# SAFETY'S EFFECTS ON JOB APPLICANTS

by

Clifford Ross Haimann A Dissertation Submitted to the Graduate Faculty of George Mason University in Partial Fulfillment of The Requirements for the Degree of Doctor of Philosophy Psychology

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# Safety's Effects on Job Applicants

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at George Mason University

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# Dedication

This is dedicated to Anna, my family, and all those who have provided me with support and guidance.

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# **Table of Contents**

List of Tables	Page vii
List of Figures	viii
Abstract	ix
Introduction	
Internet Recruitment	
Study 1	6
Method	6
Preliminary Task	6
Coding Task	7
Results	8
Discussion	9
Study 2: Experimental Study	10
Anticipated Perceived Organizational Support (APOS)	10
APOS and P&P information	12
CFL information and APOS	12
Comparing the effects of CFL and P&P information	14
The interaction of the types of safety information in predicting APOS	16
Perceptions of On-the-job Hazards	18
Safety Climate	20
The interactive effects of the two types of safety information	
Industry: Moderating the Effects of Safety Information on Outcomes	

Mediation: Connecting APOS, On-The-Job Hazards, and Safety Climate to Attraction	
Method	
Participants	
Design & Procedure	
Variables	
Websites and manipulations	
Outcome Measures.	
Results	
Manipulation Checks	
Testing the Measurement Model	
Descriptive Statistics and Correlations	
Tests of Hypotheses	
Discussion	
Theoretical Implications	
Predicting Hazards	
CFL Information's Effects did not Vary Based on Industry	
Predicting Attraction	
Practical Implications	
Limitations & Future Directions	
Conclusion	
Appendix A: Dissertation Proposal Literature Review	
References	

# List of Tables

Table		Page
1.	Table 1. Means, SDs and correlations for the dimensions	
2.	Table 2. Fit Values for Different Models	51
3.	Table 3. Means, SDs, and Correlations	
4.	Table 4. Unstandardized Estimates for All Paths	53

# List of Figures

Fig	gure	Page
1.	Figure 1. Hypothesized Model	54
2.	Figure 2. Interaction of Two Safety Dimensions when Predicting Safety Climate	55
3.	Figure 3. Interaction of P&P Information with Industry when Predicting Safety	
	Climate	56
4.	Figure 4. Interaction of P&P Information with Industry when Predicting	
	Hazards	57

#### Abstract

#### SAFETY'S EFFECTS ON JOB APPLICANTS

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Some organizations, such as construction companies, advertise the importance of employee safety on their websites; however, few research efforts have sought to understand if this safety information has any effect on potential applicants' attitudes. On one hand, safety information may promote anticipated organizational support (APOS) and safety climate perceptions, which may make an organization seem more attractive. On the other hand, website safety content may backfire by reminding individuals that the job may be hazardous, which could make an employer less appealing. To explore these possibilities, this study used an experimental design to determine if different kinds of safety information related to APOS, safety climate perceptions, hazard perceptions, and attraction. This research also sought to verify if different types of safety information interacted when predicting outcomes and if website safety content's effects varied by industry. Results showed that two types of safety information positively predicted APOS and safety climate, and one type of safety information diluted the effects of another when predicting safety climate. Safety information had little impact on hazard perceptions, and there was evidence that the effects of certain information were stronger when presented on a finance company website compared to a construction company website. Last, APOS mediated the relation between safety information and attraction. Given the positive effects of website safety content, more companies may now want to consider adding it to their websites.

## Introduction

Employee safety is a topic an organization may be able to utilize during employee recruitment (e.g., discuss on a website). Despite this possibility, little research exists regarding how organizations ought to reference safety when they address potential applicants. An employer may look to The Occupational Safety and Health Administration (OSHA.org) for guidance about advertising safety, but this federal agency's regulations generally relate to safety for current employees. Therefore, employers have few resources to draw from when they want to understand the most effective ways to talk about safety during recruitment. To provide empirical data that could help inform employers' recruitment efforts, the current research explored how organizations could message safety on their websites.

The exploration of safety on websites is important for several reasons. First, safety information may have implications for an organization's external image. In line with signaling theory (Spence, 1973), potential applicants may use safety on a company's website in order to make inferences about the employer. Therefore, from a recruitment perspective, it is in an employer's interest to determine if its website safety content can encourage positive attitudes in the minds of potential applicants. Such attitudes could include anticipated organizational support (APOS, Casper & Buffardi, 2004) or attraction. Accordingly, the current research studied if safety content proceeded favorable

website viewer attitudes, and it drew from theories in social cognition to see if qualitatively different safety messages interacted as they shaped viewer attitudes. This analysis of interactive effects represented a deviation from previous research in the APOS and attraction literature, which examined how predictors affected outcomes independently of one another (e.g., Casper & Buffardi, 2004; Wayne & Casper, 2012). While the presence of safety information could create positive attitudes, organizations may also face the possibility that safety information could backfire by reminding potential applicants that there are dangers on the job, which may promote increased hazard perceptions and less attraction. Due to this, the current research determined if safety information could affect hazard perceptions.

Second, safety on websites is important to consider because it may be one of the first mechanisms organizations can use to promote safety climate. This construct focuses on policies and procedures concerned with safety in an organization, and it represents shared perceptions of the extent to which safety is valued by an employer (Kaplan & Tetrick, 2011). Safety climate is important because evidence suggests that higher levels of safety climate relate to fewer injuries and accidents (Christian, Bradley, Wallace, & Burke, 2009). Given these findings, determining if safety climate perceptions can be shaped during the early stages of recruitment may be beneficial to employers. Further, research is lacking regarding the antecedents of the construct (Kaplan & Tetrick, 2011).

Last, this research is important because it highlights the notion that a discussion of safety on websites is potentially relevant to industries aside from those with the highest levels of accidents and injuries (e.g., construction; OSHA.org). In fact, an emphasis on

safety could be seen in industries with traditionally low levels of safety related concerns such as injuries (e.g., the finance industry); however, an emphasis on safety in an industry like finance may clash with website viewer expectations to a larger extent than a safety emphasis on a construction company website. These expectations, consequently, may impact how safety content is perceived, and the current research used expectancies as a mechanism that could determine when safety information's effects would be stronger or weaker. Overall, theory in social cognition (e.g., Graesser, 1981) points to the notion that safety information may have the greatest impact when potential applicants do not expect it to appear. From this perspective, it may be in the interest of organizations not strongly associated with safety concerns to discuss safety on websites.

This paper unfolds as follows. First, after a review of existing website recruitment literature, the safety content of actual websites is reviewed in an initial qualitative study in order to identify examples of safety information displayed by companies. Based on findings from this evaluation, an experimental manipulation of this information is presented to determine if and how it impacts applicant perceptions.

