DISSERTATION

IMPRESSION MANAGEMENT MANIFESTED ON LINKEDIN AND IN RESUMES

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ABSTRACT

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This study examines the effects of the use of impression management tactics on the professional networking site, LinkedIn. It makes three primary contributions to the literature. First, this study examines how a job seeker’s use of impression management on LinkedIn affects inferences of his or her cognitive ability and conscientiousness. In addition, I compared inferences of cognitive ability and conscientiousness made from resumes and LinkedIn profiles, which showed inferences made from LinkedIn profiles have incremental validity over inferences made from resumes. Finally, these findings build preliminary validation evidence for the use of LinkedIn as a selection screening tool.
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INTRODUCTION

Survey research has shown HR professionals are using LinkedIn as a screening tool (Hoek, O’Kane, & McCracken, 2016; Mulvey, Alonso, Esen, & Scanian, 2013), but little is known about how or why it is being used. Researchers have called for work to better understand how new technology is being used in practice for selection (Roth, Bobko, Van Iddekinge, & Thatcher, 2013). There is extensive overlap in the information found on resumes and LinkedIn profiles. In an effort to gain additional information, from which they can make inferences about job performance, HR professionals are reviewing both resumes and LinkedIn profiles.

HR professionals can make inferences about future job performance based on both signs and samples. Signs are measures of constructs we think are related to job performance, like personality and intelligence. In contrast, samples are actual job-related behaviors (Wernimont & Cambell, 1968). Using samples during the selection process follows the logic that past performance predicts future performance. For example, if an applicant’s prior work experience includes similar tasks as the position for which he or she is applying, we assume the applicant is capable of performing those same tasks in the new position. Individuals infer the presence of a latent construct from signs and samples. Then, individuals make inferences about the relationship between the latent constructs (Binning & Barrett, 1989). Accuracy of these inferences builds validity evidence for the selection procedure.

Applicants, aware that members of the organization are trying to make inferences about future job performance, attempt to influence these inferences through impression management tactics. Throughout the selection process, applicants use impression management tactics to enhance the organization’s perception of them. Stages of the selection process differ in how
much and the types of impression management tactics applicants can or do use. For example, the face-to-face interaction of an interview allows the applicant to use both verbal and non-verbal behaviors and to receive constant feedback about the success of the tactics. In contrast, an applicant is limited in tactics and cannot receive immediate feedback on a resume either directly or indirectly. LinkedIn profiles provide very similar information as resumes but use a different medium. Perhaps the social networking aspect of LinkedIn lends itself to the use of impression management tactics, allowing recruiters and hiring managers to infer additional information between the lines of the LinkedIn profile.

This study seeks to apply the extensive impression management literature to the use of LinkedIn as a selection tool, advancing our science through a greater understanding of practices already implemented by HR professionals across the country. This research will determine if the use of impression management tactics on LinkedIn influences the relationships between applicant attributes, specifically cognitive ability and conscientiousness, and a rater’s perception of those attributes. In addition, this study will examine whether or not LinkedIn provides additional information, above and beyond the information provided in resumes, from which recruiters can make inferences about job performance. If incremental validity of the LinkedIn profile can be demonstrated, I will assess the role of impression management in the increase of variance in an applicant’s assessed attributes explained by the attributes gleaned from the LinkedIn profile. Finally, these data also have the potential to establish preliminary validation evidence for the use of LinkedIn as a screening tool in selection.

**Impression Management**

Impression management tactics have been observed and studied in the work context through traditional selection procedures, including interviews, resumes, and personality testing.
Research outside the realm of the workplace has examined impression management tactics online. However, impression management on professionally oriented social networking has yet to be examined. The impression management literature will serve as a framework for understanding how conscientiousness and cognitive ability are inferred by raters.

**Defining Impression Management**

A commonly cited definition of impression management states that it “occurs because an actor has a goal of creating and maintaining a specific identity. This goal is achieved by strategically exhibiting behaviors, both verbal and nonverbal, that will cause a target to view the actor as desired” (Bozeman & Kacmar, 1997, p. 9). Goffman (1959) was one of the first researchers to discuss impression management, describing how actors alter their performances based on both the situation and the audience. Individuals behave differently based on the audience. Factors like status and familiarity of the audience impact behavior (Gardner & Martinko, 1988).

People highlight connections with prominent others and avoid undesirable connections known as impression management by association (Cialdini & Richardson, 1980). People *bask in reflected glory* (BIRG) or *blast* the opposition to enhance their own image. Cialdini (1989) expanded on the idea of basking by creating four distinct categories: *boasting* (formerly basking), *burying* (not mentioning unwanted connections), *blaring* (publicly minimizing unwanted connections), and *blurring* (blur links with wanted connections while not mentioning differences). These are all behaviors intended to influence the audience’s perceptions.

Impression management permeates many aspects of work, including selection, training, and performance appraisal. As this study focuses on impression management tactics used in resumes and professional networking profiles, the literature reviewed will revolve around
impression management in selection. The extent to which an individual can use impression management tactics successfully depends on the situation and the audience. The overuse of tactics can seem insincere (Jones & Wortman, 1973). However, not using tactics in a situation where it is appropriate, like a job interview, can be perceived negatively (Kacmar, Delery, & Ferris, 1992). Behaviors from both actors during the interview, the applicant and the interviewer, influence each other (Anderson, 1992). Some researchers have conceptualized impression management as manipulation to gain an unfair advantage (Rosenfel & Giacalone, 1991). This conceptualization led to a trend in the research of attempting to mitigate the effects of impression management in the selection process. However, other conceptualizations of impression management include the ability to highlight or sell favorable aspects of the candidate, which can be seen as a positive, desirable attribute (Rosenfeld, 1997). This fits in with an expansivist view of impression management (Schlenker & Weigold, 1992).

*Types of Impression Management Tactics.* There are a variety of different behaviors that fall under the umbrella of impression management tactics. Different types of tactics are used to accomplish different goals (Jones & Pittman, 1982). Impression management behaviors can either be direct or indirect. Direct tactics are assertive, strategic, proactive actions to create an image that will further their career, or defensive, reactions to being portrayed poorly. Indirect tactics involve a third party. This could mean the actor is hoping positive information will be passed along to others or the actor is connecting oneself to prominent others.

Jones and Pittman (1982) developed a taxonomy of impression management behaviors, resulting in 5 dimensions. The first dimension, self-promotion, includes behaviors meant to demonstrate competency. For the second dimension, ingratiation, actors attempt to make themselves more likable through flattery or performing favors. Exemplification, the third
dimension, encompasses behaviors that are self-sacrificial and demonstrate dedication. Actors who display power to appear dangerous are exhibiting the fourth dimension, intimidation. Finally, the fifth dimension, supplication, occurs when an actor wants to appear needy through showing their weaknesses. This taxonomy has been used as a framework for research and to guide scale development (Bolino & Turnley, 1999).

Tedeschi and Melburg’s (1984) typology compares two spectrums of impression management behaviors, assertive or defensive and tactical or strategic, to create four quadrants of behaviors. Assertive behaviors are used by the actor to establish an image aligned with his or her goals. Defensive behaviors are reactive, occurring to negate the potentially negative effects of the situation on the actor’s image. Tactical behaviors serve short-term goals while strategic behaviors are aimed at building a reputation and fulfilling long-term goals. The first set of behaviors, tactical-and-defensive group, are meant to mitigate the negative effects of adverse events. Excuses and justifications, apologies, and restitution and compensatory actions are examples of tactical and defensive behaviors.

Tedeschi and Melburg argue that Jones and Pittman’s taxonomy of behaviors, including ingratiation, intimidation, exemplification, self-promotion, and supplication, are all examples of the second group of behaviors, tactical-and-assertive. Further, ingratiation is divided into four groups: self-enhancing communications, other-enhancing communications, opinion conformity, and favor-doing. The third category outlined in this typology is assertive-and-strategic. Examples of these behaviors include constructing reputational characteristics, like attractiveness and prestige, esteem, status, and credibility. Finally, defensive-strategic behaviors are described as strategic self-handicapping. Tedeschi and Melburg use the example of alcoholism; the individual has an excuse that can be used repeatedly for failures or missteps. The authors note that though
most behaviors should fit cleanly in one of these four categories, some behaviors may fit in multiple categories.

A recent qualitative study, with consideration of employer online vetting, identified four types of online impression management: acceptor, dissident, scrubber, and strategist (Berkelaar, 2016). Acceptors, with the knowledge of employer-vetting, do not behave differently online. They either willingly accept that vetting will occur, expecting positive outcomes, or reluctantly accept vetting, believing they cannot effectively manage their image. In contrast, dissidents reject the norm of having an online presence in an effort to keep spheres (work, family, etc.) separate. The third group, scrubbers, attempt to remove information that may be perceived negatively by employers when they are unemployed. Finally, strategists are proactive in shaping their online persona to their advantage. Impression management strategies are leveraged the most by scrubbers and strategists.

Impression Management in the Nomological Network. There are many constructs studied in the workplace that are similar to impression management. This section seeks to clarify differences between impression management and these other constructs. Some researchers argue impression management, interpersonal influence, self-presentation, influence tactics, and organizational politics are more similar than different (Ferris, Hochwarter, Douglas, Blass, Kolodinsky, & Treadway, 2002). Impression management has also been empirically linked with self-monitoring (Schlenker & Leary, 1982). High self-monitors are far more likely to engage in impression management behaviors than low self-monitors (Bolino, Kacmar, Turnley, & Gilstrap, 2008). According to McFarland and Ryan (2000), an individual’s tendency towards self-monitoring is not highly related to the tendency to fake on selection assessments. There was only a small, significant correlation between self-monitoring and the difference between forced faking
on integrity tests and taking integrity tests under normal conditions. This pattern does not exist for other types of non-cognitive measures.

Within the context of selection, impression management can also be seen as similar to faking. Faking, particularly on non-cognitive selection tools, has been a major research focus in recent decades. The literature has explored the impact of faking on assessment validity, often with inconsistent conclusions. Some researchers have shown faking to have little impact on validity (Hough, 1998; McCrae & Costa, 1983) while other researchers show attenuated validity due to faking (Douglas, McDaniel, & Snell, 1996; Rosse, Stecher, Miller, & Levin, 1998). These inconsistencies may be due in part to the complexity of faking, including individual variability in the ability to fake and variation by assessment type (McFarland & Ryan, 2000). Though it’s possible to fake on all non-cognitive measures, it’s more difficult to fake on some assessments than others. For example, faking on biodata forms and integrity tests is much easier for applicants than faking on an Openness measure (McFarland & Ryan, 2000). In addition to the test itself, individual differences contribute to variance in faking. McFarland and Ryan (2000) identified those with low conscientiousness and high neuroticism are more likely to engage in faking.

Due in part to the breadth of research and the lack of construct clarity, researchers have presented a wide variety of proposed relationships between impression management and constructs similar to it. Baumeister (1982) categorized impression management as either pleasing the audience, enacted with behaviors that conform to the audience, or self-construction, demonstrated with behaviors matching one’s own values. In the context of selection, the latter would not qualify as misrepresentation. However, Morrison and Bies (1991) argue that both are intentional distortion and therefore, are more similar than not. We could also combine some of
these similar behaviors, including faking and impression management, into the larger category of self-presentation (Marcus, 2009). To reconcile this debate, Levashina and Campion (2007) acknowledge two forms of impression management, honest and deceptive. They therefore define faking as deceptive impression management. This distinction will guide this study’s conceptualization of impression management.

The literature has struggled to disentangle organizational citizenship behaviors (OCB) from impression management. Some measures of impression management (Kumar & Beyerlein, 1991; Wayne & Ferris, 1990) include items resembling those found on Organ’s (1988) OCB scale. Though the observable behaviors are similar, the underlying motivation is quite different (Bolino & Turnley, 1999). Researchers propose that, in comparison to impression management, for which the motivation is enhancing one’s own image, the motivation for OCBs is to help the organization. Another similar, but distinct construct is social desirability. Crowne and Marlow (1960) define social desirability as a tendency for some individuals to exhibit behaviors they think others will favor. Guadagno and Cialdini (2007) argue that social desirability and impression management can occur together when the behavior represents a trait desired by the actor.

There are also impression management behaviors that intentionally foster poor impressions (Becker & Martin, 1995). These behaviors are distinct from a similar construct, self-handicapping. The purpose behind impression management behaviors that foster a negative opinion is typically to avoid undesirable tasks or events, which is seen as a positive outcome by the individual. In contrast, self-handicapping is self-defeating behavior to excuse future failures, motivated by reducing threats to self-esteem (Ferrari, 1991).
Relevant Theories

A wide variety of theories have been applied to impression management. This section will briefly discuss several theories, fitting in to one of two categories: motivation-related theories and interaction-related theories. Then, we focus on the theory most commonly used in explaining impression management, Cybernetic Theory.

Motivation-Related Theories. There are two major motivation theories that contribute to the understanding of impression management, VIE Theory and the Two Component Model. As discussed previously, differentiating impression management behaviors from other constructs like OCBs is accomplished through understanding the motivation of the actor. Vroom’s (1964) VIE Theory can be applied to explain this motivation. VIE Theory proposes that motivation is a function of the individual’s capability to act, the individual knowing the action will lead to an outcome, and that outcome being desired by the individual. If an employee is capable of impression management, thinks those behaviors will lead to positive outcomes at work, like getting a promotion, and wants to be promoted, the employee will engage in impression management tactics (Gardner & Martinko, 1988).

Building upon this idea, Leary and Kowalski (1990) proposed the Two Component Model of impression management. According to this model, there are two separate processes involved in impression management. The first process is impression motivation. The individual must want to be able to control their image. This stage of the process depends on three factors: 1) the goal relevance of impressions, 2) the value of desired goals, and 3) the discrepancy between desired and current image. These factors influence an individual’s motivation to impression manage. The second process is impression construction, broken into five factors: 1) self-concept, 2) desired and undesired images, 3) role constraints, 4) target’s values, and 5) current social
image. The impression construction factors influence the new image an individual is trying to create.

**Interaction-Related Theories.** Three examples of theories that focus on interactions are Role Theory, Social Influence Theory, and Interdependence Theory. Role Theory, the idea that everyone in the organization has a role and that role is learned through interpersonal interactions, can help to explain impression management in the workplace (Graen, 1976). Wayne and Green (1993) proposed that the process of defining organizational roles results in impression management behaviors.

Social Influence Theory can also contribute to our understanding of impression management. This theory suggests simply that people influence and are influenced by others (Cialdini & Trost, 1998). People behave to get the reaction they want from their audience (Goffman, 2006). Social influence processes are the tactics to maximize rewards and minimize negative consequences in interpersonal reactions. The theory emphasizes the outcome, the influencee’s evaluation, and the level of cognitive processing, the extent to which the influencee is consciously aware of the tactics (Levy, Collins, & Nail, 1998). According to this theory, applicants use self-presentation skills to elicit a positive evaluation from the interviewer (Gilmore & Ferris, 1989).

Finally, Interdependence Theory suggests that the social context affects behavior (Rusbult & Van Lange, 2003). In a job interview, the situation makes the applicant reliant on the interviewer and his or her positive evaluation of the applicant. This makes the applicant want the interviewer to perceive the applicant positively and therefore, the applicant manages his or her image. The situation also creates a conflict: the interviewer wants accurate information while the applicants want to only present positive information. Self-presentation tactics are used in
situations with conflicting interests (Van Lange, 2000). In these situations, research shows the dependent person will try to maximize his outcomes, which can lead to misrepresentation (Levashina & Campion, 2007). When the interactions involve strangers and inadequate information, interdependence theory says there will be an increase in self-presentation tactics (Rusbult & Van Lange, 2003).

