactions						
Individual with health issues x						
Health Cue						
Individual with children x						
Family Cue						
Alcoholic Drinks per week x						
Social Cue						
Fit Statistics						
-2Loglikelihood	17693.8		16449.10		15427.50	
Number of estimated parameters	3		11.00		31.00	

Table 3.

Estimated coefficients of predictors of hireability

Note: N= 222. p < .05; p < .01; p < .01; p < .001. Variables were dummy coded such that the absence of the variable = 0 and the presences of the variable = 1.

	Cross level interactions (Model	
	Coefficient	SE
Level 1		
Intercept	5.67***	0.09
Health Cue	-0.04	0.03
Family Cue	-0.46***	0.04
Social Cue	-0.83***	0.06
Political Cue-Opposing beliefs	-0.78***	0.07
Political Cue- Similar beliefs	-0.23**	0.05
Level 2		
Individual with health issues	-0.04	0.18
Individual with children	-0.30	0.19
Alcoholic drinks per week	-0.07	0.07
Cross-level interaction		
Individual with health issues x Health Cue	-0.03	0.08
Individual with children x Family Cue	0.03	0.11
Alcoholic Drinks per week x Social Cue	0.18**	0.06
Fit Statistics		
-2Loglikelihood	15429.40	
Number of estimated parameters	34.00	

Table 4.Post hoc analysis- estimated coefficients of predictors of hireability

Note: N= 222. *p < .05; **p < .01; ***p < .001.

Variables were dummy coded such that the absence of the variable = 0 and the presences of the variable = 1.

	Coefficient	SE
Estimates of students		
Level 1		
Intercept	6.03***	0.22
Health Cue	-0.02	0.03
Family Cue	-0.48***	0.04
Social Cue	-0.89***	0.07
Political Cue-Opposing beliefs	-0.88***	0.08
Political Cue- Similar beliefs	-0.29**	0.06
Level 2		
Individual with health issues	-0.08	0.20
Individual with children	-0.09	0.24
Alcoholic drinks per week	-0.16	0.11
Cross-level interaction		
Individual with health issues x Health Cue	-0.05	0.08
Individual with children x Family Cue	-0.12	0.15
Alcoholic Drinks per week x Social Cue	0.16**	0.09
Additive effects for working professionals		
Level 1 variables		
Intercept	-0.61*	0.26
Health Cue	-0.12	0.08
Family Cue	0.14	0.13
Social Cue	0.44*	0.20
Political Cue-Opposing beliefs	0.46**	0.18
Political Cue- Similar beliefs	0.15	0.12
Level 2 variables		
Individual with health issues	0.09	0.50
Individual with children	-0.36	0.39
Alcoholic drinks per week	0.28	0.16
Cross-level interactions		
Individual with health issues x Health Cue	0.09	0.21
Individual with children x Family Cue	0.21	0.25
Alcoholic Drinks per week x Social Cue	-0.09	0.14
Fit Statistics		
-2Loglikelihood	15424.80	
Number of estimated parameters	46	

 Table 5.

 Comparing students and working professionals

Note: N= 222. *p < .05; **p < .01; ***p < .001. Variables were dummy coded such that the absence of the variable = 0 and the presences of the variable = 1.

Table 6.

Variance components of estimated models

	Null Model	Random intercept and fixed slopes	Random intercept and random slopes
Within-person variance	1.44***	1.12***	0.74***
Between-person variance			
Intercept variance	0.90***	0.96***	0.89***
Health cue slope variance			0.04**
Social cue slope variance			0.72***
Family cue slope variance			0.24***
Political cue opposing slope variance			0.63***
Political cue similar slope variance			0.19***
Intercept-Health cue slope covariance			0.03
Intercept-Social cue slope covariance			-0.20**
Intercept-Family cue slope covariance			-0.06
Intercept-Political cue opposing slope covariance			-0.04
Intercept-Political cue similar slope covariance			-0.08

Note: N= 222. *p < .05; **p < .01; ***p < .001.

Variables were dummy coded such that the absence of the variable = 0 and the presences of the variable = 1.
Appendix C



Figure 1. Interaction between the social cue and number of alcoholic drinks consumed per week by the rater



Figure 2. Difference between the effect of the social cue on hireability for students and working professional