### **Internet Recruitment**

Given the emerging prominence of website recruitment research, different theoretical and empirical studies exist that explain how organizational websites affect potential applicants who are trying to learn about employers. This section, therefore, highlights these different research efforts. First, theoretical work about websites is described, and then empirical support for this theory is presented.

Cober, Brown, Keeping, and Levy (2004) proposed a theoretical model that

explains how websites affect applicant attraction. Central to the prediction of attraction are individuals' attitudes toward organizational websites, which are themselves a function of the affective reactions elicited by the sites along with such factors as their usability (the extent to which one could move around a site and find desired content). Cober et al.'s model also suggests that organizations want their websites to leave favorable impressions in individuals' minds. In other words, potential applicants ought to have favorable representations or images of organizations in their minds after looking at websites because positive impressions encourage attraction (Cober et al. 2004, Wayne & Casper, 2012).

Empirically, considerable research has focused on the characteristics of websites such as their physical design and usability. As examples, Ehrhart, Mayer, and Ziegert (2012) found that website usability positively predicted organizational attraction. Braddy, Meade, and Kroustalis (2008) found similar effects. Others have noted that a favorable website design, such as a visually appealing layout, promotes attraction to an organization (De Goede, Van Vianen, & Klehe, 2011). Lastly, a general positive attitude about a website (e.g., viewers believe it is enjoyable and likable) promotes favorable attitudes about organizations (e.g. Allen, Mahto, & Otondo, 2007). Due to the relation between website attitudes and attraction, website attitude is used as a control variable the present study.

In terms of the content discussed on websites, most research has not explored safety specifically, but Braddy, Meade, and Kroustalis (2006) briefly touched on this subject. They had students examine websites to see what inferences they could draw about organizational culture. The qualitative analyses suggested that website content shaped perceptions of culture. To provide a specific illustration, companies with employee testimonials about innovation along with those that depicted innovative products seemed to have an innovative culture compared to companies that did not present such information. Moving to safety, the researchers noted that organizational commitment to promoting safety signaled that the organizational culture was detail oriented. These findings suggested that individuals used safety-related information to make inferences about employers, which supports the idea that companies may be able to use safety during recruitment to shape perceptions.

Braddy et al. (2006) performed a cursory and very general examination of safety (the word "safety" only appeared twice in their article). To expand upon their work in the current study, safety information had to be operationalized in some manner in order to present it concisely to applicants. Therefore, to find examples of safety information depicted on actual websites, Study 1 explored the content of real organizations' safety pages. In a second study, this information was manipulated to determine how it affected applicants.

## Study 1

Safety content is presented on websites, but the current literature seems to lack an exploration of it. Therefore, Study 1 examined safety pages from firms in contracting, engineering and construction in order to identify examples of safety information displayed by real organizations. This safety information was then experimentally manipulated in Study 2. By finding examples of actual safety content, the website evaluation in Study 1 allowed for an experimental study with higher levels of external validity.

The Engineering News-Record (2013), which lists the top contractors in the United States, was used to select websites that would be relevant for Study 1. The companies on this list were deemed relevant because they are in industries where safety concerns are prominent. As a result, at least some of these companies would likely have safety content on their websites. The results of this study were then used in a second study where safety information was experimentally manipulated.

# Method

**Preliminary Task.** The first author studied 50 randomly selected websites from the Engineering News-Record list above to identify types of safety information presented on website. Of these sites, 36 had identifiable sections where safety was discussed. Examination of those 36 websites suggested the presence of two types of information that could be used as examples of website content. The first highlighted the extent to which companies provide details about their safety policies and procedures. Some employers said nothing about their policies. As an example, one company wrote: "Regardless of the project, safety remains, and always will be, our number one priority. A core value of each project is a commitment to the safety of all team members" (JEDunn Construction, 2013). Other companies, in contrast, provided many details about their mandatory trainings along with the rules supervisors must follow. Given these details, there appeared to be a policies and procedures (P&P) type of safety information

A second type of information noted that safety has implications for life outside of the workplace. This information seemed to indicate that employers recognize that safety will enable workers to go home and take part in their family lives. For instance, Manson Construction (2013) says the following on its webpage when referencing safety precautions: "It means that our employees, subcontractors and worksite visitors will return home to their families each night absent a workplace injury or illness." Hoffman Construction's (2011) website states: "First of all, we have a duty to the families of Hoffman Construction to make certain our workers return home in the same condition they came to work." Such words contrast with other websites that reference nothing about family. Based on this evidence, there appeared to be a concern for family life (CFL) type of safety information.

**Coding Task.** In line with other qualitative research (e.g. Baddly et al., 2006), the current task used independent coders in order to verify the existence of the information identified above. The details of this task are described below.

*Participants.* Three adults performed the coding task. They had no specific knowledge of industrial organizational psychology research or of the purposes of the study. Their average age was 47. They worked independently of one another.

*Materials & procedure.* The first author provided participants with a spreadsheet that contained a list of 14 randomly chosen organizational websites from the list of contractors mentioned above. If a safety page existed, participants received a link directly to that page so they did not have to search through the website. If it did not exist, the raters were told that they could search for it, but they never found a safety page that the first author had missed. For each site, they rated the extent to which the website contained information on safety policies and procedures and consideration of family life relative to safety. To assess P&P, they were asked to what extent the website displayed details about safety policies and procedures (1 = not at all, 2 = somewhat, 3 = to a great extent). Using the same response scale, they were also asked to identify the extent to which the employer said that safety at work would promote one's family life.

#### Results

Interrater-reliability was examined for each of the types of safety information using a two-way random average measure ICC (2,k). P&P information had an ICC of .86, and CFL information had an ICC of .75. These ICC values were higher than the common .70 cutoff seen in organizational research (Lebreton & Senter, 2008), which suggested an acceptable level of reliability. Moreover, Table 1 presents the means, standard deviations, and inter-correlations for all types of information. The mean was higher for P&P information compared to CFL information, and the different types of safety information displayed a small positive correlation.

## Discussion

The results of Study 1 identified two examples of safety information on actual websites. The first, P&P information, reflects the level of detail organizations provide about their safety related policies and procedures. The second, CFL information, emphasizes that organizations want employees to be safe with the hopes that they can leave work healthy in order to have time with their families. Of note, the low correlation between the types of safety information suggested that they were not the same construct, and the appropriate reliability values showed that individuals could reliably identify the different types of information.

#### **Study 2: Experimental Study**

Having identified two types of safety information that exist on actual websites, Study 2 sought to determine how they impacted potential applicants' perceptions of anticipated support, safety climate, and on-the-job hazards. These perceptions and their relations to safety content are depicted in figure 1. Applicant perceptions of organizational support, safety climate, and hazards are important because they represent the theoretical mechanisms through which safety information may impact subsequent applicant attitudes such as attraction. In other words, determining if safety content precedes APOS, safety climate, hazards, and attraction will enable organizations to understand how their websites affect potential applicants.