*Cybernetic Theory.* Cybernetic Theory is defined as “the regulation of behavior such that perceived discrepancies between a given standard or goal (e.g., one’s desired image in impression management) and feedback from an external source relevant to this goal are reduced or eliminated” (Bozeman & Kacmar, 1997, p. 10). Some researchers refer to this theory as Control Theory, however, for the purpose of this paper it will only be referred to as Cybernetic Theory. According to this theory, our behaviors change and influence the situation, which then influences our behaviors, creating a cyclical system. Systems have a reference point, feedback, a comparator, and an effector (Lord & Hanges, 1987). The comparator is the process for comparing feedback to the reference point and the effector is the mechanism by which behavior changes. Control Theory usually includes a decision mechanism (Campion & Lord, 1982). In order to monitor progress, an individual will attend to information pertaining to his or her goal in an effort to move towards the goal (Karoly, 1993). The literature has shown that the application of this theory to impression management has several benefits, including its theoretical utility, the accuracy with which it describes the impression management process, and its prescriptive value (Lord & Maher, 1990).

Feedback is an important part of the process. As shown in the model, the individual needs feedback in order to maintain or change behavior. Feedback seeking not only serves to ensure obtaining feedback, but it can also influence how the audience views the individual. Those who
seek feedback are seen as more conscientious than those who do not seek feedback (Ashford & Northcraft, 1992). Therefore, feedback-seeking can be used both as an impression management tactic as well as a method to continue the process outlined by Cybernetic Theory. However, the feedback itself is less impactful than how the individual perceives the feedback. Cybernetic Theory describes the perception of feedback as a filtering process (Scheier & Carver, 1982). People often filter information based on how pertinent it is to their goal (Goschke & Kuhl, 1993) or how it can influence attaining their goal (Klinger, 1977).

Bozeman and Kacmar (1997) discussed at length how Cybernetic Theory would be applied to impression management, calling it the Cybernetics Impression Management Model. In this model, the actor can process appropriate tactics and assess which ones are working by examining the situation, behavior of the audience, and knowing what has worked in the past. All of these decisions are processed unconsciously. This model assumes impression management is seen as both important and achievable by the individual. The underlying motivation of impression management is based on the perception of discrepancies between the reference point and feedback. People have many reference points, depending on the situation (Cropanzano, James, & Citera, 1993; Markus & Wurf, 1987), just as individuals intentionally present themselves differently depending on the audience (Goffman, 1959). Discrepancies between the current social image and desired social image will spark behavioral and cognitive change to reduce the discrepancy (Leary & Kowalski, 1990).

This theory is aligned with face-to-face interactions between an applicant and hiring manager. Though the connection is less clear, it can also be applied to creating and maintaining resumes and online profiles. For example, an applicant can use impression management tactics on a resume, including highlighting professional work or tailoring the resume for a specific job.
The applicant then either maintains or makes changes to the resume based on feedback from the hiring manager, even if it is as simple as whether or not the applicant makes it to the next stage of the selection process. Though it is not a face-to-face interaction, this information is still feedback on the success of the impression management tactics.

Measuring Impression Management

The task of measuring impression management has been tackled by two main methods, observation and scale development. Researchers have observed impression management behaviors exhibited during the selection process (Stevens & Kristof, 1995) and examined tactics used in environments with various factors like accountability, ambiguity, and self-monitoring (Fandt & Ferris, 1990). These types of studies reduce the bias that often comes from self-report, however, feasibility of conducting observations outside of the laboratory presents a challenge, making this research less generalizable.

The second method to measure impression management is the development of valid and reliable scales. Several scales have been developed aiming to capture the full construct of impression management. Wayne and Ferris (1990) developed a 24-item scale identifying supervisor-, self-, and job-focused impression management behaviors. There is also an abbreviated, 10-item version of this scale (Wayne & Liden, 1995). The benefits of this scale include ease of administration and an account of behaviors from the individual, rather than relying on an observer to accurately interpret the behavior. However, this scale is not without its flaws. First, some researchers have argued that this scale is construct deficient, lacking subdimensions like supplication and intimidation (Bolino & Turnley, 1999). The scale was developed using exploratory factor analysis, making dimensions more data driven rather than theory driven and their definitions more ambiguous (Bolino & Turnley, 1999). Additionally, the self-focused
tactics factor does not meet acceptable standards of reliability and validity (Ferris, Judge, Rowland, & Fitzgibbons, 1994).

Kumar and Beyerlein (1991) developed another 24-item scale, the Measure of Ingratiatory Behaviors in Organizational Settings (MIBOS). Though it was developed with rigor, this scale narrows in on only one aspect of impression management, ingratiation. Additionally, Kacmar and Valle (1997) questioned the validity of the scale.

Andrews and Kacmar (2001) developed the Impression Management by Association Scale, borrowing from Cialdini’s framework of the 4 Bs: boasting, burying, blaring, and blurring. This scale could be pertinent to online social interactions, however like each of the previously discussed scales, it is narrowly focused on just one piece of the impression management construct.

Finally, Bolino and Turnley (1999) developed a scale guided by Jones and Pittmasn’s (1984) taxonomy of impression management. Unlike previously discussed scales, this scale presents a more complete picture of impression management. Further, a rigorous development process led to a well-functioning scale 22-item scale.

**Antecedents of Impression Management**

Both situational and dispositional factors can influence the use of impression management, as well as specific types of impression management. For example, other-enhancing behavior can be predicted by leader-member exchange (LMX), self-esteem, need for power, and job involvement, while just self-esteem and job involvement are antecedents of opinion conformity behaviors. Additionally, self-esteem, need for power, and job involvement are antecedents for favor render behaviors while self-promotion behaviors can be explained by role ambiguity, need for power, job involvement, and shyness (Kacmar, Carlson, & Bratton, 2004).
Specifically, high levels of LMX may lead to impression management behaviors that show support for the leader (Wayne & Green, 1993). In situations with high accountability and low ambiguity, employees use defensive information and emphasize the positive (Fandt & Ferris, 1990).

Many studies have examined the relationship, or lack thereof, between personality and impression management. The Big Five, a commonly used framework of personality, have been researched in relation to impression management tactics. Higgins and Judge (2004) found that extraverted individuals speak positively about themselves and agreeable individuals engage in non-verbal behaviors. Similarly, Kristof-Brown, Barrick, and Franke (2002) explored the impact of Big Five personality traits on the use of different types of impression management tactics during interviews. They found that applicants high in extraversion tend to use self-promotion tactics while applicants high in agreeableness tend to use non-verbal cues. Additionally, the use of self-promotion tactics increased perceptions of person-job fit in contrast with non-verbal tactics, which predicted perceived similarity.

Researchers have also examined the use of impression management on personality assessments, finding that they are robust to impression management and faking attempts. Hogan, Barrett, and Hogan (2007) found that after being rejected 6 months prior, job applicant scores on a personality test did not significantly change. This indicates that any attempts of impression management were not successful. Additionally, a meta-analysis by Li and Bagger (2006) indicated that neither impression management nor self-deception (using the Balanced Inventory of Desirable Responding; Paulhus, 1986) interfered with the criterion validity of personality measures.
Research on the relationship between personality and impression management extends beyond the Big Five. Individuals high in self-monitoring were more likely to manipulate information than low self-monitors (Fandt & Ferris, 1990). High self-monitors use impression management tactics, including ingratiation, self-promotion, and creating favorable images, more effectively than low self-monitors (Turnley & Bolino, 2001). These findings are echoed in Higgins and Judge (2004), concluding that high self-monitors speak positively about themselves and the interviewer. However, in contrast to Turnley and Bolino’s (2001) findings, Bolino and colleagues (2008) found that those high in Machiavellianism will use any and all impression management tactics while those high in self-monitoring generally use non-confrontational, positive tactics.

Outcomes of Impression Management

During the selection process, the use of impression management tactics is influential in the final hiring outcome. An interview provides the applicant an ideal opportunity to affect hiring decisions (Gilmore & Ferris, 1989). More specific outcomes during the hiring process will be thoroughly discussed later in this paper. Impression management tactics can also impact coworker perceptions. For example, one study found that when new employees apologize for poor performance, attributing the poor performance to being new, they were forgiven by coworkers. However, if the coworkers were negatively impacted by the new employee’s poor performance, knowledge that the employee was new led to more unfavorable reactions than no knowledge of newness (Greenberg, 1996).

Empirical Findings

The following section discusses empirical finding of the effects of impression management on selection processes, including interviews and assessments. Then the literature on
the use of impression management online in non-work sites is discussed. Finally, the existing literature suggests some potential moderators to the effects of impression management.

**Interviews.** The environment of an interview lends itself to the use of impression management tactics. Therefore, the impact of impression management tactics during this selection method has been the most thoroughly researched. The vast majority of applicants use impression management tactics (Ellis, West, Ryan, & DeShon, 2002). The literature has established that impression management tactics influence both interviewer ratings (Gilmore & Ferris, 1989; Tsai, Huang, Wu, & Lo, 2010) and lead to favorable interview outcomes (Baron, 1986; Barrick, Shaffer, & DeGrassi, 2009; Higgins & Judge, 2004; Stevens & Kristof, 1995). A more specific look at this relationship showed that ingratiation tactics lead to positive hiring recommendations through perceived fit with the organization (Higgins & Judge, 2004). Another study showed that using both ingratiation and self-promotion led to more favorable outcomes than simply using one tactic (Proost, Schreurs, De Witte, & Derous, 2010). However, Stevens and Kristof (1995) found that applicants tend to rely more on self-promotion than ingratiation during interviews. Additionally, self-focused tactics have been shown to be more effective, leading to higher ratings, more recommendations, and fewer rejections, than other-focused tactics (Kacmar, Delery, & Ferris, 1992).

There are many other factors during an interview that may moderate the relationship between impression management use and interview outcome. The type of interview impacts both the type and effectiveness of impression management tactics used. The more structured an interview is, the less influential the use of impression management tactics will be (Tsai, Chen, & Chiu, 2005). The types of questions asked during a structured interview also influence the use of tactics. One study found that applicants use self-focused tactics when asked behavior-based
question but use other-focused tactics when asked situational questions (Peeters & Lievens, 2006). Similarly, another study found self-promotion tactics were used while answering experience questions and ingratiation tactics were used while answering situational questions (Ellis et al., 2002). Additionally, the job for which interviewees are applying moderates the relationship between impression management and interview outcomes. For jobs with less customer contact, impression management tactics are less influential (Tsai et al., 2005). In a sense, the ability to manage impressions is actually job-related for customer-oriented positions. The concerns the interviewer has about the applicant can also moderate the relationship between tactics and outcomes. Three types of defensive tactics, apologies, justification, and excuses, alleviated concerns of competence, however, only apologizing alleviated concerns of integrity (Tsai et al., 2010).

The Interview Faking Behavior (IFB) scale, developed based on the impression management literature, has four factors: slight image creation, extensive image creation, image protection, and ingratiation. The success of these factors differs within the context of selection. Extensive image creation is significantly related to positive interview outcomes, but image protection is negatively related to interview outcomes (Levashina & Campion, 2007). However, overuse of tactics can lead to negative interview outcomes. In one study, female confederate applicants used either positive nonverbal cues, wore perfume, or did both. Alone, each tactic positively influenced ratings. However, used together, the tactics were seen as manipulative by the interviewer (Baron, 1986).

There are factors beyond the use of impression management that also influence interview outcome. For example, in addition to impression management, Barrick and colleagues identified appearance and verbal and non-verbal behaviors to influence decision making in their 2009
meta-analysis. Further, applicants can “fake” impression management tactics. After being instructed to engage in impression management, applicants demonstrated more impression management behaviors. However, these behaviors were verbal rather than non-verbal, indicating that non-verbal tactics are likely performed unconsciously (Peeters & Lievens, 2006). Though a significant relationship between impression management and interview outcomes has been established (Barrick et al., 2009), the relative importance of that relationship should be considered. Lievens and Peeters (2008) used relative weights analysis and found that, compared to job-relevant competencies, impression management tactics had little bearing on the interview outcome. This finding is reassuring, as research shows self-presentation tactics are more related to interview ratings than they are to actual job performance, though there is still a slightly positive correlation between these tactics and performance (Barrick et al., 2009).

Assessments. The use of assessments in selection is ever-increasing (Dattner, 2013). Both impression management and faking have been examined in personality tests, with a fine distinction between the two constructs. As discussed previously, in attempt to clarify the issue, Levashina and Campion (2007) distinguish two types of impression management: honest and deceptive. They then define faking as deceptive impression management. Research shows that applicants are very capable of impression management, even on standardized testing. Bagby and Marshall (2003) compared actual job applicant personality tests using the Big 5 framework to a group who first received normal instructions, then “fake good” instructions. The “fake good” condition was more similar to applicants than the normal condition. However, though employees used self-deception and impression management tactics, a separate study concluded that distortion does not decrease the predictive validities of assessed emotional stability and
conscientiousness, using voluntary turnover and supervisory ratings as the outcomes (Barrick & Mount, 1996).

*Online Behaviors Beyond the Workplace*

While the extant literature is sparse on impression management tactics in professionally-oriented social networking sites, there is research on socially-oriented networking sites that may provide useful insights to the professional context. Though the orientation of the sites is different, the medium of communication is the same. In general, individuals are able to present a positive image of themselves online (Barash, Ducheneaut, Isaacs, & Bellotti, 2010; Stopfer, Egloff, Nestler, & Back, 2014). Motivation to impression manage also predicts more frequent use of the social networking site (Kramer & Winter, 2008).

Based on information from online profiles, raters are able to accurately assess personality traits (Kluemper & Rosen, 2009; Stopfer et al., 2014) and cognitive ability (Kluemper & Rosen, 2009). In addition, users are able to accurately predict how others perceive them based on the online profiles (Stopfer et al., 2014).

Early findings on computer-mediated-conversations (CMC) suggests that, compared to impressions formed from face-to-face interactions, impressions formed through CMC are much stronger (Hancock & Dunham, 2001). In line with this finding, other research has shown that individuals are not aware of the intensity of impressions formed by others based on their social networking site use (Barash et al., 2010). We also know that, when evaluating unfamiliar others, raters feel inconsistencies between an individual online and in person are intentionally misleading and diminish trust in the ratee (DeAndrea & Walther, 2011).

There are similarities between the act of impression management on online dating sites and the selection process. In both situations, the individual is motivated to present their best
possible self (Ellison, Heino, & Gibbs, 2006). This motivation is demonstrated through research findings showing that, though widespread, discrepancies between reality and information on a dating profile were very small (Toma, Hancock, & Ellison, 2008). On other social networking sites like MySpace and Facebook, research shows that self-efficacy in impression management is associated with the number of virtual friends and the level of detail in the profile (Kramer & Winter, 2008). These outcomes could be compared to the number of connections and the completeness of a LinkedIn profile.

**Gender and Impression Management**

The literature shows that likelihood of use, types of tactics used, and others’ perceptions of use of impression management tactics differ by gender. Women are less likely to use impression management (Bolino & Turnley, 2003a). Specifically, one study found that within the context of promotions, women were less likely than men to use impression management tactics. Rather, they rely on their performance and commitment to the organization to demonstrate readiness for promotion (Singh, Kumra, & Vinnicombe, 2002).