#### **Anticipated Perceived Organizational Support (APOS)**

APOS represents the extent to which individuals believe their employers will value them as individuals once they are on the job (Casper & Buffardi, 2004). It is rooted in the domain of perceived organizational support (POS), which identifies the extent to which current employees believe their employers value them as individuals (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Research has demonstrated that job seekers use a variety of resources prior to employment to determine how much organizational support they will receive on the job (Casper & Buffardi, 2004). Theoretically, this research is often framed in the context of signaling theory (Spence, 1973; Ehrhart & Ziegert, 2005).

This theory states that firms provide signals to individuals that allow them to make inferences about employers' traits or characteristics. Research suggests that many organizationally related elements have been construed as signals. For instance, recruiter behaviors and characteristics have been viewed in this regard (Turban, 2001). In addition, organizational policies have been viewed as signals (Aiman-Smith et al., 2001; Cable & Judge, 1994, Lievens, Decaesteker, Coetsier & Geirnaert, 2001). Using these signals, individuals infer what qualities organizations possess. Of current interest, individuals may use signals during recruitment to understand how much organizational support they will receive on the job. Accordingly, signals, which suggest an employer will consider employee interests, foster APOS.

For instance, promises from an employer have been empirically connected to APOS. Haimann, Vega, Buffardi, and Eisenberger (2012) found that two types of promises positively predicted APOS. The first were promises noting the employee would have control over his or her work. The second type consisted of promises about good pay. Moreover, research by Casper and her colleagues has documented that HR strategies act as signals that can influence APOS. In one study, Casper and Buffardi (2004) found that increasing scheduling flexibility and dependent care assistance resulted in more APOS. In this instance, flexibility and assistance suggested to individuals that employers were attempting to help workers cope with their demands outside of the workplace, which signaled that organizations were concerned about employees as individuals. In a second study, Wayne and Casper (2012) discovered that pay, diversity programs, and workfamily policies all predicted APOS. In line with these studies, the current research conceived P&P information and CFL information as potential signals to applicants. Like other signals (e.g., HR policies), the two types of safety information represent details designed and supported by the organization, and hence, applicants can use them to make inferences about employers.

**APOS and P&P information.** In line with signaling theory, P&P information may signal to applicants that employers value them as individuals. If organizations have safety policies and procedures, individuals may infer that employers are investing time and resources to ensure better conditions for them, which will increase APOS (Eisenberger & Stinglhamber, 2011). References to safety inspections and meetings in the P&P information may provide evidence supporting the notion that the employer has put effort into bettering the workplace.

Additionally, P&P information often references safety training and other learning opportunities for workers. Theory and empirical data in the organizational support domain suggests that such training signals that employers care for individual employees, which serves to increase POS (Rhoades & Eisenberger, 2002). This finding applied to current employees, but a similar effect is expected for job applicants. Therefore, it is hypothesized:

Hypothesis 1: The presence of P&P information positively relates to APOS.

**CFL information and APOS.** Like P&P information, CFL information is expected to positively relate to APOS because it signals an organizational concern for employees' families. As illustrated below, firm characteristics, which are representative of a concern for employees' family lives (e.g., having family friendly policies), have been

connected to APOS. While CFL information signals a concern for family, it is qualitatively different from other indicators of concern because its central focus is on the relation between work-related injury and employees' home lives, which is distinct from other predictors of APOS that have been studied such as scheduling flexibility.

As initial evidence supporting a link between CFL information and APOS, one can draw from research showing that family benefits promote favorable work attitudes (APOS falls into the domain of favorable work attitudes). For instance, Grover and Crooker (1995) argued that family-friendly benefits were a symbol of organizational concern for employees' families, and their work suggested that such benefits induced favorable organizational perceptions (e.g., commitment) not only for those who needed such benefits, but also for individuals who did not use them. This finding highlighted the symbolic nature of family-friendly benefits. As symbols, therefore, the benefits could signal to employees that employers care for their well-being, which would serve to promote favorable incumbent attitudes.

Grover and Crooker (1995) studied attitudes like commitment, but research related to organizational support showed that organizational concern for employees' families created POS. For instance, evidence exists suggesting that work-family policies promote POS because they enable individuals to handle the different demands in their lives and signal employer concern for employees' families (Eisenberger & Stinglhamber, 2011). Regarding APOS specifically, Casper and Buffardi (2004) and Wayne and Casper (2012) found that the provision of family-friendly benefits predicted APOS. These APOS findings provide evidence that an organizational concern for employees' families can impact job applicants' organizational support attitudes. Since CFL information is a potential indicator of an organizational concern for family, it is expected to positively predict APOS. Given the evidence above, it is hypothesized:

Hypothesis 2: The presence of the CFL information positively relates to APOS

**Comparing the effects of CFL and P&P information**. The hypotheses above posited main effects for two types of safety information that may predict APOS; however, it may be the case that the effect of the CFL information was stronger than the effect for P&P information when predicting APOS. This may have been the case because the details presented in P&P information could be seen as the result of external forces acting upon the organization as opposed to discretionary action on the part of the employer.

Drawing from social exchange theory, Eisenberger et al., (1997) argued that discretionary organizational actions provide more information about an organization's characteristics compared to actions that are perceived as less discretionary. Specifically, discretionary favorable or unfavorable employer treatment is an indicator of the employer's actual concern for employees. Non-discretionary actions, in contrast, are not informative because the employer did not choose to exhibit the acts in question, and employees are less likely to use these non-discretionary actions to make inferences about organizational support. (Eisenberger et al., 1997; Eisenberger & Stinglhamber, 2011). Eisenberger et al. (1997), therefore, said that discretionary acts should relate more strongly to POS compared to nondiscretionary acts. To test this theoretical rationale, they had applicants rate the favorableness of work conditions/organizational characteristics

such as job security and opportunities for advancement. They also asked participants to identify how much control organizations had over each of the work characteristics. The results suggested that more discretionary characteristics (e.g., training opportunities) correlated more strongly with POS in comparison to characteristics over which organizations had less control.

Extending these ideas to APOS, one would expect that increasing discretion would be associated with higher levels of APOS. In support of this, research from Casper and Buffardi (2004) found that salary did not correlate with APOS, but schedule flexibility and dependent care assistance were related to APOS. Organizations are required by law to offer some form of compensation to employees, and hence, salary's correlation with APOS was weak because salary may have been deemed a nondiscretionary employer characteristic. In contrast, there is no legal obligation to offer dependent care assistance or flexible scheduling, and these benefits may have appeared more discretionary, which strengthened their relations with APOS.

Turning to safety in particular, having safety policies and procedures may be seen as a non-discretionary employer action because they may be viewed as the result of legal regulations. Supporting this idea, Eisenberger et al., (1997) said that government health and safety regulations could limit the discretion organizations have over many practices. Showing regard for workers' families with CFL information, in contrast, may be seen as more discretionary because there may be no clear laws in this particular domain. Hence, CFL information can be seen as an indicator of the employer's character because the employer chose to portray this content as opposed to acting because of regulations or external pressures. Since the details portrayed in P&P information may be seen as less discretionary in comparison to the information in CFL, the P&P information - APOS relation is hypothesized to be weaker than the connection between APOS and CFL information.

**Hypothesis 3**: The P&P information - APOS relation is weaker than the CFL information- APOS relation.

The interaction of the types of safety information in predicting APOS. The section above identified that CFL information may be a stronger predictor of APOS than P&P information. This possibility may also have implications for the combined effect of these two types of information. Specifically, research in social cognition suggests that when individuals form initial impressions of targets using multiple sources of information, which is common during recruitment (Kanar, Collins, and Bell, 2008), the effects of highly predictive or informative signals can be diluted by the addition of information that is not as informative.

This idea was supported in the work of Nisbett, Zukier, and Lemley (1981). They had individuals form impressions of targets using information that varied in its diagnosticity. Diagnostic information represents facts that allow individuals to make effective categorizations of targets. Or, it is information that is highly predictive of an outcome according to Nisbett et al. (1981). Turning to impression formation during recruitment (Kanar, Collins, and Bell, 2008), applicants may want to form an impression of an organization, and employer testimonial about favorable employee treatment may allow for inferences about organizational support (i.e. the testimonial is diagnostic). The

organization's name, in contrast, may be less diagnostic.

With this in mind, Nisbett et al. (1981) examined how individuals formed impressions of targets when they had diagnostic information and information that was not as predictive. For instance, they had participants rate targets' electrical shock tolerances and movie attendance patterns. They were given information that was more diagnostic, such as major (engineering vs. music), along with other information such as hometown, which was viewed as less diagnostic or predictive. The results in multiple studies suggested that individuals gave more extreme responses when they had only diagnostic information compared to when they had mixed information. In other words, the less diagnostic information diluted the effects of diagnostic information.

Nisbett et al., (1981) argued that this occurred because of Tversky's (1977) features of similarity model. In this conceptualization, individuals compare targets (e.g., a company seen on a website) to some outcome (for this study, the outcome may be a mental representation of a highly supportive employer). Diagnostic or highly predictive information (e.g., CFL information) make the target and outcome seem similar, which leads individuals to categorize the target as the outcome they have in mind (i.e., the target company on the website is perceived as very supportive). According to Tversky (1977), if this diagnostic information is paired with less diagnostic information, however, this minimally predictive information reduces the extent to which the target seems similar to the outcome even when the diagnostic information is present (i.e., the target company on a website is less likely to be perceived as highly supportive). In this research, P&P information may serve as this less diagnostic information because P&P information's

non-discretionary nature may make it seem far less predictive of organizational supportiveness compared to CFL information, which was hypothesized above. Based on this thinking, the presence of less diagnostic or predictive safety information (P&P) may weaken the effects of more diagnostic or predictive information such as CFL.

The idea above suggests that the presence of P&P information moderates the relation between the presence of CFL information and APOS such that the relation becomes weaker when the P&P information is present as opposed to absent. In the domain of APOS, Casper and Buffardi (2004) found some empirical support for a similar moderating effect even though they did not comment theoretically about their finding. They examined antecedents of APOS (scheduling flexibility and dependent care benefits) and found a negative interaction effect for these benefits in predicting APOS. Moreover, in this case, one antecedent was more predictive of the outcome than the other. Given the theoretical and empirical evidence above:

**Hypothesis 4**: P&P information moderates the relation between CFL information and APOS such that the positive relation becomes weaker when the P&P information is present as opposed to absent.

## Perceptions of On-the-job Hazards

The section that follows stresses that empirical and theoretical work has shown that safety content makes the job seem less hazardous to individuals. Given the comfort safety information can bring, this section argues that P&P information may be especially reassuring to applicants.

While one may think that seeing safety information on a website could push

individuals to think of danger, research in ergonomics suggests that safety-related thoughts do not elicit strong negative reactions. Wogalter et al. (1998) explored hazard ratings when individuals saw signs containing words such as deadly, danger, warning, caution and safety first, which was supposed to "indicate general instructions about safe work practices, procedures..." (p. 127). Participants identified what level of hazards these signs indicated, and "safety first" was connected to a very low hazard rating. Words like danger, deadly, and warning were connected to significantly higher ratings of hazards compared to safety first. The words that were strongly tied to hazards, such as deadly and warning, did not seem to appear on the safety websites explored during Study 1. Therefore, evidence from ergonomics may suggest that websites discussing safety are not likely to elicit strong perceptions of hazards in the workplace. In fact, other evidence suggests that being surrounded by safety stimuli makes individuals feel less, as opposed to more, concerned about hazards. For instance, Leiter and Robichaud (1997) discovered that perceptions of organizational adherence to safety policies and procedures encouraged lower hazard perceptions. Theoretically, these authors argued that the presence of safety policies and procedures made workers feel that they were in control at work and that the working conditions were safe.

Given this previously described research, it seems that an emphasis on procedures relates to perceptions of fewer hazards. Extending this research to job applicants and signaling theory, P&P information may signal to workers that conditions will be safe and that they will have control in their environment. Such beliefs may cause applicants to think that the environment will be less hazardous. Based on this, it is hypothesized: **Hypothesis 5**: The presence of P&P information negatively relates to perceptions of hazards on the job.

#### Safety Climate

As noted above, safety climate focuses on shared perceptions of the policies and procedures concerned with safety in an organization, and it represents perceptions of the extent to which safety is valued by an employer (Zohar & Polachek, 2014; Kaplan & Tetrick, 2011). According to Zohar's (2000) theoretical rationale explaining safety climate formation, individuals are bombarded with many signals (e.g., policies) that suggest what an employer values. These employees must make sense of these competing signals, and if safety continues to be stressed above other competing priorities, such as speed and efficiency, individuals may perceive high levels of safety climate (i.e., the employer seems to care about safety more than other topics).

The signals influencing climate are often created by management and other leaders in an organization, and these leader behaviors are potential determinants of safety climate. Supporting the role of leaders, Zohar (2000) noted that management makes safety policies and procedures. Other research suggests that supervisor behaviors provide information to employees that encourages climate perceptions. As an example, safety specific transformational leadership (operationalized using items such as "My supervisor talks about his/her values and beliefs about the importance of safety") has been shown to positively relate to safety climate perceptions (Barling, Loughlin, & Kelloway, 2002). Others have noted that employees make inferences about the importance of safety as they observe their supervisors' behaviors (Zohar, 2002; Luria, 2008).