When women use impression management tactics, they are more likely to be feminine-typed tactics (Guadagno & Cialdini, 2007). These tactics are consistent with stereotypes and gender roles. Women are more likely to use apologies, opinion conformity, and modesty when they impression manage. Feminine-typed tactics are typically not as valued or rewarded in the workplace as masculine-typed tactics, like assertiveness (Guadango & Cialdini, 2007). Other research has demonstrated the tendency for women to use strategies that build relationships while men use more work related-strategies (Singh & Vinnicombe, 2001). Additionally, more women than men are reluctant to self-promote, something that Singh and Vinnicombe (2001) argue could be creating a barrier to career advancement.
Additionally, the use of tactics is evaluated differently for men and women. The literature suggests these differences in evaluations are due to a perceived violation of gender role expectations (Guadagno & Cialdini, 2007). However, men who violate role expectations in their use of impression management tactics do not experience the same negative outcomes (Floge & Merrill, 1986). Women who use self-promotion as an impression management tactic are seen as more competent; however, they are also seen as less hirable (Rudman, 1998). One of the impression management tactics included in Jones and Pittman’s (1982) taxonomy is intimidation. Findings of a study comparing the use of this tactic by males and females working in law enforcement demonstrate that supervisor ratings of likeability are not related to the use of intimidation for males, however, females who use intimidation are seen as less likeable (Bolino & Tunnley, 2003b). In addition, this study found that females’ use of intimidation was unrelated to performance ratings while males’ use of the tactic was associated with positive performance ratings. Research shows differences in the effectiveness of another tactic from the Jones and Pittman taxonomy, ingratiation. More favors done for supervisors by men was associated with higher salaries. In stark contrast, more favors done for supervisors by women was associated with lower salaries (Dreher, Dougherty, & Whitely, 1989). Some researchers have attributed females’ lack of career progression, seen both in pay and promotion, to differences in impression management behaviors and role expectation violations (Guadango & Cialdini, 2007; Oakley, 2000; Singh & Vinnicombe, 2001).

One potential explanation for the differences in how impression management behaviors are perceived may be found in Implicit Personality Theory (IPT). Combining the literatures of personality and impression formation, this theory proposes that, when faced with limited information, individuals form an overall impression of someone based on their “theory” of how
traits covary (Pedersen, 1965). For example, knowing an individual is dependable may lead to the assumption that he or she is also organized. IPT is especially applicable when the individual forming an impression is not familiar with the other individual (Koltuv, 1962). In the selection process, HR professionals must form impressions about someone with whom they are not familiar, based on limited information. Research shows that an individual’s theory for how traits covary can differ by gender (Ashmore & Del Boca, 1979). In their study, Ashmore and Del Boca (1979) asked participants to form impressions of a male or female based on a short list of personality traits. They found that the impressions formed from the list of traits differed based on the gender associated with the list. Facets of IPT significantly influenced by gender, including intellectual desirability (e.g., scientific vs. unscientific) and potency (e.g., weak vs. strong). These findings indicate that applicants engaging in the same behaviors can result in different impressions, depending on the gender of the applicant. Based on these differences, any conclusions drawn about the influence of impression management on resumes and LinkedIn profiles should include investigation of potential gender differences. Therefore, applicant gender will be a methodological consideration in this study.

**Resume Literature Review**

Resume reviews are a standard hiring practice used a wide variety of industries. The effectiveness of reviewing resumes can be explained through Attribution Theory (Fiske & Taylor, 1991). According to the theory, recruiters rely on characteristics of the resume to make judgments about job-related attributes of applicants. Though some research shows inferences made by recruiters from resumes lack validity and reliability (Cole, Field, Giles, & Harris, 2009), other research supports the use of these inferences. These judgments can range from cognitive ability (Chen, Huang, & Lee, 2011) to Big Five personality traits (Cole, Feild, & Stafford, 2005).
Related Constructs

Resumes have been examined extensively in the literature. Specifically, research has demonstrated how recruiters perceive different sections of the resume. Recruiters infer job knowledge (Chen et al., 2011) and person-organizational fit (Tsai, Chi, Huang, & Hsu, 2011) from the work experience section of a resume. Additionally, interpersonal skills (Chen et al., 2011) and personality traits like extraversion and neuroticism (Cole, Feild, & Giles, 2003) are inferred from the extracurricular activities section. Chen and colleagues (2011) found that HR professionals inferred applicants’ general mental ability from their academic qualifications. Similarly, research has shown that HR professionals relate the educational background section to person-organizational fit (Tsai et al., 2011), the academic achievement section to cognitive ability (Cole et al., 2003), and reporting GPA to cognitive ability and conscientiousness (Cole et al., 2003). Other research shows recruiters infer a relationship between job tenure section and an applicant’s job knowledge (Huang, Chen, & Lai, 2013). In the same study, results show HR professionals infer job knowledge, cognitive ability, and conscientiousness from both leadership experience and challenging job experience presented on a resume.

Finally, Kristof-Brown, Barrick, & Franke (2002) found that recruiters view self-promotion on a resume as an indicator of person-job fit. Self-promotion, a common impression management tactic, is used in interviews frequently when responding to questions about experience (Ellis et al., 2002). It is therefore logical that when self-promotion is used in a resume, where applicants describe work experiences, a recruiter is better able to identify fit with the attributes of the applicant.
Impression Management in Resumes

The use of impression management tactics manifests differently on a resume than in other selection contexts (Knouse, 1994) like an interview, for which the applicants interact face-to-face with the recruiter. It is more challenging for applicants to use impression management tactics on a resume. Cybernetic theory, as previously discussed, highlights the importance of feedback in the process of impression management. Resumes do not provide the same opportunities for feedback as other selection tools. The feedback cycle described in cybernetic theory may occur, but in a much different, slower way. An individual can create a resume and submit it to an organization. The individual can infer whether or not the resume was received well by continuing in the selection process or not. A rejection could lead the individual to adjust the resume until the goal, being hired, is achieved. In addition, there is less flexibility in the presentation of information, as resume information is verifiable and when overused in a resume, tactics can be perceived as deceptive (Knouse, Giacalone, & Pollard, 1988). Knouse et al. (1988) found managers to perceive resumes using impression management tactics negatively compared to a resume without the use of these tactics on a variety of attributes, including likeability, potential, competence, and truthfulness.

The effects of impression management tactics in resumes have been researched using controlled studies as well. Knouse (1994) manipulated resumes with relevance of education, relevance of job experience, and use of impression management tactics. The tactics used were acclaiming statements, highlighting favorable pieces of information, enhancement statements, describing positive evaluations, and a self-description statement, emphasizing the applicant’s desire to improve personally and professionally. When the resume used the impression management tactics, reviewers inferred greater interpersonal skills, self-confidence, overall
impressiveness, hireability, and overall applicant competence. Additionally, the reader expressed an interest in checking the applicant’s background further. This may indicate the reader wants the applicant to continue further in the process, however, Knouse believes this could also be a negative outcome of impression management tactics. Wanting to further investigate the applicant’s background could be a result of raised skepticism due to the impression management tactics. Compared to Knouse et al., (1988) this study used “concrete examples of accomplishment” (p. 43-44) rather than adjectives. Therefore, recruiters may perceive specific, concrete examples as reliable but the adjectives as exaggerated and possibly false.

Social Media as a Screening Tool

LinkedIn is quickly becoming a popular screening tool among HR professionals (Chauhan, Buckley, & Harvey, 2013; Davison, Maraist, Hamilton, & Bing, 2012; Mulvey, et al., 2013; Nguyen, 2014). The Society for Human Resource Management surveyed its members in 2013, finding that 20% of their membership uses social networking sites to screen job applicants, compared to 13% in 2008 and 18% in 2011 (Mulvey, et al., 2013). Of those using social networking sites, 92% of respondents specifically use LinkedIn.

Comparison of Resumes and LinkedIn

There are many similarities between the information presented in a resume and a LinkedIn profile. In both, there are sections for a summary or objectives, education, and work experience. Both sources of information also include a skills section, however, on the resume the applicant writes this section whereas on LinkedIn, this section is completed by connections of the applicant. Though, applicants are able to request recommendations from their connections.

There are differences between a resume and a LinkedIn profile, some of which may be influential. First, HR professionals consider including a picture essential on a LinkedIn (Zide,
Elman, & Shahani-Denning, 2014) while a picture should not be present on resumes for the vast majority of professions. A picture of the applicant provides a lot of additional information that may not be immediately available to the organization, including approximate age, gender, and race. These attributes specifically are protected classes and not job related, adding ethical and legal implications to the decision-making process. Additionally, the connections an applicant has can be seen on LinkedIn. The number of connections an applicant has may be seen as an indicator of interpersonal skills, however, there are other, less relevant, factors that may be more influential in the number of connections, like frequency of LinkedIn use or desire to impression manage. Finally, LinkedIn, though professionally oriented, is still a social networking site. The site encourages users to communicate and post regularly. This fosters social interaction, making LinkedIn more similar to face-to-face interaction, during which impression management tactics are more commonly and easily used, than traditional resumes. Therefore, LinkedIn provides vastly different information than what can be found on a resume. For these reasons, we cannot expect impression management tactics to be used by the applicant or perceived by the organization in the same way as they are with a resume.

**The Present Study**

I recruited job seekers who provided their LinkedIn profiles and resumes and were assessed on their levels of cognitive ability, conscientiousness, impression management, and other related constructs to be discussed below. These scores will be known as *assessed conscientiousness* and *assessed cognitive ability*. After the development of stimuli, a separate group of participants was asked to make inferences about the job seekers’ cognitive ability and conscientiousness based on their resumes and profiles. These ratings will be known as *inferred conscientiousness* and *inferred cognitive ability*. 
This study makes three contributions to the literature. The first is to examine the effect of impression management on inferences of conscientiousness and cognitive ability. Specifically, it determines the contribution of impression management in the relationship between assessed and inferred levels of conscientiousness and cognitive ability. Additionally, the effects of impression management, conscientiousness, and cognitive ability are linked to a more tangible outcome, base salary offer.

The second contribution of this study is the assessment of incremental validity with a LinkedIn profile. As many HR professionals report reviewing a LinkedIn profile (Mulvey et al., 2013), perhaps they are able to gain more information about job-relevant constructs like cognitive ability and conscientiousness above and beyond that which they gain from reviewing a resume. This could be due to the social nature of LinkedIn. As previously discussed, it is challenging for applicants to appropriately use impression management tactics on a resume, while a more interactive medium may foster greater use of these tactics. There is empirical evidence to suggest this may be the case. Lautenschlager and Flaherty (1990) examined how impression management differs by level of anonymity (anonymous or identified) and mode of information (online or paper-and-pencil). Using both the self-deception and impression management sections of the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1986), the researchers found greater use of impression management tactics when using a computer and when the information was identifiable, both of which are factors present when using LinkedIn. However, even this scale is susceptible to faking, as demonstrated empirically by Pauls and Crost (2004).

The final contribution of this research is building construct validity evidence for the use of LinkedIn as a screening tool. As mentioned prior, in spite of its wide spread use, there has
been very little research on the use of applicant LinkedIn profiles during the selection process. Therefore, this study identifies the relationship between inferred conscientiousness and cognitive ability and assessed conscientiousness and cognitive ability. The ability to accurately rate cognitive ability and conscientiousness, a powerful combination for predicting job performance (Schmidt & Hunter, 1998), from LinkedIn profiles begins to establish the validation evidence needed to confidently use LinkedIn profiles in selection. Additionally, due to the previously discussed differences between men and women in the use and perception of impression management, the effects of gender are explored.

**Hypotheses**

*The Effect of Impression Management*

Based on the literature discussed above, the use of impression management tactics likely has an effect on perceptions of applicant conscientiousness and cognitive ability. The literature has shown that it is more challenging for an individual to implement impression management tactics in written form compared to face-to-face interactions (Knouse, 1994). The successful use of impression management tactics in a resume or social networking profile will be salient to the rater. Therefore, the use of impression management tactics will partially mediate the relationship between assessed conscientiousness and inferred conscientiousness. As these inferences are meant to predict job performance, we would expect applicants with higher levels of inferred conscientiousness to be offered higher salaries upon selection.

*Hypothesis 1: An applicant’s level of conscientiousness is positively related to the level of conscientiousness a rater infers based on information from the LinkedIn profile.*
Hypothesis 2: An applicant’s tendency to use impression management tactics is positively related to the level of conscientiousness a rater infers based on information from the LinkedIn profile.

Hypothesis 3: The inferred level of conscientiousness based on information from the LinkedIn profile is positively related to the rater’s salary recommendation.

Hypothesis 4: Impression management mediates the relationship between conscientiousness and inferred conscientiousness based on information from the LinkedIn profile.

An individual must have a high enough level of cognitive ability to employ impression management tactics (Carver & Scheier, 1990). However, this is a low bar for an applicant to meet. After having met that bar, the use of impression management tactics should differ by the individual. Therefore, I predicted impression management would moderate the relationship between assessed cognitive ability and inferred cognitive ability. Again, these predictors will be linked to the rater’s salary recommendation.

Hypothesis 5: An applicant’s level of cognitive ability is positively related to the level of cognitive ability a rater infers based on information from the LinkedIn profile.

Hypothesis 6: An applicant’s tendency to use impression management tactics is positively related to the level of cognitive ability a rater infers based on information from the LinkedIn profile.

Hypothesis 7: The inferred level of cognitive ability based on information from the LinkedIn profile is positively related to the rater’s salary recommendation.
Hypothesis 8: Impression management moderates the relationship between assessed cognitive ability and inferred cognitive ability with a stronger relationship for individuals high in impression management.

Assessing Incremental Validity

HR professionals are viewing the LinkedIn profiles of applicants in addition to viewing the corresponding resumes. The types of information from these sources differ slightly, with the profile included information like status updates, organizations the applicant follows, and connections. This study seeks to determine whether or not the additional and different presentation of the information on a LinkedIn can add incremental validity to the prediction of conscientiousness and cognitive ability, above and beyond resumes. Additionally, if LinkedIn does provide incremental validity to inferences of applicant attributes, I will test the role of impression management in this relationship. I propose that the ability to interact with others online makes it easier for applicants to use impression management tactics (Knouse, 1994), which facilitates their greater use.

Hypothesis 9a: Ratings of conscientiousness from LinkedIn are positively related to assessed conscientiousness above and beyond resume ratings.

Hypothesis 9b: The increase in variance of conscientiousness explained is due, at least in part, to the use of impression management tactics.

Hypothesis 10a: Ratings of cognitive ability from LinkedIn are positively related to assessed conscientiousness above and beyond resume ratings.

Hypothesis 10b: The increase in variance of cognitive ability explained is due, at least in part, to the use of impression management tactics.
Assessing Construct Validity

Research on selecting with LinkedIn is sparse, particularly studies examining the validity of this selection method and this data collection effort provides additional opportunities to contribute to the literature. Therefore, this study begins the process of building validation evidence. Cognitive ability and conscientiousness have both been accurately rated from other social networking profiles, like Facebook (Kluemper & Rosen, 2009). It is therefore reasonable that a rater would be able to accurately assess a professionally oriented social networking profile.

Hypothesis 11: Conscientiousness inferred from LinkedIn is positively related to assessed conscientiousness.

Hypothesis 12: Cognitive ability inferred from LinkedIn is positively related to assessed cognitive ability.
METHODS

Stimulus Development

In order to develop the stimuli to be rated in the main study, resumes and profiles were collected from job seekers. Then those resumes and profiles will be assessed on amount of impression management and information by subject matter experts. These ratings will measure variability in resumes and profiles and could potentially serve as a control variable, if amount of information provided varies.

Job seekers

I recruited participants in their final year at Colorado State University and considered themselves to be on the job market. I asked for copies of their resume and access to their LinkedIn profile. The resumes and profiles were altered only to remove identifiable information, without compromising the value of using real profiles. The information removed eliminated the ability to connect the resume and profile to the same person. In exchange for volunteering, participants received extra credit for their upper level management or psychology courses and consultation on improving the quality of their resumes and LinkedIn profiles.

Some of the recruited job seekers were eliminated from the pool for having non-English LinkedIn profiles or noting in the survey that they created the profile that day in order to participate in the study. Though these job seekers were eliminated from the study, they still received course credit and the offer to review their resume and profile. This left a total of 53 job seekers remaining the in participant pool.
Subject Matter Experts

Nine subject matter experts (SMEs) were recruited to participate in a manipulation check reviewing and rating LinkedIn profiles and resumes. They were recruited from a pool of Industrial-Organizational Psychology graduate students. These SMEs received a 30-minute training on impression management before participating in a 30-minute calibration session and taking by an assessment. This training outlined theories and frameworks of impression management and emphasized the use of impression management within the context of selection. SMEs rated example LinkedIn profiles and resumes on a 1 to 7 scale for use of impression management tactics, with 1 being far fewer tactics than expected given a selection context, 4 being expected use of tactics, and 7 being far more tactics than expected. During the calibration, all SMEs provided ratings within 1 point of each other. The assessment was used to qualify SMEs to rate the study stimuli. The assessment consisted of one LinkedIn profile and one resume from different job seekers. SMEs rated the job seeker’s impression management use on a 1 to 7 scale, with the goal of consistent ratings across SMEs. The final scores yielded a standard deviation of .97 for the resume and 1.12 for the LinkedIn profile.

Manipulation Check

There are no existing scales to measure impression management specifically within a selection context. The measure job seekers took will provide information about impression management tendencies rather than whether or not they engaged in those behaviors in their resume and profile. Therefore, in order to gain a better understanding of the impression management tactics actually used in the resumes and LinkedIn profiles, subject matter experts rated each profile and resume on the amount of information provided and impression management tactics used in the profile or resume.
The Primary Study

Participants

A separate group of participants was recruited from Mechanical Turk (MTurk). In order for these participants to be selected for this study, they had to be familiar with both resumes and social networking profiles. Familiarity included frequent use or creation of resumes and profiles. MTurk is a viable sample for this study for several reasons, including empirical support for data quality and ability to make ratings. First, MTurk provides a sample more diverse than a typical college or internet sample (Buhrmester, Kwang, & Gosling, 2011). In addition, MTurk samples are equally reliable as traditional methods and data quality is unaffected by rates of compensation (Buhrmester et al., 2011). Further, other studies employing a similar research design have used similar samples. For example, Kluemper and Rosen (2009) used college students to rate personality traits and intelligence from Facebook profiles.

Procedure

Assessing Job Seekers

Job seekers, having already provided their LinkedIn profiles and resumes, were assessed on cognitive ability, conscientiousness and impression management. These measures will be referred to as assessed conscientiousness, assessed cognitive ability, and impression management tendencies. The Wonderlic, a 50 item 12 minute test, was used to measure each job seekers cognitive ability. The Wonderlic is commonly used for personnel selection and in research (Kluemper & Rosen, 2009). Conscientiousness was assessed using 20 items from the NEO-PI-R, \( \alpha = .90 \). Half of the items will be reverse coded. Finally, Bolino and Turnley’s (1999) 22 item impression management scale, developed based on Jones and Pittman’s (1982) taxonomy, was used to assess the impression management tendencies of participants. The scale has 5 subfactors:
self-promotion (α = .78), ingratiation (α = .83), exemplification (α = .75), intimidation (α = .86), and supplication (α = .88). To establish construct validity for the measure of impression management for this study, job seekers also responded to additional items. Five of these additional items come from the Social Astuteness Factor from the Political Skill Inventory (Ferris, et al., 2005). Ferris and colleagues (2005) define social astuteness as the ability to “comprehend social interactions and accurately interpret their behavior, as well as that of others, in social settings” (pp. 129). Job seekers also took a 25 item Self-Monitoring scale (Snyder, 1974).

Rating Resumes and Profiles

The MTurk participants rated, based on each resume and LinkedIn profile, the levels of cognitive ability and conscientiousness they infer the applicant has using a 7 point Likert-type scale. The scaling decision was based on Cicchetti, Showalter, and Tyrer’s (1985) recommendation for 5 or 7 point scales to maximize variability and reliability. MTurk raters assessed job seekers on six facets of conscientiousness based on the NEO-PI-R framework, including competence, orderliness, dutifulness, achievement-striving, self-discipline, and cautiousness. These raters also assessed job seekers on verbal and quantitative ability. Finally, raters were asked to provide a salary recommendation, given the base-salary range for the position of $40,000 to $55,000. MTurk participants also took the impression management tendencies survey, the self-monitoring scale, and the social astuteness scale. During these scales, two attention check items were added to ensure participants were reading and thoughtfully responding throughout the survey. Participants were instructed in advance that attention check items were used and that their responses may not be counted if the survey was taken too quickly or if the attention check items were missed.
MTurk participants responded to a post on the MTurk site which included a link to the survey on Qualtrics. Of the 587 participants who saw the first page of the survey, 13 participants reported they were not familiar with resumes and LinkedIn profiles or did not answer the question and therefore did not take any part of the survey. These 13 participants were removed. In order to retain only quality data, participants who missed both attention check items (12) were removed from the sample. Participants who missed one of the attention check items (47) were flagged for more careful review. The responses from these participants were reviewed for patterned responses, but there were no obvious problems. The final sample was 562 MTurk participants.
RESULTS

Stimulus Development

Due to constraints of participant fatigue and additional sample required for a sufficient number of ratings, 20 job seekers were randomly selected from the pool of 53 job seekers. The selected job seekers were compared to non-selected job seekers on demographic variability, conscientiousness, impression management tendencies, social astuteness, self-monitoring, and Wonderlic scores, and were found to be highly similar, as seen in Table 1.

Participants

Job Seekers

The average age of selected Job Seekers was 21.36 years. Most selected Job Seekers were female (60%) and white (75%) with a bachelor’s degree (45%). On average, job seekers had 3.2 social networking profiles.

Subject Matter Experts

Nine SMEs were selected from a pool of graduate students studying Industrial-Organizational Psychology. The majority of SMEs were female (66.67%) and white (88.89%). The average age was 26.89.

MTurk Raters

There were a total of 514 MTurk raters who completed ratings for at least one profile or resume. Most raters were female (59.33%) and white (77%) with a bachelor’s degree (42.64%). Additional descriptive information available in Tables 2-4.

Raters were also asked about their social media use. First, raters indicated for which sites they have profiles. Raters had an average of 3.66 profiles on social media. The majority of raters
check Facebook daily (66.67%) and do not have Google+ (50.9%) or Tumblr (71.32%) profiles. Many raters reported not having or never using Twitter (40.31%), Instagram (46.25%), and Pinterest (45.48%). The majority of raters (57.62%) check LinkedIn at least once a month.

**Descriptive Statistics**

**Subject Matter Expert Ratings**

After a training and assessment on impression management tactics, SMEs were asked to rate the profiles and resumes of job seekers on their use of impression management. SMEs were instructed to consider the selection context, making their ratings based on the tactics one would typically expect to see in this context. The ratings of impression management tactics on the LinkedIn profile were not correlated to the ratings of the resume ($r = -.04$). I also compared the SME ratings of impression management to the job seeker’s impression management tendencies scale score. Resume ratings were related to job seeker impression management tendencies ($r = .38$), however, LinkedIn ratings were not related to impression management tendencies ($r = .08$). This relationship is smaller than anticipated and will be examined further in the discussion section. This finding indicates SME rated impression management is likely not the best control variable when examining the relationships between rated and assessed conscientiousness and cognitive ability.

SMEs also rated the amount of information provided on and the credentials of the resumes and LinkedIn profiles. The amount of information on a job seeker’s resume was positively correlated to that of the profile ($r = .21$). The credentials of the job seeker, rated on both the resume and profile, were also positively correlated ($r = .31$). Finally, SMEs predicted the gender of the job seeker. On average, SMEs guessed the gender of the job seeker correctly 60% of the time. Female job seekers were correctly predicted 58.33% of the time and male job
seekers were guessed correctly 62.5% of the time. For both resumes and LinkedIn profiles, SMEs correctly predicted 60% of the time.

**MTurk Ratings**

There were a total of 20 job seekers. To maximize responses while minimizing fatigue, each MTurk rater was asked to rate 25 stimuli. Due to the design of the study, I anticipated some instances of MTurk raters viewing both the LinkedIn profile and resume of a specific job seeker. Each rater who completed all 25 stimuli would see both the LinkedIn profile and resume of at least 5 job seekers. On average, raters viewed both the LinkedIn profile and resume of 6.44 job seekers. This lack of independence is taken into account in the regression models. MTurk raters were also asked to predict the gender of the job seeker. On average, raters predicted correctly 55% of the time. Raters predicted gender correctly 50% of the time while reviewing LinkedIn profiles and 60% of the time while reviewing resumes. Raters were more likely to predict female job seekers correctly, 68.75% of the time, than male job seekers, 45.83% of the time.

**Interrater Agreement**

In order to assess the interrater agreement among MTurk participants, I used James, Demaree, and Wolf’s (1984) method, within group interrater reliability ($R_{wg}$). This method accounts for both rank and similarity of ratings. Kozlowski and Hattrup (1992) argue that past critiques of this index have clouded the distinction between interrater reliability and interrater agreement. $R_{wg}$ is an index of interrater agreement, or consensus within a group, while interrater reliability is a measure of consistency. The present goal is to assess these ratings for consensus.

I calculated $R_{wg}$ for each of the ratings made by MTurk participants, including the 6 facets of conscientiousness, 2 facets of cognitive ability, and salary recommendation. The $R_{wg}$
estimates ranged from .78 to .84. The rule of thumb for this index is results greater than .70 are acceptable and justify homogeneity (Judge & Bono, 2000).

**Guidance from the Policy Capturing Literature**

In policy capturing designs, researchers create a series of scenarios or vignettes as stimuli to be rated, manipulating specific variables, have raters make judgments based on the available criteria, i.e., the manipulated variables. From this process, we learn how decision-makers “weight, combine, or integrate information” (Zedeck, 1977, p.51). The primary difference between this study and a traditional policy capturing design is the creation of the stimuli. Traditionally, researchers create “paper” people, manipulating the variables of interest and keeping all other factors constant. However, there are concerns with the validity of “paper” people (Gorman, Clover, & Doherty, 1978) has led to criticism of policy capturing designs (Karren & Barringer, 2002). Rather than creating mock LinkedIn profiles and resumes, known as “paper” people, this study uses active job seekers’ actual LinkedIn profile and resume along with measures of cognitive ability and conscientiousness. This approach is more externally valid than creating profiles and resumes at varying levels of conscientiousness and cognitive ability.

Policy-capturing designs typically address idiographic or nomothetic questions. Idiographic questions focus on an individual’s decision making tendency while nomothetic questions attempt to identify the factors that predict decisions in general (Aiman-Smith et al., 2002). This study’s questions can be classified as nomothetic.

Each participant rated a randomly selected subset of the stimuli. This is acceptable with intercorrelations between the variables are low \( r < .25 \). In the policy capturing design, the predictor variables should be orthogonal. Theoretically, cognitive ability and conscientiousness should not be correlated. In fact, research has shown empirically that they are slightly negatively
correlated. Rammstedt, Danner, and Martin (2016) found correlations of -.09 and -.08 for conscientiousness and verbal ability and conscientiousness and numerical ability, respectively.

In an effort to maximize power and minimize participant fatigue, each participant reviewed 25 randomly selected profiles and resumes. The literature provides some guidance as to the number of stimuli a participant can rate and be reasonably expected to process, including Rossi and Anderson (1982), recommending a maximum of 60 scenarios, and Aiman-Smith et al. (2002), recommending a maximum of 80 written scenarios. However, it’s important to consider the complexity of the stimuli (Graham & Cable, 2001). The time and effort to read and process a short vignette is different than the time and effort to read and process a full LinkedIn profile or resume.

When answering nomothetic questions, the regression coefficients can help us understand inferences at the aggregate level (Aiman-Smith et al., 2002). With variables using different metrics, unstandardized regression weights cannot be compared. Instead, we should use the standardized regression coefficients. However, these weights are only directly comparable if the variables are uncorrelated. Correlations of .9 or higher leads to instability in the model (Aiman-Smith et al., 2002). The cognitive ability and conscientiousness scores are ordinal variables, meaning we can establish a rank-order but cannot assume equal differences between equal data points. Aiman-Smith et al. (2002) recommend, rather than creating ranges of the variables and using dummy codes, using the existing values to “maintain a meaningful metric” (p. 403).

**Hypothesis Testing**

*Dual Methodologies*

These data were analyzed using two different procedures for structuring the data. The first methodology uses control variables to account for the non-independence of the data. The
second methodology accounts for the non-independence of ratings using a pooled correlation procedure. Both methodologies are discussed in detail below.

**Methodology 1**

Due to the nature of the study design, the model should take into account the nonindependence of ratings made by the same MTurk participant and ratings for the same job seeker’s resume and LinkedIn profile. Therefore, in the construction of the dataset, variables were created for job seeker ID and MTurk ID. For all analyses, these variables served as controls to partial out variance potentially due to response tendencies of MTurk participants and similarities between a job seeker’s profile and resume.

**Inferences of Conscientiousness.** Hypothesis 1 suggested that a job seeker’s level of conscientiousness predicts the level of conscientiousness inferred from the LinkedIn profile. Job seeker conscientiousness and inferred conscientiousness are correlated, $r = .17$, $p < .01$.

Additionally, in a regression model, having controlled for job seeker ID and MTurk ID, job seeker conscientiousness significantly predicts inferred conscientiousness, $b = .57$, $t(5711) = 14.30$, $p < .001$, with a significant regression model, $r^2 = .04$, $F(3, 5711) = 68.87$, $p < .001$. Therefore, this hypothesis was fully supported.

Hypothesis 2 proposed that job seeker impression management tendencies would predict conscientiousness inferred from the job seeker’s LinkedIn profile. After controlling for job seeker ID and MTurk ID, job seeker impression management significantly predicted conscientiousness inferred from the LinkedIn profile, $b = .35$, $t(5711) = 7.37$, $p < .001$, with a significant regression model, $r^2 = .01$, $F(3, 5711) = 18.77$, $p < .001$. In order to examine a more quantifiable outcome of inferences made from a LinkedIn profile, MTurk raters reported a salary offer for the job seeker between $40,000 and $55,000. Hypothesis 3 suggested that inferred
conscientiousness would predict salary offer. Controlling for job seeker ID and MTurk ID, inferred conscientiousness significantly predicts salary offer, $b = 1.943.07$, $t(4988) = 52.92$, $p < .001$, with a significant regression model, $r^2 = .36$, $F(3, 4988) = 944.57$, $p < .001$.