Given this research stressing management's role in shaping safety climate, the content of a website, which stresses the value and importance of safety, seems to be a possible precursor to safety climate perceptions. Website content represents messages deliberately shaped by the organization and its leadership. As the research above has highlighted, such messages precede climate perceptions. Moreover, as website space is devoted to safety as opposed to other subjects, then onlookers will come to infer the importance of safety relative to other topics, which aligns with Zohar's (2000) conceptualization regarding how climate forms. Given this reasoning, the presence of the safety information will signal the importance of safety more compared to a website that does not contain these dimensions. Therefore, it is hypothesized:

**Hypotheses 6 and 7**: The presence of P&P information and the presence of CFL information each positively predict safety climate perceptions.

The interactive effects of the two types of safety information. As noted above, safety climate perceptions often form when individuals infer that safety is important relative to other competing demands. In manufacturing and construction for instance, production speed may compete with nonproductive investments in safety (Zohar & Polachek, 2014). Hence, if workers see that organizations ask them to take part in safety training and other related procedures, which by necessity means that they are not doing other competing things, such as working in a very quick fashion, this may promote higher levels of safety climate because individuals may infer that safety is prioritized.

With this explanation of safety climate formation, P&P information may be a stronger predictor of safety climate than CFL information. The stronger relation may

exist because the P&P information may suggest to workers that some of their time will be devoted to investments in safety as opposed to competing goals such as constantly working in a quick fashion. References to safety meetings and training in the P&P information identify that time will be invested in safety and consequently taken from other competing priorities. From this perspective, the P&P information implicitly signals safety's priority relative to other demands. The CFL information, in contrast, tells onlookers less about the relative importance of safety. In fact, it does not even address safety's implications for employees' experiences on the job. It simply shows that organizations are aware of the negative repercussion of poor safety (injuries and less time with family).

Supporting the prominent role P&P information, Dejoy, Schaffer, Wilson, Vandenberg and Butts (2004) argued that theoretically safety policies and programs can be considered "surface manifestations" (p. 82) of organizations' beliefs about safety. Highlighting the central nature of these policies, Dejoy et al. (2004) found that they correlated with safety climate more than other constructs such as coworker support or environmental conditions. In fact, Diaz and Diaz-Cabrera (1997) discovered that safety policies were the strongest indicators of safety climate when compared to other factors such as emphasizing productivity versus safety. Given this theory and evidence, it is hypothesized:

**Hypothesis 8**: The P&P information - safety climate relation is stronger than the relation between CFL information and safety climate.

Since CFL information is expected to have a weaker relation with safety climate

compared to P&P information, it may moderate the relation between P&P information and safety climate. The reasoning behind this centers on the same dilution effect described above for APOS. Therefore, it is hypothesized:

**Hypothesis 9**: CFL information moderates the relation between P&P information and safety climate such that the positive relation becomes weaker when CFL information is present as opposed to absent.

#### **Industry: Moderating the Effects of Safety Information on Outcomes**

As noted above, a discussion of safety on websites may be associated with certain jobs and businesses. For instance, a safety page would likely be expected on a construction website, but it would be potentially more surprising to see on a website for a finance company. This idea highlights the notion that expectancies may impact perceptions of objects in the social world. More specifically, expectancy is the extent to which information observed by an individual aligns with a pre-existing pattern or structure (Heckler & Childers, 1992). The section below draws from research in social cognition to determine how such expectancies impact safety signals.

Considerable evidence suggests that expectancy-incongruent information is encoded in a deliberate fashion, which promotes enhanced memory for this information (Heider, Scherer, Skowronski, Wood, Edlund, Hartnett, 2007; Bell, Buchner, Kroneisen, & Giang, 2012; Stangor & McMillan, 1992; Rojahn & Pettigrew, 1992). These findings are rooted in models from cognitive psychology. The Schema-Pointer Plus Tag model, for instance, suggests that unexpected information is encoded into a distinct part of long term memory and marked with a tag (Graesser, 1981). Congruent or typical information is encoded in a normal fashion. Another model, an associative network model formulated by Hastie (1980), suggests that increasing levels of expectation incongruence promote a deliberate processing of stimuli. Such processing allows for the creation of more cognitive associations between the incongruent information and other information.

This enhanced recall and memory for expectancy-incongruent information is important in the context of attitude formation. Specifically, when individuals are asked for their attitudes about a target (e.g., attitude about an employer's supportive nature or safety climate), they can use their preexisting attitudes if they already exist, or they can construct attitudes by drawing relevant information about the target from memory (Krosnick, Judd, & Wittenbrink, 2005; Azjen & Sexton, 1999; Shwarz, 1999). When this relevant information is processed in a deliberate and thorough fashion, this increases the likelihood that it will be recalled when attitudes need to be constructed (Azjen & Sexton, 1999). Applying this thinking to safety and the recruitment process (when individuals are learning about employers), if potential applicants are asked for their organization's safety-related attitudes, they will often need to construct those attitudes because it is unlikely that they have preexisting ones for companies they know little about or have never seen. In this instance, individuals would need to draw relevant information (e.g., the safety information) from memory in order to form their attitudes. Consequently, the more deliberate processing associated with the safety information when it is more unexpected (e.g., on a finance website) increases the possibility that individuals will recall it from memory when asked to provide their attitudes about an employer. When safety is expected (e.g., on a construction website), in contrast, the less deliberate

processing of the safety information reduces the extent to which it will be drawn from memory in order to influence attitude formation. Therefore, it is hypothesized,

**Hypothesis 10a**: Industry moderates the relation between P&P information and APOS such that the positive relation is stronger for a finance organization compared to a construction organization.

**Hypothesis 10b**: Industry moderates the relation between CFL information and APOS such that the positive relation is stronger for a finance organization compared to a construction organization.

**Hypothesis 11a**: Industry moderates the relation between P&P information and safety climate such that the positive relation is stronger for a finance organization compared to a construction organization.

**Hypothesis 11b**: Industry moderates the relation between CFL information and safety climate such that the positive relation is stronger for a finance organization compared to a construction organization.

**Hypothesis 12**: Industry moderates the relation between P&P information and hazards such that the negative relation becomes more negative for a finance organization compared to a construction organization.

Mediation: Connecting APOS, On-The-Job Hazards, and Safety Climate to Attraction

The previous sections have posited that safety information relates to APOS, safety climate, and perceptions of on-the-job hazards. The current section relates these three constructs to organizational attraction, which creates the foundation for a mediated
relation between the safety information and organizational attraction. APOS has been found to mediate the relation between organizational characteristics and attraction (Wayne & Casper, 2012); therefore, the current section briefly highlights the connection between APOS and attraction in order to ensure replication. Further, it describes how hazard perceptions and safety climate may relate to organizational attraction, which is an avenue that has not been explored in IO psychology.