To further clarify the relationships between job seeker conscientiousness, job seeker impression management tendencies, and inferred conscientiousness, hypothesis 4 suggested that job seeker impression management tendencies mediate the relationship between job seeker conscientiousness and inferred conscientiousness. To test this hypothesis, I followed the steps outlined by Baron and Kenny (1986). The initial steps were established in hypothesis 1 and 2. When adding job seeker impression management tendencies to the model, the regression coefficient for job seeker conscientiousness decreases by .04, but does not disappear. This indicates partial mediation.

Inferences of Cognitive Ability. Hypotheses 5-8 mirror hypotheses 1-4, examining inferences of job seeker cognitive ability. Hypothesis 5 predicted a significant, positive relationship between job seeker cognitive ability and cognitive ability inferred from the job seeker’s LinkedIn profile. Though this correlation was smaller than anticipated, $r = .26$, it is statistically significant. A regression model, controlling for job seeker ID and MTurk ID, shows job seeker cognitive ability does predict inferred cognitive ability, $b = .07$, $t(5705) = 5.05$, $p < .001$, with a significant regression model, $r^2 = .08$, $F(3, 5705) = 172.07$, $p < .001$.

Hypothesis 6 proposed that job seeker impression management tendencies predict job seeker cognitive ability inferred from the LinkedIn profile. Controlling for job seeker ID and MTurk ID, job seeker impression management tendencies significantly predict inferred cognitive ability, $b = .26$, $t(5705) = 5.05$, $p < .001$, $r^2 = .01$, $F(3, 5705) = 8.62$, $p < .001$. 
Hypothesis 7 suggested inferred cognitive ability would significantly predict salary offer. After controlling for job seeker ID and MTurk ID, the regression model shows inferred cognitive ability significantly predicts salary offer, \( b = 1810.35, t(4982) = 52.93, \ p < .001, r^2 = .36, F(3, 4982) = 945.36, p < .001. \)

Instead of mediation, Hypothesis 8 proposed impression management tendencies moderate the relationship between job seeker cognitive ability and inferred cognitive ability. I created an interaction variable for impression management tendencies and job seeker cognitive ability. Controlling for job seeker ID and MTurk ID, this interaction variable significantly predicts inferred cognitive ability, \( b = -.17, t(5703) = -16.55, \ p < .001, r^2 = .13, F(5, 5703) = 163.50, p < .001. \)

*The Unique Contribution of LinkedIn.* This study also sought to understand the nuances of information learned from reviewing resumes and LinkedIn profiles. Hypothesis 9a proposed the level of conscientiousness inferred from LinkedIn would predict job seeker conscientiousness above and beyond the level of conscientiousness inferred from the job seeker’s resume. Controlling for job seeker ID and MTurk ID, resume inferred conscientiousness explains 19.3% of the variance of job seeker conscientiousness. Using hierarchical regression, adding LinkedIn inferred conscientiousness, the model explains 20.2% of the variance of job seeker conscientiousness. This was a statistically significant change in \( r^2, p < .001. \) Hypothesis 9b asked if this change in \( r^2 \) could be explained by job seeker impression management tendencies. Job seeker impression management was added as a 3rd step in the model. This addition decreased the effects of both LinkedIn inferred conscientiousness and resume inferred conscientiousness, increasing the amount of variance of job seeker conscientiousness explained by the model to 26.4%. Therefore, both Hypotheses 9a and 9b were fully supported.
Hypothesis 10a suggested the level of cognitive ability inferred from LinkedIn would predict the job seeker’s cognitive ability above and beyond the level of cognitive ability inferred from a resume. The same steps were for this analysis as in hypothesis 9a. The amount of variance explained by the model increased from 17% to 23.2% when LinkedIn inferred cognitive ability was added to the model. Further, this increase could be at least partially explained by job seeker impression management tendencies, as this addition to the model decreased the coefficients of LinkedIn and resume inferences, providing support for Hypothesis 10b. Additionally, the model with impression management tendencies explains 29.7%. This shows impression management tendencies may be even more important in job seeker outcomes than previously anticipated.

In order to ensure inferences made from LinkedIn were adding unique variance above and beyond resume inferences, I conducted the same analyses but entered LinkedIn inferences in the model first, then added resume inferences. LinkedIn inferences alone account for 19.6% of the variance in assessed conscientiousness and 23.0% of the variance in assessed cognitive ability. This supports the idea that inferences made from LinkedIn a more predictive than those made from resumes.

Validation Evidence. Finally, Hypotheses 11 and 12 sought to establish preliminary validation evidence for the use of LinkedIn in selection in estimating cognitive ability and conscientiousness, constructs predictive of performance across a wide variety of jobs. Controlling for job seeker ID and MTurk ID, inferences of conscientiousness made from LinkedIn profiles significantly predicted job seeker conscientiousness, $b = .06, t(5711) = 14.30, p < .001$, with a significant model, $r^2 = .20, F(3, 5711) = 474.62, p < .001$ and inferences of
cognitive ability made from LinkedIn profiles significantly predicted job seeker cognitive ability, 
\[ b = 1.19, t(5707) = 22.71, \ p < .001, \ r^2 = .24, \ F(3, 5705) = 590.46, \ p < .001. \]

**Methodology 2**

In order to account for potential within person effects, I conducted the same series of regressions using a pooled correlation matrix. I first calculated a correlation matrix for each participant who rated both the profile and resume of at least 2 job seekers. I then averaged these correlations across raters, isolating the variance due to the differences in inferences made from resumes and those made from LinkedIn profiles. This final pooled correlation matrix was used for all analyses.

**Inferences of Conscientiousness.** To retest the first set of hypotheses, I found that job seeker conscientiousness and inferred conscientiousness are correlated, \( r = .19, p < .01 \). The effect of assessed conscientiousness on inferred conscientiousness is significant, \( b = .52, t(5712) = 14.23, \ p < .001 \), with a significant regression model, \( r^2 = .03, F(1, 5712) = 202.42, p < .001 \). Job seeker impression management significantly predicted conscientiousness inferred from the LinkedIn profile, \( b = .24, t(5712) = 5.38, \ p < .001 \), with a significant regression model, \( r^2 = .01, F(3, 5712) = 28.94, p < .001 \). Inferred conscientiousness significantly predicts salary offer, \( b = 1,367.80, t(5712) = 35.59, \ p < .001 \), with a significant regression model, \( r^2 = .18, F(1, 5712) = 1266.42, p < .001 \). When adding job seeker impression management tendencies to the model, the regression coefficient for job seeker conscientiousness decreases by .03, but does not disappear. This indicates partial mediation. Therefore, hypotheses 1 through 4 are still supported.

**Inferences of Cognitive Ability.** To retest the second set of hypotheses, I found that job seeker cognitive ability and inferred cognitive ability are correlated, \( r = .27, p < .01 \). The effect of assessed cognitive ability on inferred cognitive ability is significant, \( b = .06, t(5712) = 20.77, \ p < .001 \).
Job seeker impression management significantly predicted cognitive ability inferred from the LinkedIn profile, $b = .15$, $t(5712) = 3.10$, $p < .001$, with a significant regression model, $r^2 = .002$, $F(3, 5712) = 9.62$, $p < .001$. Inferred cognitive ability significantly predicts salary offer, $b = 1,285.32$, $t(5712) = 35.69$, $p < .001$, with a significant regression model, $r^2 = .18$, $F(1, 5712) = 1273.70$, $p < .001$. The interaction of assessed cognitive ability and impression management is not a significant predictor of inferences of cognitive ability. Therefore, hypotheses 5 through 7 are still supported, but hypothesis 8 is not fully supported.

The Unique Contribution of LinkedIn. Using the second methodology, resume inferred conscientiousness explains 1% of the variance of job seeker conscientiousness. Adding LinkedIn inferred conscientiousness, the model explains 4.4% of the variance of job seeker conscientiousness. This was a statistically significant change in $r^2$, $p < .001$. The addition of impression management decreased the effects of both LinkedIn inferred conscientiousness and resume inferred conscientiousness, increasing the amount of variance of job seeker conscientiousness explained by the model to 16.6%. Therefore, both Hypotheses 9a and 9b are still fully supported.

The amount of variance explained by the model increased from 3.2%, with only resume inferred cognitive ability in the model, to 9.5% when LinkedIn inferred cognitive ability was added to the model. The addition of impression management to the model decreases the effects of inferences of cognitive ability and increases the variance explained to 9.9%. Hypotheses 10a and 10b are still supported.

Validation Evidence. Finally, inferences of conscientiousness made from LinkedIn profiles significantly predicted job seeker conscientiousness, $b = .07$, $t(5712) = 14.23$, $p < .001$,
with a significant model, $r^2 = .03$, $F(1, 5712) = 202.42$, $p < .001$ and inferences of cognitive ability made from LinkedIn profiles significantly predicted job seeker cognitive ability, $b = 1.20$, $t(5712) = 20.77$, $p < .001$, $r^2 = .07$, $F(1, 5712) = 431.42$, $p < .001$. These hypotheses are therefore still supported.

Comparison of Methodologies 1 and 2

Overall, the results of the second methodology are consistent with those of the first methodology. The significance and directionality of most findings stayed the same. This indicates that between subjects effects were likely not confounded by within subjects effects. As noted above, there were two differences of note between the results of these methodologies. First, the interaction effect of cognitive ability and impression management on inferences of cognitive ability (hypothesis 8), is no longer significant. Second, though the trends are the same, the amount of variance explained by resume and profile ratings was lower.

Exploratory Analyses

Gender

Perceptions of applicants can vary by gender. Therefore, I first examined the descriptive statistics to identify patterns by job seeker gender as well as gender perceived by the rater. Male and female job seekers scored similarly (differences less than a standard deviation) in conscientiousness, cognitive ability, impression management tendencies, and social astuteness. However, there was a difference in self-monitoring. This scale consisted of true/false items which were averaged for a possible 1 to 2 scale range. The minimum score was 1.19 and the maximum score was 1.81. Both of these scores were from male job seekers. The mean and standard deviation for males was 1.42 (0.18) and for females was 1.55 (0.09), indicating more
variance among male job seekers and overall higher levels of self-monitoring among females. The means were not significantly different.

There were virtually no differences between MTurk ratings of facets of conscientiousness and cognitive ability among job seekers presumed to be men and those presumed to be women. For example, when given the range of $40,000 to $55,000, the average recommended starting salary differed by only $71.68, which is non-significant, favoring women. A similar pattern holds for the ratings of conscientiousness and cognitive ability on resumes. The only difference based on resumes is for recommended starting salary. On average, applicants presumed to be men received a recommended starting salary $634.47 higher than applicants presumed to be women. This is a statistically significant difference $t(4238) = 4.49, p < .001$. So, there are no differences among male and female job seekers, but there are differences based on the rater’s perception of the job seeker’s gender.
DISCUSSION

The primary goal of this study was to better understand how inferences are made from reviewing LinkedIn profiles within the selection context. Specifically, this study examined the role of impression management in inferences of cognitive ability and conscientiousness. Even further, this study provides preliminary validation evidence for the use of LinkedIn as a selection tool.

Discussion of Findings

Inferences of Conscientiousness on LinkedIn

Both the job seeker’s measured level of conscientiousness and impression management tendencies predicted the level of conscientiousness inferred by raters of the job seeker’s LinkedIn profile. Additionally, inferred conscientiousness was related to suggested starting salary. Finally, the relationship between a job seeker’s assessed conscientiousness and inferred conscientiousness is partially mediated by the job seeker’s tendency towards impression management. From this, we learn that conscientiousness can be assessed with some accuracy from a LinkedIn profile, aligning with prior research on inferring personality traits from online profiles (Kluemper & Rosen, 2009; Stopfer et al., 2014). Further, a rater’s inference of a job seeker’s level of conscientiousness is related to the rater’s suggestion for starting salary.

Inferences of Cognitive Ability on LinkedIn

The job seeker’s measured cognitive ability and impression management tendencies both predicted the level of cognitive ability inferred by raters of the job seeker’s LinkedIn profile. Moreover, the job seeker’s inferred cognitive ability was significantly related to suggested starting salary. Unlike the relationship between impression management and conscientiousness,
an applicant must have a base level of cognitive ability to employ impression management tactics (Carver & Scheier, 1990). Once this minimum level of cognitive ability is met, the applicant either engages in impression management or not. Therefore, impression management is treated as a moderator in the relationship between assessed and inferred cognitive ability. Assessed cognitive ability and impression management tendencies interact to predict inferred cognitive ability, indicating that impression management tendencies moderate the relationship between assessed and inferred cognitive ability.

Based on these findings, we see that raters can assess an applicant’s cognitive ability from a LinkedIn profile, a finding seen in research on other social networking sites (Kluemper & Rosen, 2009). Inferred cognitive ability is then in turn related to the starting salary suggested by the rater.

As noted earlier, the SME ratings of use of impression management tactics were not leveraged in the analyses. This is because the relationship between ratings of impression management tactics on LinkedIn and the job seeker’s measured impression management tendency was smaller than anticipated. Lack of construct clarity may have been a factor. Impression management tactics vary by context. A resume is presented almost exclusively during selection process, whereas a LinkedIn profile can also be used for professional development and networking. It is possible that the impression management scale taken by job seekers more closely resembles the selection context than networking or professional development. Another possible explanation for these relationships is that the SMEs were better able to assess the use of impression management tactics on resumes than on LinkedIn profiles.
LinkedIn Inferences Relative to Resume Inferences

This study sought to identify the differences between inferences made about job seekers from their resumes and those made from their LinkedIn profiles. Though small, inferences of conscientiousness from LinkedIn did significantly predict job seeker conscientiousness above and beyond inferences made from resumes. The addition of impression management in the model decreased the effects of inferred conscientiousness from both resumes and profiles, indicating at least part of the incremental validity of inferences made from LinkedIn can be attributed to job seeker impression management.

Similar patterns held for cognitive ability. The incremental validity of inferences made from LinkedIn over inferences made from resumes was even larger for cognitive ability. When impression management was added to the model, the effects of inferences of cognitive ability from profiles and resumes decreased.

Though the incremental validity of inferences made from LinkedIn over those made from resumes was significant, the model only explained an additional .9% of the variance of assessed conscientiousness. This calls into question why human resource professionals are spending time reviewing both resumes and LinkedIn profiles during the screening process. Perhaps there are other applicant attributes for which LinkedIn can provide valuable additional information.

Preliminary Validation Evidence

As reflected in hypotheses 1 and 5, inferred conscientiousness was significantly related to assessed conscientiousness and inferred cognitive ability was significantly related to assessed cognitive ability. So, ratings of job-relevant attributes made from LinkedIn are related to other well-established measures of those attributes.
Gender Differences

As discussed in the introduction, both the use of tactics and the perceptions of those tactics vary by gender. These results show no differences based on gender of the job applicant. However, there are differences from resume ratings in the concrete outcome, suggested starting salary, based on the applicant’s gender perceived by the rater. This finding is in line with previous research. When female applicants self-promote, they are perceived as more competent but less hirable (Rudman, 1998). Guadagno and Cialdini (2007) say these differences occur when the rater, or recruiter, view the applicant’s actions as a violation of gender roles. These findings based on the rater’s perception of gender, rather than actual gender, of the job seeker within the context of this study aligns with Implicit Personality Theory (IPT). According to this theory, when we have limited information, we fill in the gaps with our own “theory” of the traits that commonly covary with the few traits we know (Pedersen, 1965).

Though this study provided the opportunity to distinguish between perceived gender and actual gender, this distinction is rarely possible in the hiring context. All job seeker names were changed to gender neutral alternatives and profile pictures were blurred. References to participation in gender-specific activities, like the Girl Scouts or Men’s Lacrosse Team, were also removed. In a typical hiring situation, the recruiter would see the applicant’s name on both LinkedIn and a resume and would likely see a picture on LinkedIn. There may also be references to gender-specific organizations. Therefore, any differences in outcome would be attributed to gender, rather than refined to differences in behaviors by gender or differences in perceptions of behaviors by gender. Though gender differences in negotiating salary have been well-researched (Amanatullah & Morris, 2010; Bowles, Babcock, & McGinn, 2005; Small, Gelfand, Babcock, & Gettman, 2007), research on initial salary offers by gender is sparse. There is some correlational
data (Fuller, 2008) but very few, if any, experimental research studies. Generally, the literature 
shows very small wage gap, if any, in early career stages (Manning & Swaffield, 2005). The 
findings of this study also show a small wage gap for applicants raters thought were female. 
Further research is needed to explore this area.

*Legal Implications*

Though this study provides preliminary validation evidence for the use of LinkedIn as a 
selection tool, it does not mean this practice is without legal ramifications. There are three 
primary legal concerns with using LinkedIn screenings to inform hiring decisions: an applicant’s 
right to privacy, the use of information that is not job-relevant, and the lack of standardization 
across applicants.

Our legal system has a well-established right to privacy. Prior research shows applicants 
have negative reactions to perspective employers searching for and reviewing online social 
networking profiles like Facebook (Soughton, Thompson, & Meade, 2015; Peluchette & Karl, 
2008). However, LinkedIn profiles are typically created for the specific purpose of sharing 
information with perspective employers. According to Goffman’s (1959) theory, we engage in 
specific behaviors depending on our audience. We behave differently with coworkers than we 
would with friends or family. Consistent with this theory, information posted on LinkedIn is 
fundamentally different from information posted on sites with a more social orientation, meaning 
employers viewing LinkedIn profiles is likely acceptable or even encourage by applicants.

Information used in selection decisions should be job-relevant. A LinkedIn profile 
typically includes a picture, meaning the employer has access to demographic information 
related to protected-class status. The lack of standardization of information included profiles as 
well as whether or not an applicant has a profile is another concern, potentially related to an
applicant’s protected group status. Certain groups, like ethnic or racial minorities and older workers, are less likely to use the Internet regularly (Jackson et al., 2008; Mitzner et al., 2010) and may therefore not update their profile or have one at all. For this reason, the exclusive use of LinkedIn for screening applicants is not recommended.

**Limitations**

This study was limited in scope due to the feasibility of assessing multiple job seekers. Certain characteristics of the job seekers, like age, had limited variance in part due to the sample of job seekers, senior undergraduate students from Colorado State University, as well as the need to reduce potentially influential factors. Additional factors, beyond cognitive ability, conscientiousness, and gender, would have required many more SMEs and even more MTurk raters to adequately assess each profile and resume. Therefore, potentially influential factors like age, race, or level of attractiveness of the job seeker could not be explored. Additionally, it may be interesting to explore the effects of a match or mismatch of demographic characteristics of the rater and applicant. Though this area has been thoroughly researched in other selection contexts (Buckley, Jackson, Bolino, Veres, & Field, 2007; Koch, D’Mello, & Sackett, 2015; McCarthy, Van Iddekinge, & Campion, 2010), researchers should examine whether or not the relationships hold for this new selection tool.

The policy capturing methodology is traditionally used when the researcher has manipulated explanatory variables, holding other potential factors constant. As this study used real job seekers at varying levels of cognitive ability and conscientiousness, other potentially influential factors could not be held constant. Therefore, there could be other factors affecting inferred conscientiousness, inferred cognitive ability, and salary offer beyond those included in the model. Additionally, because participants only viewed a randomly selected subset of the
stimuli, it is possible that they were affected by the particular stimuli presented (Graham & Cable, 2001).

Though this study identified statistically significant mediating and moderating variables, we should interpret these findings with caution. The mediating and moderating variables were correlated with other variables in the relationships. This means that though these findings are theoretically sound, the predictor variables could be switched with the mediating or moderating variables and likely yield similar results. Without a controlled experimental design, it is difficult to be certain that these variables are appropriately positioned in the model.

**Future Research**

As the use of LinkedIn as a selection tool is a relatively new line of research, there many questions left to be examined. In fact, a recent review article stressed the lack of existing research on impression management via new technologies at work (Bolino, Long, & Turnley, 2016). The success of different types of impression management tactics depends on the context. Additional research is required to identify if this holds true for LinkedIn. Are some tactics more effective than others for this medium? Though LinkedIn is essentially an online resume, we cannot assume the tactics used on resumes will still be effective. For example, the use of impression management tactics on resumes can lead to perceptions of self-confidence, interpersonal skills, and competence. Additionally, the overuse of tactics can lead to skepticism by the reviewer (Knouse, 1994). Do these patterns hold true for LinkedIn? Moreover, prior research shows men and women tend to use different tactics. Women are more likely to use strategies to build relationships while men are more likely to use self-promotion (Singh & Binnicombe, 2001). Future research should examine gender differences in impression management on LinkedIn.
The ability to update, post or link to articles, and communicate with potential employers adds complexity to this context. Similar to an interview, an applicant has the opportunity to communicate with perspective employers. Tactics like ingratiation may be successful (Higgins & Judge, 2004). Yet, this context for communication is not identical to that of an interview. Applicants would be corresponding with potential employers online rather than in person or over the phone. Research shows successfully using impression management tactics in written form is more difficult than using those same tactics in person (Knouse, 1994). There is no opportunity to use non-verbal behaviors or perceive feedback, an essential part of Cybernetic Theory, is delayed rather than immediate (Barrick et al., 2009; Bozeman & Kacmar, 1997).

LinkedIn use and inferences made may vary by industry (Zide et al., 2014). This study did not assess potential differences by industry in how job seekers present themselves or how human resource professionals review profiles. Specifically, some information may be more appropriate in certain fields, like including personal information when working in sales. This may be seen as a positive addition by others working in or hiring for sales. However, human resource professionals from other fields may view this inclusion as unprofessional. Researchers should examine how profiles are perceived based on industry as well as what happens to a job seeker’s profile during the transition from one industry to another. Is there a slow change to as the job seeker learns and adopts new norms? Perhaps the profile is perceived differently, accepting that the job seeker is new to the industry and the faux-pas may not reflect the job seeker’s characteristics. These issues should be explored through additional research.

Researchers should further examine the effects of demographic variables on applicant LinkedIn use. Not only are many protected class characteristics shown in the profile picture, adding potential bias, but members of protected classes may use LinkedIn differently. For
example, there are many methods of selection that show differential prediction for older workers, meaning older workers’ performance on the selection method does not accurately reflect their job performance when compared to younger workers (Fisher, Truxillo, Finkelstein, & Wallace, 2016). Social media sites are traditionally thought of as being utilized more so by younger users. We may see different relationships between inferences gleaned from LinkedIn profiles and job performance by age. Unless social media is somehow job relevant, this may be an inappropriate selection tool. With potential legal ramifications, this topic warrants additional research.

As this study provides only preliminary validation results for the use of LinkedIn as a selection tool, additional research is necessary to build upon these findings. This study only connects inferred job seeker conscientiousness and cognitive ability to assessed conscientiousness and cognitive ability. While previous literature ties these assessments to job performance, additional research with LinkedIn profile reviews and job performance is necessary. Additionally, though cognitive ability and conscientiousness are strong predictors of job performance across jobs, there may be some jobs or industries for which this selection approach is more appropriate. Predictive or concurrent validation studies would provide additional insight.

Further, an examination of the screening process would move the science forward with regards to using LinkedIn for selection. Borrowing from the extensive literature on structured vs. unstructured interviews, we know we can learn much more about job applicants by asking each the same, job relevant questions (Schmidt & Hunter, 1998). Additional research is needed to identify whether or not a structured approach brings the same benefits to LinkedIn screenings as interviews. If a structured approach provides additional validity to the use of LinkedIn as a screening tool, research on what that structure would look like should follow.
Conclusion

This research serves as an initial step in understanding how and why LinkedIn is used in employee selection. From these findings, we learned that raters can accurately assess applicants’ levels of cognitive ability and conscientiousness, two of the best predictors of job performance (Schmidt & Hunter, 1998). As in other selection methods, the applicant’s use of impression management tactics affects the inferences made by reviewers.

While organizations have long been using data analytics in other capacities, this approach has been adopted by human resources relatively recently. The influx in data-driven decision making provides Industrial-Organizational psychologists the opportunity to influence application with empirically supported practices. With the abundance of data available about candidates and organizations eager to use it, this line of research can serve as a guide for best practices (Hoek et al., 2016).
TABLE 1. Mean (Standard Deviation) Comparison of Selected Job Seekers to Full Sample

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Conscientiousness</th>
<th>Impression Management</th>
<th>Social Astuteness</th>
<th>Self-Monitoring</th>
<th>Wonderlic</th>
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<tbody>
<tr>
<td>Used</td>
<td>20</td>
<td>3.97 (.49)</td>
<td>2.50 (.41)</td>
<td>4.25 (.56)</td>
<td>1.50 (.15)</td>
<td>23.45 (6.67)</td>
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<td>All</td>
<td>26</td>
<td>3.87 (.41)</td>
<td>2.58 (.40)</td>
<td>4.42 (.51)</td>
<td>1.48 (.13)</td>
<td>23.70 (5.67)</td>
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Table 2. Job Seeker Demographics

<table>
<thead>
<tr>
<th>Demographic</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8 (40%)</td>
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<tr>
<td>Female</td>
<td>12 (60%)</td>
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<tr>
<td>Race</td>
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<td>Japanese</td>
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<tr>
<td>White</td>
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<tr>
<td>Hispanic</td>
<td>3 (15%)</td>
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<tr>
<td>Middle Eastern</td>
<td>1 (5%)</td>
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<tr>
<td>Education</td>
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</tr>
<tr>
<td>High School</td>
<td>6 (30%)</td>
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<tr>
<td>Associates</td>
<td>4 (20%)</td>
</tr>
<tr>
<td>Bachelors</td>
<td>9 (45%)</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>1 (5%)</td>
</tr>
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</table>

Table 3. Job Seeker Scale Score Descriptive Statistics

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>Impression Management Scale Score</td>
<td>20</td>
<td>1.59</td>
<td>3.09</td>
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Table 5. MTurk Rater Demographics

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<tr>
<td>Filipino</td>
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<td>Japanese</td>
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<td>Korean</td>
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<tr>
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<tr>
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<td></td>
<td>(66.67%)</td>
<td>(5.94%)</td>
<td>(18.09%)</td>
<td>(21.19%)</td>
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Table 7. MTurk Rater Scale Score Descriptive Statistics

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</tr>
<tr>
<td>2</td>
<td>An applicant’s tendency to use impression management tactics will be positively related to the level of conscientiousness a rater infers based on information from the LinkedIn profile.</td>
</tr>
<tr>
<td>3</td>
<td>The inferred level of conscientiousness based on information from the LinkedIn profile will be positively related to the rater’s salary recommendation.</td>
</tr>
<tr>
<td>4</td>
<td>Impression management will mediate the relationship between conscientiousness and inferred conscientiousness based on information from the LinkedIn profile.</td>
</tr>
<tr>
<td>5</td>
<td>An applicant’s level of cognitive ability will be positively related to the level of cognitive ability a rater infers based on information from the LinkedIn profile.</td>
</tr>
<tr>
<td>6</td>
<td>An applicant’s tendency to use impression management tactics will be positively related to the level of cognitive ability a rater infers based on information from the LinkedIn profile.</td>
</tr>
<tr>
<td>7</td>
<td>The inferred level of cognitive ability based on information from the LinkedIn profile will be positively related to the rater’s salary recommendation.</td>
</tr>
<tr>
<td>8</td>
<td>Impression management will moderate the relationship between assessed cognitive ability and inferred cognitive ability with a stronger relationship for individuals high in impression management. Ratings of conscientiousness from LinkedIn will be positively related to assessed conscientiousness above and beyond resume ratings.</td>
</tr>
<tr>
<td>9a</td>
<td>The increase in variance of conscientiousness explained will be due, at least in part, to the use of impression management tactics.</td>
</tr>
<tr>
<td>9b</td>
<td>Ratings of cognitive ability from LinkedIn will be positively related to assessed conscientiousness above and beyond resume ratings.</td>
</tr>
<tr>
<td>10a</td>
<td>The increase in variance of cognitive ability explained will be due, at least in part, to the use of impression management tactics.</td>
</tr>
<tr>
<td>10b</td>
<td>Conscientiousness inferred from LinkedIn will be positively related to assessed conscientiousness.</td>
</tr>
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<td>Cognitive ability inferred from LinkedIn will be positively related to assessed cognitive ability.</td>
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REFERENCES


http://dx.doi.org/10.1016/j.orgdyn.2013.03.006


Appendix A
Job Seeker Consent

My name is Lauren Cotter, and I am a researcher from Colorado State University in the Psychology department and the Co-Principal Investigator. We are conducting a research study on how HR professionals make decisions when screening applicants. The Principal Investigator is my advisor, Jeanette Cleveland, Ph.D., Professor from the Psychology department.

We would like you to respond to a series of questions about yourself as well as a brief cognitive ability assessment. This survey will take place online. Participation will take no more than 20 minutes. Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and choose to end participation in the survey at any time without penalty.

All data is for research purposes only. No identifying information will be collected. Your responses will be confidential and anonymous. Only the Principal Investigator and Co-Investigator will have access to the data.

If you are interested I am happy work with you to improve your resume and LinkedIn profile as you prepare to enter to the job market. Please contact me, lcotter@colostate.edu, if you are interested in improving your resume and/or profile.

There are no known risks in this study. While it is not possible to identify all potential risks in research procedures, the researchers in this project have taken reasonable safeguards to minimize any known and potential, but unknown, risks. Participation in this study is voluntary. Please remember that you do not have to take part in this study if you do not want to.

If you have any questions about your rights as a participant, please contact Lauren Cotter at laurenelizabethcotter@gmail.com, or Jeanette Cleveland at Jeanette.Cleveland@colostate.edu. If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: RICRO_IRB@mail.colostate.edu; 970-491-1553.

To indicate your consent to participate in this research and to continue on to the survey, please click the arrow on the right below.

Sincerely,
Jeanette Cleveland, Ph.D. Lauren Cotter
Principal Investigator Co-Principal Investigator
Professor Doctoral Student
Appendix B
Subject Matter Expert Consent

My name is Lauren Cotter, and I am a researcher from Colorado State University in the Psychology department and the Co-Principal Investigator. We are conducting a research study on how HR professionals make decisions when screening applicants. The Principal Investigator is my advisor, Jeanette Cleveland, Ph.D., Professor from the Psychology department.

We would like you to respond to a series of questions about the amount of information provided and impression management tactics used in resumes and LinkedIn profiles. This survey will take place online. Participation will take no more than 20 minutes. Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and choose to end participation in the survey at any time without penalty.

All data is for research purposes only. No identifying information will be collected. Your responses will be confidential and anonymous. Only the Principal Investigator and Co-Investigator will have access to the data.

There are no direct benefits to the participants, but we hope the information will help with the applicant screening process in the future.