In terms of APOS, in the context of signaling theory, Wayne and Casper (2012) said that applicants who expect support have more favorable schemas or representations of organizations, which should make the organizations more appealing. This idea is further supported by Cober et al.'s (2004) theoretical model that describes how websites affect attraction. They noted that organizational image, which they defined as "an individual's representation of an organization's character that exists at a given point in time" (p. 634), relates directly to attraction. So if an organization has a supportive image, this would serve to increase applicant attraction. Given APOS's relation with attraction and the previous hypotheses about the safety dimensions, it is hypothesized:

**Hypothesis 13:** APOS mediates the relation between the presence of P&P information and organizational attraction.

**Hypothesis 14:** APOS mediates the relation between the presence of CFL information and organizational attraction.

Perceptions of on-the-job hazards have not been explored as a predictor of organizational attraction; therefore, there is little research in IO psychology that sheds light on this topic. However, one can draw from the consumer psychology literature to address this domain, which is a tactic others have taken previously when discussing attraction (e.g., Cober et al., 2004).

Research related to risk suggests that perceived risks make products less appealing. Theoretically, in the consumer literature, when individuals consider buying a product, they are concerned with the potential risk associated with their purchase. This may mean that they are concerned about the product underperforming or that financial loss may result from the purchase. Such risk often negatively impacts purchasing intentions (Yeung & Morris, 2006). For instance, Change and Wu (2012) found that risk, which was defined as concern over loss or injury (the loss in this case centered on the loss of privacy or financial injury), made individuals less likely to take part in online shopping. In other studies, when a trip was perceived as more risky (i.e., that it would lead to financial loss), individuals were less likely to have travel desires (Quintal, Lee, & Soutar, 2010). Yeung and Morris (2006) showed that individuals are less likely to buy food that is perceived as dangerous or potentially hazardous. Other studies have shown how risks associated with food discourage willingness to pay for products (e.g. Dillaway, Messer, Benard & Kaiser, 2011).

Extending these findings to the recruitment literature, if individuals feel an employment opportunity is more hazardous, they may feel that there is a higher probability of loss or injury (the loss or injury here is physical as opposed to financial). A concern over loss, therefore, may make an organization less attractive. Given this possibility and the evidence presented above about the formation of hazard perceptions, it is hypothesized:

**Hypothesis 15:** Perceptions of on-the-job hazards mediate the P&P informationorganizational attraction relation.

Safety climate is expected to positively relate to organizational attraction. In line with signaling theory, a concern about safety may signal to individuals that the employer is investing in them and willing to provide favorable treatment. Meta analytic work suggests that such beliefs about treatment positively relate to attraction (Uggerslev, Fassina, & Kraichy, 2012).

To connect safety climate to attraction further, one can also look to the instrumental-symbolic framework and its applications to attraction (e.g., Lievens & Highhouse, 2003; Slaughter, Zockar, Highouse, & Mohr, 2004). Taken from the marketing literature, this perspective argues that individuals connect instrumental functions and symbolic meaning with an organization (Lieves & Highhouse, 2003). Instrumental functions describe an organization's objective characteristics that bring value to individuals (e.g., pay and benefits). Symbolic meaning, in contrast, references elements of the organization that are not tangible. Instead, an organization is described in terms of inferred traits or attributes (Keller, 1998). If employers have positive symbolic attributes, this is often appealing to individuals because associating with the employers will reflect well on applicants' self-concepts, which ultimately encourages attraction. (Aaker, 1997; Lievens & Highhouse, 2003).

Using these ideas, Lievens and Highouse (2003) demonstrated that individuals inferred that organizations had traits such as competence (ie., the employer seemed smart and reliable) and innovativeness (ie., the employer seemed trendy and cool), and these

positively predicted attraction. Slaughter et al. (2004) showed that individuals made inferences about organizational personality and that such inferences predicted attraction. Of note, they identified one dimension labeled thrift, which contained characteristics such as low-budget, sloppy, and deprived. This trait negatively related to attraction because it conveyed an unappealing symbolic value with which individuals did not want to associate.

Relating these ideas to safety climate, beliefs that an organization values and invests in safety may foster perceptions of low thrift (i.e., the employer is not sloppy) and competence, which may make that employer attractive. Supporting this assertion, research has demonstrated that individuals believe an organizational emphasis on safety suggests that an employer is diligent and detail oriented (i.e., not sloppy) (Braddy et al., 2006). Moreover, Flin, Mearns, O'Connor, and Bryden (2000) identified a theme often connected to safety climate measures, which they labeled as competence. It reflects the levels of skills and knowledge possessed by those in an organization. In line with this, an emphasis on safety at an employer may cause outsiders to believe that an organization's workers are knowledgeable and trained about safety matters, which could make the employer seem more intelligent/ competent. Overall, these perceptions of competence and low thrift, which are encouraged by an emphasis on safety's importance, may make an employer more attractive. Given the hypothesis above, it is hypothesized:

Hypothesis 16: Safety climate mediates the P&P information-attraction relation.

Hypothesis 17: Safety climate mediates the CFL information-attraction relation.

# Method

# **Participants**

The sample consisted of 217 workers on Amazon.com's Mechanical Turk. This is an online marketplace where individuals can perform various tasks for compensation. Participants were 51% male (1.4% missing), 84% Caucasian, and they had an average age of 34 (SD = 11.30). Individuals worked in over 17 industries. Of note, 14 percent worked in IT, 10.3% had administrative jobs, 9% worked in the food industry, and 8% had positions in education. On average, these individuals had worked for 5.4 years in their current position (SD = 5.82). As an indicator of family obligations, 34% of the sample noted that they had children living at home.

# **Design & Procedure**

The hypotheses were tested via a 2 (presence vs. absence of P&P information) x 2 (presence vs. absence of CFL information) x 2 (Construction vs. Finance) betweensubjects experimental design. Overall, there were eight conditions with different combinations of stimuli presented to viewers: both types of information, P&P only, CFL only, and a control condition with no safety information. These four conditions were displayed for either a finance company or a construction company.

To take part in the study, participants saw a description of the study on Mechanical Turk. They clicked the task and received a link to the experiment, which was presented on Qualtrics. This program has a mechanism to randomly assign individuals to conditions, so it randomly assigned participants to one of the eight different website conditions where they were asked to read the content of a website. They saw images of two pages from a hypothetical website and then they completed the measures of APOS, safety climate, hazard perceptions, and website attitude. This was followed by attraction measures and the manipulation checks. Individuals received 1 dollar when they completed the task.

#### Variables

Websites and manipulations. Via Google Sites, websites were created for a construction company and a finance company (they were Prezley Construction Services and Prezley Financial Services). These two types of companies served to manipulate expectation congruence based on industry. Specifically, an emphasis on safety on a construction page was supposed to align with expectations more than such a safety emphasis on a financial services website. Individuals saw a home page that identified the financial or construction services offered by the company. After this, participants saw a safety page with the same generic heading, which stressed the priority given to safety at the organization. The only things that varied on this safety page were the manipulations, which were different depending on the condition. In a control condition, instead of a safety page participants saw a "contact us" page.

For the P&P information, the condition emphasized the importance of different safety procedures and policies. It stated: "We have various policies and procedures in place to prevent accidents and ensure worker safety. We require monthly safety inspections, safety meetings for all staff, and 10 hours of various individualized trainings." The CFL information read "Safety means more quality time with your family. At end of the day we want all employees to go home and enjoy time with their families. We want everyone to leave work happy and injury-free so time outside of the workplace can as productive as possible."

# **Outcome Measures.**

**APOS.** Wayne and Casper's (2012) five-item measure was used to measure APOS. The response scale ranged from 1 (Strongly Disagree) to 7 (Strongly Agree). A sample item read: "If I were working at this company, I would feel supported at work." The alpha was .94.

*Perceptions of hazards.* This construct was measured by a scale developed by Leiter and Robichaud (1997). The scale asked individuals to what extent they feel at risk of injury from various hazards using a scale of 1 (not at all at risk) to 7 (could not be more at risk). Their study explored airplane mechanics, so airplane related hazards (e.g. interaction with aircraft when the engines are off) were not included here. Instead, hazards were chosen only if they were general hazards that could apply to many organizations. The hazards included: falling, lifting heavy objects, being cut by sharp objects, and being hit by large objects. The alpha was .95.

*Safety climate.* Safety climate was measured using Neal and Griffin's (2006) three-item scale. A sample item read: "Management places a strong emphasis on workplace health and safety. Participants\_rated the extent to which they agreed with the statements using a scale of 1 (strongly disagree) to 7(strongly agree). The alpha was .96.

**Organizational attraction.** Highhouse et al.'s (2003) five- item scale was used as one measure of organizational attraction. Participants rated the extent to which they agreed with items using a scale of 1 (strongly disagree) to 7 (strongly agree). A sample item read: For me, this company would be a good place to work. The alpha was .92. As a second measure, participants responded to one question that asked if they wanted more information about the company's culture and services. Participants responded with either "yes" or "no."

*Control variables*. Participants provided their general attitude about the website using the scale from Bruner and Kumar (2000), which had an alpha of .95. A sample item read: "I like the website."

*Manipulation Checks.* Individuals rated the extent to which they agreed with three statements using a scale of 1(strongly disagree) to 7 (strongly agree). The first read: This company said it had policies and procedures, such as safety training, to ensure worker safety. The second check read: This company said that safety allows for more quality time outside of work with family. The last check said: I expected a company like Prezley to highlight safety as a top priority on its website.

## Results

#### **Manipulation Checks**

To determine that the manipulations had worked, the manipulation checks were examined using t tests. The large effect sizes for all the questions suggested the manipulations had been successful. Specifically, those seeing CFL information (M = 6.11, SD = 1.17) agreed that it had been presented to a larger degree than those who did not see the information (M = 2.79, SD = 1.71), t(189.28) = -16.55, p < .05, d = 2.26. The same was true for those seeing P&P information (M = 6.20, SD = 1.92) compared to those who did not see P&P information (M = 3.60, SD = 1.99), t(157.90) = -12.07, p < .05, d = 1.67. Last, those seeing a construction site (M = 5.33, SD = 1.28) expected to see a prioritization of safety more than those seeing a financial website (M = 3.46, SD = 1.98), t(197.33) = -8.13, p < .05, d = 1.12.

#### **Testing the Measurement Model**

Confirmatory factor analysis examined the structure of the multi-item scales. A model with five factors (safety climate, APOS, website attitude, hazards, and attraction) provided a good fit to the data  $\chi^2$  (161)= 311.72, p < .05, CFI = .96, TLI = .96, RMSEA = .06). Competing models were estimated, and as shown in Table 2, the 5-factor model was

superior to other models tested. Furthermore, the poor fit of the one factor model provided evidence against common method variance being a serious concern (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In addition, all latent variables did not even correlate with one another (e.g., hazards did not correlate with attraction), which offered more evidence against common method variance being a concern.

#### **Descriptive Statistics and Correlations**

Table 3 presents the means, standard deviations, and correlations for the variables in the study. The correlation matrix provides preliminary evidence for the main effects of P&P information and CFL information because both types of safety information positively correlated with APOS and safety climate. Based on Steiger (1980) and Lee and Preacher (2013), tests for differences in dependent correlations identified that CFL was a stronger predictor of APOS compared to the other safety information, Z = 2.15, p < .05. The same finding occurred for safety climate Z = 3.69, p < .05. Last, given that the dichotomous attraction item displayed no correlations with the mediating variables, the test of hypotheses only focused on the five-item attraction scale.

#### **Tests of Hypotheses**

The formal hypotheses were tested via a path analysis using Mplus software. Specifically, the model in Figure One was tested where all regression were examined simultaneously. As a control, website attitude was added as a predictor of APOS, hazards, safety climate, and attraction. This model did not provide acceptable fit,  $\chi^2$  (12) = 103.70 p < .05, CFI = .82, TLI = .49, RMSEA =.19. Given that it was expected that APOS and safety climate would be correlated, which showed in the correlation table, these two variables were allowed to correlate in a second model. This model provided acceptable fit,  $\chi^2$  (11) = 24.76 p < .05, CFI = .973, TLI = .916, RMSEA = .076<sup>1</sup>. In it, 40% of the variance in APOS was explained, and 26% of the variance in hazard perceptions was explained. R squared for safety climate was .39, and it was .52 for attraction.

Table 4 provides the parameter estimates for the second model. Both safety dimensions were positively related to APOS, which supported hypotheses 1 and 2. Hypothesis 3, which specified a stronger effect for CFL information compared to P&P information when predicting APOS, was examined by performing Wald's tests in order to determine if the parameters between the types of safety information and APOS were equivalent. The test was not significant (Wald's Statistic = .15, p = .70), which suggested the parameters were of equal magnitude. This did not support hypothesis 3. Turning to hypothesis 4, the interaction term for the two types of safety information was not significant, which did not support hypothesis 4.