There are no known risks in this study. While it is not possible to identify all potential risks in research procedures, the researchers in this project have taken reasonable safeguards to minimize any known and potential, but unknown, risks. Participation in this study is voluntary. Please remember that you do not have to take part in this study if you do not want to.

If you have any questions about your rights as a participant, please contact Lauren Cotter at laurenelizabethcotter@gmail.com, or Jeanette Cleveland at Jeanette.Cleveland@colostate.edu. If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: RICRO_IRB@mail.colostate.edu; 970-491-1553.

To indicate your consent to participate in this research and to continue on to the survey, please click the arrow on the right below.

Sincerely,
Jeanette Cleveland, Ph.D. Lauren Cotter
Principal Investigator Co-Principal Investigator
Professor Doctoral Student
Appendix C
MTurk Participant Consent

My name is Lauren Cotter, and I am a researcher from Colorado State University in the Psychology department and the Co-Principal Investigator. We are conducting a research study on how HR professionals make decisions when screening applicants. The Principal Investigator is my advisor, Jeanette Cleveland, Ph.D., Professor from the Psychology department.

We would like you to respond to a series of questions about applicants’ resumes and LinkedIn profiles. This survey will take place online. Participation will take no more than 20 minutes. Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and choose to end participation in the survey at any time without penalty.

All data is for research purposes only. No identifying information will be collected. Your responses will be confidential and anonymous. Only the Principal Investigator and Co-Investigator will have access to the data.

There are no direct benefits to the participants, but we hope the information will help with the applicant screening process in the future.

There are no known risks in this study. While it is not possible to identify all potential risks in research procedures, the researchers in this project have taken reasonable safeguards to minimize any known and potential, but unknown, risks. Participation in this study is voluntary. Please remember that you do not have to take part in this study if you do not want to.

If you have any questions about your rights as a participant, please contact Lauren Cotter at laurenelizabethcotter@gmail.com, or Jeanette Cleveland at Jeanette.Cleveland@colostate.edu. If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: RICRO_IRB@mail.colostate.edu; 970-491-1553.

To indicate your consent to participate in this research and to continue on to the survey, please click the arrow on the right below.

Sincerely,
Jeanette Cleveland, Ph.D.       Lauren Cotter
Principal Investigator       Co-Principal Investigator
Professor       Doctoral Student
Appendix D
Stimuli Development
Survey for Job Seekers (CSU senior undergraduates)

Thank you for volunteering to participate in this study and for submitting your resume and LinkedIn profile. You will now answer questions about yourself. This survey should take no more than 20 minutes. You may stop the survey at any point by closing the browser.

(Demographics)

What is your current age? *(allow 2 numerical digits to be entered)*

What is your gender?
1. Male
2. Female
3. Prefer not to say

What is your race?
1. African American
2. Chinese
3. Filipino
4. Indian
5. Japanese
6. Korean
7. Southeast Asian
8. White Caucasian-Non-Hispanic
9. Hispanic
10. Mexican
11. American Indian/Alaskan Native
12. Middle Eastern
13. More than one race
14. Unknown
15. Prefer not to say

What is your highest level of education?
1. High School
2. Associates Degree
3. Bachelors Degree
4. Masters Degree
5. Juris Doctorate
6. Doctorate
7. Post-Doctorate
8. Prefer not to say

For which of the following social networking sites do you have a profile?
1. Facebook
2. LinkedIn
3. Twitter
4. Instagram
5. Google+
6. Pinterest
7. Tumblr

How often do you use each of the following sites for personal (rather than professional reasons)?

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<th>Never/Do not have a profile</th>
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How often do you check your LinkedIn profile?

How often do you update or modify your LinkedIn profile?

How often do you interact with others (messages, endorsements, status updates, blog posts, etc) on LinkedIn?

What resources (e.g. the career center) have you used to improve or maintain your LinkedIn profile?

*(NEO-PI-R Conscientiousness 20 item measure (alpha = .90). Items will be in random order)*

Please indicate the extent to which you agree with the following questions using the following scale:
1 Strongly Disagree
2 Disagree
3 Neither Agree nor Disagree
4 Agree
5 Strongly Agree

1. I am always prepared.
2. I pay attention to details.
3. I get chores done right away.
4. I carry out my plans.
5. I make plans and stick to them.
6. I complete tasks successfully.
7. I do things according to a plan.
8. I am exacting in my work.
10. I follow through with my plans.
11. I waste my time.
12. I find it difficult to get down to work.
13. I do just enough work to get by.
14. I don’t see things through.
15. I shirk my duties.
16. I mess things up.
17. I leave things unfinished.
18. I don’t put my mind on the task at hand.
19. I make a mess of things.
20. I need a push to get started.

(Impression Management Scale, Bolino and Turnley, 1999, items will be presented in random order)

Please describe how frequently in the last 6 months you have used each of these strategies while at work based on the following scale:

1 = never behave this way
2 = very rarely behave this way
3 = occasionally behave this way
4 = sometimes behave this way
5 = often behave this way

1. Talk proudly about your experience or education.
2. Make people aware of your talents or qualifications.
3. Let others know that you are valuable to the organization.
4. Make people aware of your accomplishments.
5. Compliment your colleagues so they will see you as likeable.
6. Take an interest in your colleagues’ personal lives to show them that you are friendly.
7. Praise your colleagues for their accomplishments so they will consider you a nice person.
8. Do personal favors for your colleagues to show them that you are friendly.
9. Stay at work late so people will know you are hard working.
10. Try to appear busy, even at times when things are slower.
11. Arrive at work early to look dedicated.
12. Come to the office at night or on weekends to show that you are dedicated.
13. Be intimidating with coworkers when it will help you get your job done.
14. Let others know that you can make things difficult for them if they push you too far.
15. Deal forcefully with colleagues when they hamper your ability to get your job done.
16. Deal strongly or aggressively with coworkers who interfere in your business.
17. Use intimidation to get colleagues to behave appropriately.
18. Act like you know less than you do so people will help you out.
19. Try to gain assistance or sympathy from people by appearing needy in some area.
20. Pretend not to understand something to gain someone’s help.
21. Act like you need assistance so people will help you out.
22. Pretend to know less than you do so you can avoid an unpleasant assignment.

*(Social Astuteness Factor from the Political Skill Inventory; Ferris et al., 2005)*

Describes how much you agree with each statement about yourself. 1 (strongly disagree) 2 (disagree) 3 (slightly disagree) 4 (neutral) 5 (slightly agree) 6 (agree) 7 (strongly agree)

1. I always seem to instinctively know the right thing to say or do to influence others.
2. I have good intuition or savvy about how to present myself to others.
3. I am particularly good at sensing the motivations and hidden agendas of others.
4. I pay close attention to people’s facial expressions.
5. I understand people very well

*(Self-Monitoring; Snyder, 1974)*

The statements on the following pages concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is TRUE or MOSTLY TRUE as applied to you, respond True. If a statement is FALSE or NOT USUALLY TRUE as applied to you, respond False.

1. I find it hard to imitate the behavior of other people. (F)
2. My behavior is usually an expression of my true inner feelings, attitudes, and beliefs. (F).
3. At parties and social gatherings, I do not attempt to do or say things that others will like. (F)
4. I can only argue for ideas which I already believe. (F)
5. I can make impromptu speeches even on topics about which I have almost no information. (T)
6. I guess I put on a show to impress or entertain people. (T)
7. When I am uncertain how to act in a social situation, I look to the behaviors of others for cues. (T)
8. I would probably make a good actor. (T)
9. I rarely need the advice of my friends to choose movies, books, or music. (F)
10. I sometimes appear to others to be experiencing deeper emotions that I actually am. (T)
11. I laugh more when I watch a comedy with others than when alone. (T)
12. In a group of people I am rarely the center of attention. (F)
13. In different situations and with different people, I often act like very different persons. (T)
14. I am not particularly good at making other people like me. (F)
15. Even if I am not enjoying myself, I often pretend to be having a good time. (T)
16. I’m not always the person I appear to be. (T)
17. I would not change my opinions (or the way I do things) in order to please someone else or win their favor. (F)
18. I have considered being an entertainer. (T)
19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else. (T)
20. I have never been good at games like charades or improvisational acting. (F)
21. I have trouble changing my behavior to suit different people and different situations. (F)
22. At a party I let others keep the jokes and stories going. (F)
23. I feel a bit awkward in company and do not show up quite so well as I should. (F)
24. I can look anyone in the eye and tell a lie with a straight face (if for a right end). (T)
25. I may deceive people by being friendly when I really dislike them. (T)

(Wonderlic Test)

This is a test of problem-solving ability. It contains various types of questions that must be completed without the aid of a calculator or other problem-solving device.

This test contains 50 questions that increase in difficulty. It is unlikely that you will finish all of them, but do your best.

After you click the arrow to advance the survey at the bottom of this page, you will have exactly 12 minutes to provide as many correct answers as you can. Work carefully but do not spend too much time on any one question or skip around. Before you begin taking this test, please answer the sample questions below.

1. Reap is the opposite of
   • Obtain
   • Cheer
   • Continue
   • Exist
   • Sow

The correct response is “sow.”

2. Paper clips sell for 23 cents per box. What will 4 boxes cost?

The correct response is 92 cents. To answer this question, write 92 cents.

3. Miner Minor – do these words
   • have similar meanings
   • have contradictory meanings
   • mean neither the same nor opposite

The correct response is “mean neither the same nor opposite.”

After clicking the arrow to advance the survey, you will have exactly 12 minutes to provide as many correct answers as you can.

1. Bitter is the opposite of
   • acid
   • cutting
   • sharp
   • sweet
   • tart
2. The sixth month of the year is
  - October
  - August
  - May
  - June

3. In the following set of words, which word is different from the others?
  - Cinnamon
  - Ginger
  - Clove
  - Cotton
  - Mint

4. Medieval Medical – do these words
   - have similar meanings
   - have contradictory meanings
   - mean neither the same nor opposite

5. Look at the following row of numbers. What number should come next?
   49 42 35 28 21 14
   ________________

6. In the following set of words, which word is different from the others?
   - Slight
   - Vast
   - Massive
   - Bulky
   - Immense

7. Faithful is the opposite of
   - true
   - loyal firm
   - fickle sure

8. Sand sells at 8 ½ cents per pound. How much will you save by buying a 100 pound sack at $8.25?
   ________________

9. Ignite Ignorant – Do these words
   - have similar meanings
   - have contradictory meanings
   - mean neither the same nor opposite
10. Are the meanings of the following phrases:
Love me, love my dog. He that strikes my dog would strike me if he dared.
- similar
- contradictory
- neither similar nor contradictory

11. Clean is the opposite of
- disinfect
- scour
- scrub
- debase
- sponge

12. Assume the first 2 statements are true. Is the final one:
The voice is in tune with the piano. The piano is in tune with the cello. The voice is in tune with the cello.
- true
- false
- not certain

13. In the following set of words, which word is different from the others?
- ill-matched
- unsuitable
- inconsistent
- accordant
- contrary

14. Assume the first 2 statements are true. Is the final one:
These girls are normal children. All normal children are active. These girls are active.
- true
- false
- not certain

15. Two of the following proverbs have similar meanings. Which ones are they?
- Those that dance must pay the music
- The tongue is the enemy of the neck
- A golden hammer breaks an iron door
- Who pays the piper calls the tune
- A barking dog never bites
16. Conquer is the opposite of
   - overpower
   - submit
   - subject
   - vanquish
   - master

17. Suppose you arranged the following words so that they made a true statement. Then print the last letter of the last word as the answer.
   than  fortunate  rich  better

18. Attack is the opposite of
   - aid
   - assail
   - combat
   - besiege
   - storm

19. Illicit  Illiterate – do these words
   - have similar meanings
   - have contradictory meanings
   - mean neither the same nor opposite

20. Are the meanings of the following sentences:
   No wonder can last more than three days. All good things are three.
   - similar
   - contradictory
   - neither similar nor contradictory

21. Idea  Ideal – do these words
   - have similar meanings
   - have contradictory meanings
   - mean neither the same nor opposite

22. A boy is 15 years old and his sister is twice as old. When the boy is 25 years old, what will be the age of his sister?

23. Are the meanings of the following sentence:
   Elbow-grease is the best polish. The work proves the workman.
   - similar
   - contradictory
   - neither similar nor contradictory
24. The geometric figure can be divided by a straight line into two parts which will fit together in a certain way to make a perfect square. Draw such a line by joining two of the numbers. Then write these numbers as the answer.

______________________

25. Chasten, Chastise – do these words

- have similar meanings
- have contradictory meanings
- mean neither the same nor opposite

26. Two of the following proverbs have similar meanings. Which ones are they?

- Get money first; prestige comes afterward.
- Look not upon the wine when it is red.
- It’s an ill wind that blows nobody good.
- No hill is so steep but a donkey loaded with gold can climb it.
- The watched pot never boils.

27. Assume the first 2 statements are true. Is the final one:

Great people are important. I am important. I am a great person.

- true
- false
- not certain

28. Pride is the opposite of

- reserve
- self-esteem
- self-abasement
- disdain
- arrogance

29. In 66 days a boy saved $1.98. What was his average daily savings?

______________________

30. Piteous, Pitable – do these words

- have similar meanings
- have contradictory meanings
- mean neither the same nor opposite

31. How many of the five items listed below are exact duplicates of each other

- Waterhouse, H. I. Waterous, H. I.
- Lindquist, W. C. Lundquist, W. C.
- Pollauf, A. S. Pollauf, A. S.
- Rosenfeld, R. E. Rosenfield, R. E.
- Sivertsen, P. B. Sivertsen, B. P.
32. Are the meanings of the following sentences
Nothing is so bad as not to be good for something. A person who hopes for good fears not.
   - similar
   - contradictory
   - neither similar nor contradictory

33. Appeal is the opposite of
   - beseech
   - entreat
   - request
   - deny
   - invoke

34. Which number in the following group of numbers represents the smallest amount?
10 3 2 .8 .888 .96
__________________

35. Assume the first 2 statements are true. Is the final one:
Most explorers are risk takers. Most explorers are introverted. Some risk takers are introverted.
   - true
   - false
   - not certain

36. A clock was exactly on time at noon on Monday. At 8 PM on Tuesday, it was 128 seconds slow. At that same rate, how much did it lose in ½ hour?
__________________

37. Two of the following proverbs have similar meanings. Which ones are they?
   - A person without money is a bow without an arrow.
   - Money is a merry fellow.
   - Fine words butter no parsnips.
   - Don’t try to carry water cans on both shoulders.
   - The hot coal burns, the cold one blackens.

38. A plane travels 70 feet in 1/10 second. At this same speed, how many feet will it travel in 3 ½ second?
__________________

39. Suppose you arrange the following words so that they make a complete sentence. If it is a true statement, mark (T) in the brackets; if false, put an (F) in the brackets.
of the Envy enemy is honor
__________________
40. Assume the first 2 statements are true. Is the final one:
Marion called Glen. Glen called Jean. Marion did not call Jean.
- true
- false
- not certain

41. One number in the following series does not fit in with the pattern set by the others. What should that number be?
1/16  1/6  ¼  ½  1  2

42. Ask is the opposite of
- entreat
- crave
- demand
- appeal
- deny

43. When wire is selling at $.0125 a foot, how many feet can you buy for a dollar?

44. This geometric figure can be divided by a straight line into two parts which will fit together in a certain way to make a perfect square. Draw such a line by joining two of the numbers. Then write the numbers as the answer.

45. In printing an article of 21,000 words, a printer decides to use two sizes of type. Using the larger type, a printed page contains 1,200 words. Using the smaller type, a page contains 1,500 words. The article is allotted 16 full pages in a magazine. How many pages must be in the larger type?

46. Two of the following proverbs have similar meanings. Which ones are they?
- Mothers’ darlings make but milksop heroes.
- Still water runs deep.
- Mother knows best.
- Wide will wear but narrow will tear.
- As a twig is bent, so is the tree inclined.

47. For $4.50 a grocer buys a case of fruit which contains 14 dozen. She knows that four dozen will spoil before she sells them. At what price per dozen must she sell the good ones to gain 1/3 of the whole cost?
48. Assume the first 2 statements are true. Is the final one:
All athletes are active. Some of the people in this room are active. Some of the people in this room are athletes.
  • true
  • false
  • not certain

49. What is the next number in this series?
2 1 .5 .25 .125

50. Three individuals form a partnership and agree to divide the profits equally. X invests $4,500, Y invests $4,500, and Z invests $1,000. If the profits are $1,500, how much less does X receive than if the profits were divided in proportion to the amount invested?


Appendix E
Stimulus Development
Survey for Subject Matter Experts

Thank you for your assistance with this research! Please read the following information about impression management:

Impression management occurs because an actor has a goal of creating and maintaining a specific identity. This goal is achieved by strategically exhibiting behaviors, both verbal and nonverbal, that will cause a target to view the actor as desired.

Taxonomy of Impression Management (Jones & Pittman, 1982)
- **Self-promotion**: actors use behaviors meant to demonstrate competency
- **Ingratiation**: actors make themselves more likable through flattery or performing favors.
- **Exemplification**: actors use behaviors that are self-sacrificial and demonstrate dedication.
- **Intimidation**: actors display power to appear dangerous
- **Supplication**: actors try to appear needy by showing their weaknesses.

Now, please rate the following resumes and profiles on amount of information provided and impression management tactics used.

*(for each profile/resume)*
1. On a scale from 1-7, 1 being no information, 7 being the most possible information, please rate the amount of information provided in above.
   1 2 3 4 5 6 7

2. Based on your knowledge of impression management, on a scale from 1 to 7, 1 being no tactics present, 7 being the most possible tactics used, please rate the amount of impression management tactics used in the profile/resume above.
   1 2 3 4 5 6 7

3. How strong are this applicant’s credentials? For this rating, 4 is an average applicant with 1 being not strong at all and 7 being the strongest possible credentials.
   1 2 3 4 5 6 7

4. If you had to guess, what gender would you guess this applicant is?
   Male
   Female
   I’m not sure
Appendix F
Survey for Applicant Raters

Screening question:
Are you familiar with resumes and LinkedIn profiles?
(If yes, participants will take the survey. If no, the participant will not take the survey)

Thank you for your participation in this study. You will review a series of LinkedIn profiles and resumes of job applicants. For each profile or resume, you will rate how intelligent and conscientious you believe the applicant to be.
(Participants will see a resume or a profile, followed by the following two questions. Resumes and profiles will be presented in a random order)

Please base the following ratings on this scale:
1 = extremely low
2 = low
3 = slightly below average
4 = average
5 = slightly above average
6 = high
7 = extremely high

1. Please estimate this applicant’s competence.
1 2 3 4 5 6 7

2. Please estimate this applicant’s orderliness.
1 2 3 4 5 6 7

3. Please estimate this applicant’s dutifulness.
1 2 3 4 5 6 7

4. Please estimate this applicant’s achievement-striving.
1 2 3 4 5 6 7

5. Please estimate this applicant’s self-discipline.
1 2 3 4 5 6 7

6. Please estimate this applicant’s cautiousness.
1 2 3 4 5 6 7

7. Please estimate the applicant’s verbal ability.
1 2 3 4 5 6 7
8. Please estimate this applicant’s quantitative ability.
1 2 3 4 5 6 7

3. This applicant is applying for a position with a base salary range of $40,000 to $55,000. Based on this range and the applicant’s resume/profile, what starting salary would you recommend? _____ (sliding scale ranging from 40,000-55,000)

4. How strong are this applicant’s credentials? For this rating, 4 is an average applicant with 1 being not strong at all and 7 being the strongest possible credentials.
1 2 3 4 5 6 7

5. If you had to guess, what gender would you guess this applicant is?
Male
Female
I’m not sure

(Demographics)

What is your current age? (allow 2 numerical digits to be entered)
________________________

What is your gender?
1. Male
2. Female
3. Prefer not to say

What is your race?
1. African American
2. Chinese
3. Filipino
4. Indian
5. Japanese
6. Korean
7. Southeast Asian
8. White Caucasian-Non-Hispanic
9. Hispanic
10. Mexican
11. American Indian/Alaskan Native
12. Middle Eastern
13. More than one race
14. Unknown
15. Prefer not to say
What is your highest level of education?
1. High School
2. Associates Degree
3. Bachelor’s Degree
4. Master’s Degree
5. Juris Doctorate
6. Doctorate
7. Post-Doctorate
8. Prefer not to say

For which of the following social networking sites do you have a profile?
1. Facebook
2. LinkedIn
3. Twitter
4. Instagram
5. Google+
6. Pinterest
7. Tumblr

How often do you use each of the following sites for personal (rather than professional reasons)?

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(Impression Management Scale, Bolino and Turnley, 1999, items will be presented in random order)

Please describe how frequently in the last 6 months you have used each of these strategies while at work based on the following scale:

1 = never behave this way
2 = very rarely behave this way
3 = occasionally behave this way
4 = sometimes behave this way
5 = often behave this way

1. Talk proudly about your experience or education.
2. Make people aware of your talents or qualifications.
3. Let others know that you are valuable to the organization.
4. Make people aware of your accomplishments.
5. Compliment your colleagues so they will see you as likeable.
6. Take an interest in your colleagues’ personal lives to show them that you are friendly.
7. Praise your colleagues for their accomplishments so they will consider you a nice person.
8. Do personal favors for your colleagues to show them that you are friendly.
9. Stay at work late so people will know you are hard working.
10. Try to appear busy, even at times when things are slower.
11. Arrive at work early to look dedicated.
12. Come to the office at night or on weekends to show that you are dedicated.
13. Be intimidating with coworkers when it will help you get your job done.
14. Let others know that you can make things difficult for them if they push you too far.
15. Deal forcefully with colleagues when they hamper your ability to get your job done.
16. Deal strongly or aggressively with coworkers who interfere in your business.
17. Use intimidation to get colleagues to behave appropriately.
18. Act like you know less than you do so people will help you out.
19. Try to gain assistance or sympathy from people by appearing needy in some area.
20. Pretend not to understand something to gain someone’s help.
21. Act like you need assistance so people will help you out.
22. Pretend to know less than you do so you can avoid an unpleasant assignment.

(Social Astuteness Scale, items will be presented in random order)

Describes how much you agree with each statement about yourself.
1 = strongly disagree
2 = disagree
3 = slightly disagree
4 = neutral
5 = slightly agree
6 = agree
7 = strongly agree

1. I always seem to instinctively know the right thing to say or do to influence others.
2. I have good intuition or savvy about how to present myself to others.
3. I am particularly good at sensing the motivations and hidden agendas of others.
4. I pay close attention to people’s facial expressions.
5. I understand people very well

(Self-Monitoring Scale, items will be presented in random order)

The following statements concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is TRUE or MOSTLY TRUE as applied to you, respond True. If a statement is FALSE or NOT USUALLY TRUE as applied to you, respond False.

1. I find it hard to imitate the behavior of other people.
2. My behavior is usually an expression of my true inner feelings, attitudes, and beliefs.
3. At parties and social gatherings, I do not attempt to do or say things that others will like.
4. I can only argue for ideas which I already believe.
5. I can make impromptu speeches even on topics about which I have almost no information.
6. I guess I put on a show to impress or entertain people.
7. When I am uncertain how to act in a social situation, I look to the behaviors of others for cues.
8. I would probably make a good actor.
9. I rarely need the advice of my friends to choose movies, books, or music.
10. I sometimes appear to others to be experiencing deeper emotions that I actually am.
11. I laugh more when I watch a comedy with others than when alone.
12. In a group of people I am rarely the center of attention.
13. In different situations and with different people, I often act like very different persons.
14. I am not particularly good at making other people like me.
15. Even if I am not enjoying myself, I often pretend to be having a good time.
16. I’m not always the person I appear to be.
17. I would not change my opinions (or the way I do things) in order to please someone else or win their favor.
18. I have considered being an entertainer.
19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else.
20. I have never been good at games like charades or improvisational acting.
21. I have trouble changing my behavior to suit different people and different situations.
22. At a party I let others keep the jokes and stories going.
23. I feel a bit awkward in company and do not show up quite so well as I should.
24. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
25. I may deceive people by being friendly when I really dislike them.
Appendix G
Examples of LinkedIn and Resume Stimuli

Shawn Wilson
Student at Colorado State University
Fort Collins, Colorado
Current: Colorado State University, Nature's Herbs and Wellness Center
Previous: Cailean Pub and Grill
Education: Colorado State University

Background

Experience

Student Caller
Colorado State University
August 2016 – Present (10 months) | Fort Collins, Colorado Area

HR Assistant
Nature's Herbs and Wellness Center
August 2015 – Present (10 months) | Garden City, Colorado

Waitress
Cailean Pub and Grill
June 2011 – December 2015 (4 years 7 months) | Fort Morgan

Education

Colorado State University
Bachelor’s Degree, Industrial and Organizational Psychology
2012 – 2017

Fort Morgan High School
Background

Experience

**Summer Intern**
BHCDO
May 2015 – Present (1 year 1 month) | Windsor, CO

Intern, Tower crew member

**Landscaper**
Longs Peak Landscape
April 2013 – August 2013 (5 months)

Helping with every aspect of the job, mainly on the paver patio installation team.

**Warehouse Staff**
Commercial Tile
August 2012 – February 2013 (7 months)

Skills

- Project Planning
- Customer Service
- Focused
- Strong Work Ethic
- Determination
- Communication
- Positivity

Education

**Colorado State University**
Construction Management major with Business Administration minor
2013 – 2017

Construction Management

**Monarch High School**
High School/Secondary Diplomas and Certificates
2010 – 2012

Languages

English
CASEY HENDERSON

EDUCATION

Semester at Sea (Study Abroad)  Summer of 2014
Double Major: Sociology & Psychology  August 2012-present
Colorado State University (CSU), Fort Collins, CO

PROFILE

- Strong teamwork skills acquired through Drama Club, work at Cover 4 Theatres, LaMar’s Donuts
- Communication skills acquired through concession sales at Cover 4 Theatres, LaMar’s Donuts, and volunteering for Victim Assistance Team
- Organization skills acquired through being a full-time student and leadership positions in Drama Club
- Time management skills acquired through being a full-time student and participation in clubs

WORK EXPERIENCE

LaMar’s Donuts, Fort Collins, CO  Spring 2013 – December 2014
- Sales Associate

Cover 4 Theatre Employee, Fort Morgan, CO  June 2010 – December 2012
- Shift leader- in charge of staff and closing for the night
- Technician- start and maintain projectors
- Concession sales
- Maintenance- cleaning theatres, bathrooms, and concessions

Babysitting, Fort Morgan, CO  2008 -2012
- First-aid and safety training
- Child care skills

LEADERSHIP AND SERVICE

CSU History Club  Spring 2015 – present
- Member of club, participating in various club activities
- Social Media Officer as of the beginning of the Fall 2015 semester

CSU Criminal Justice Organization  Fall 2014 – present
- Member of club, participating in various club activities and trips
- Volunteering for CSU’s Ram Ride

CSU Victim Assistant Team (VAT)  Fall 2013- present
- Volunteer work being an on-call, after-hours advocate for victims of sexual abuse and assault on campus
- Advocate during the “Take Back the Night” walk to Old Town, Fort Collins
Harper Scott

Education:
Colorado State University - Fort Collins, CO  Anticipated Graduation: May 2017
Bachelor of Arts: Interdisciplinary Liberal Arts
Relevant Coursework: Mass Communication, Intercultural Communication, Public Relations

Work Experience:
Guest Relations & Event Associate, Office of CSU Events: Fort Collins, CO  June 2015 - Current
◆ Duties: organize events, communicate with donors and faculty, daily operations
◆ Accomplishments: successful completion of events including President’s Gala, Ram Good Time Auction, Alumni Tailgates and other events

◆ Duties: Assisted in planning and implementing special events, daily tours, daily operations, administrative responsibilities and research
◆ Accomplishments: Expanded public speaking skills

Pool Assistant Manager, Pueblo Parks and Recreation: Pueblo, CO  May 2013 - Sept. 2013
◆ Duties: Enforced rules and policies, organized special events, scheduled lifeguards and managed finances
◆ Accomplishments: Met deadlines consistently, supervised 12 staff, provided a safe and friendly environment, recognized for high-quality work

◆ Duties: Contributed to the overall safety of the pool, maintained a clean and professional environment for pool guests, taught water safety courses
◆ Accomplishments: Monitored approximately 100 swimmers per day, affectively assisted people, developed teamwork skills

Volunteer Experience:
INTO CSU: Colorado State University – Fort Collins
◆ Tutored international students involved in the program to develop their ability to speak, write and read the English language

Global Leadership Adventures: Costa Rica
◆ Lived and worked in a rural community during part of the summer of 2013
◆ Assisted in projects to improve a school’s infrastructure
◆ Provided after-school activities for children
Riley Murphy

Education
Colorado State University                                    Expected Graduation May 2017
BA in Economics with minor in Business Administration

Skills
- Exceptional sales and customer service skills, nearly five years of successful operation with clientele.
- Adept analytical capabilities, years of analyzing and comprehending market data. Proficient in MS Office with an emphasis on Microsoft Excel. I can perform vlookups, manipulate pivot tables, and have an understanding of a variety of different formulas.
- Deadline oriented and organized, history of completing tasks on time with great accuracy.
- Competitive and driven, participation in Varsity soccer and real estate sales develop a winning mentality.

Professional History
Headwaters Realty, Transaction Manager- Fort Collins, CO                      08/15-Present
- Documented all broker transactions.
- Facilitated all broker transactions, proofread contracts, made agents aware of upcoming deadlines.
- Assisted in general business management practice and marketing.
- Created and developed new systems to promote productivity and ease using Microsoft Excel.

Rocking X Land Company, Real Estate Sales Agent- Burlington, CO          06/11-08/15
- Used self-marketing and sales skills in order to create business.
- Participated in several residential and commercial sales transactions as a licensed real estate agent.
- Fulfilled client needs and facilitated smooth transactions through negotiation, expectation setting, and knowledge of real estate practice.
- Created dozens of market analyses for residential, commercial, and agricultural properties for my clients as well as property valuation companies using Microsoft Excel as well as other programs.
- Researched ownership of subsurface (mineral) rights for clients’ proof of possession.

Renewable LLC, Sales Associate- Fort Collins, CO                      02/13-08/13
- Operated as a broker and participated in several home sales on both the buying and selling sides.
- Used various programs to create market analyses for clients on a month-to-month basis.
- Brought energy efficient updates to homes in Northern Colorado by acting as broker between contractors and clients.
- Sold my Excel program that tracked increases in energy efficiency after sustainability renovations to company upon leaving.