Hypothesis 5, which specified a negative effect of P&P information on hazards, was not supported because the parameter for this dimension was not significant. There was, however, a main effect of industry when predicting hazard perceptions. Specifically, the construction condition was perceived as more hazardous than the finance condition. Hypotheses 6 and 7 were supported because both types of safety information were positively related to safety climate. Wald's test identified that the two types of safety

<sup>&</sup>lt;sup>1</sup> The same parameters were significant and non-significant in each of the models presented above. All terms were in the same direction as well (positive or negative). In other words, the conclusions are no different in the first model compared to the second.

information did not have different relations with safety climate (Wald's statistic = .57, p = .45). Therefore, hypothesis 8 was not supported. Despite this null finding, the interaction of the two types of safety information when predicting safety climate was significant, and a comparison of models with and without the interaction term showed that the term explained seven percent of the variance in safety climate. Examination of the regression equation and simple slopes showed that P&P information positively predicted safety climate when CLF information was not present (gradient of slope = 1.68, p < .05). When CFL information was present, however, the gradient of the slope for P&P information did not differ significantly from zero (slope of gradient = .38, p > .05). These relations are depicted in Figure 2, and they supported hypothesis 9.

The interaction term for each type of safety information with industry when predicting APOS was not significant, which did not support hypothesis 10a and 10b. For safety climate, the interaction term for industry and P&P information was significant, and it explained two percent of the variance in safety climate. Examination of simple slopes showed that P&P information positively predicted safety climate in the construction condition (gradient of slope = 1.02, p < .05), and it displayed a larger positive relation in the finance condition (gradient of slope = 1.68, p < .05). These relations are shown in Figure 3, and they supported hypothesis 11a. Hypothesis 11b was not supported as the interaction term for CFL information and industry was not significant. Last, the interaction term for P&P information with industry was significant when predicting hazards, and it explained 1% of the variance in hazards. As shown in Figure 4, the interaction took the form of a small crossover, and as a result, there was no main effect of

P&P information on hazards, which was demonstrated in the analysis of simple slopes. The slopes showed that the P&P - hazard relation was positive in the finance condition (gradient of slope = .32, p > .05) and negative in the construction condition (gradient of slope = .29, p > .05), but neither of these slopes were statistically different than zero. This interaction did not support hypothesis 12.

For the mediation, examination of bootstrapped indirect effects showed that APOS mediated the relation between both safety dimensions and attraction. The unstandardized indirect effect for P&P information was .49 (C.I = .21, .77). It was .43 (C.I. = .16, .70) for CFL information. No other indirect effects differed from zero. Therefore, hypotheses 13 and 14 were supported while hypotheses 15 through 17 were not.

To summarize, both types of safety information positively related to APOS and safety climate, and they interacted when predicting safety climate (the interaction term was negative). Further, the effects of P&P information were stronger in the finance industry compared to the construction industry when predicting safety climate. P&P information also interacted with industry when predicting hazards, and the interaction displayed a very small crossover pattern. Last, APOS mediated the relation between both types of safety information and attraction.

#### Discussion

The current study examined how website safety content affects onlookers' perceptions of organizations. Two examples of safety information, policies and procedures information and concern for family life information, were identified and used to predict APOS, hazard perceptions, and safety climate. As expected, both types of information predicted APOS and safety climate. Of theoretical importance, along with identifying why safety content influences website viewers, this research explored the interplay of multiple employer signals. It also identified some conditions under which safety messages varied in strength. Lastly, as will be noted below, the practical implications of this study will enable effective safety messaging by organizations.

# **Theoretical Implications**

The results supported the notion that website viewers used safety content to make inferences about organizational supportiveness and safety climate. Further, both types of safety information seemed to offer unique details to onlookers because each safety message was predictive of outcomes when the other type of information was present in the model. While the two kinds of safety information seemed to offer distinct details to website viewers, their relations with safety climate and APOS were not of different magnitudes, which did not support the hypotheses. The original argument for these different relations when predicting APOS rested on the notion that individuals would attribute the existence of the details described by P&P information to forces external to the organization, such as legal regulations. Such regulations were expected to make P&P information seem less discretionary compared to CFL information. The findings did not support this assertion about perceived differences in employer discretion.

The information described by the two types of safety messages may not be viewed as different from one another in terms of employer discretion; however, the use of other organizational support research (e.g., Eisenberger et al., 1997) allows one to extrapolate that safety information is potentially viewed as less discretionary compared to other workplace characteristics. Specifically, in the current research, the relations between both types of safety information and organizational support were generally smaller compared to existing relations between high-discretion job characteristics and organizational support, which can be seen in Eisenberger and colleagues' work. In their research, high-discretion characteristics, such as fringe benefits and rewards, had strong relations with organizational support (correlations larger than .40; Eisenberger et al., 1997; Rhoades & Eisenberger, 2002). In fact, the current associations between the safety information and organizational support resembled the correlations for job characteristics Eisenberger et al. (1997) considered to be less discretionary on the part of the employer (an example of a low-discretion characteristic is "relationship with other coworkers"). Given these results, it is possible that website viewers think that the work characteristics described by the safety information are less discretionary compared to work characteristics such as fringe benefits and rewards. This conclusion is meaningful because it supports the claims of Eisenberger et al. (1997) who alluded to the notion that safety regulations may place restrictions on employers that limit the extent to which they have control over characteristics such as training and work schedules.

The results also demonstrated that in some instances (when predicting safety climate) the presentation of both types of safety information resulted in an interaction such that one type of information diluted the effects of the other. The theoretical mechanism to explain this dilution effect, which was described above, relied on the notion that the two types of safety information would have different validities with safety climate; however, the results showed that the information's relations with safety climate were not of different magnitudes, which draws the previously described theoretical rationale into question. As an alternative explanation, one could consider the idea of bounded rationality (Simon, 1955). This concept notes that individuals use just enough information to meet their needs, and then they become satisfied and move on to other goals (this is commonly known as satisficing). In other words, when a decision-making situation is not optimal because of poor information, lack of time, or even too much information, people have a tendency to use just enough data to meet their needs. This strategy prevents them from wasting too much time on their decision-making processes. The information they utilize is essentially considered good enough (Bawden & Robinson, 2009).

Applying this idea to safety climate, upon seeing one type of information by itself (P&P information), viewers could satisfy their goals of learning about an organization's safety attitudes. In other words, a person can see the P&P information, note that the

employer values safety, and move on to other judgments as the goal of understanding the organization's perspective on safety has now been achieved. If a second type of information were added (CFL information), however, the onlooker might not use it thoroughly because he or she had already met the need of understanding the organization's safety perspective with the first piece of information, and it would be wasteful to continue on with additional details, even if that information had the potential to offer unique data. It may even be possible that the viewer would skip over the second piece of information entirely. If the second type of information (CFL information) were presented by itself, however, the viewer would use it to form his or her impression about safety at the organization. Hence, CFL information is predictive by itself, but if it is added to an existing piece of information, its effects are reduced.

As another possible explanation, one could consider the literature related to consumer marketing and consumer decision-making. Scholars have examined online environments and have noted that increasing levels of information about products can lead to a more difficult consumer experience resulting in negative consequences such as less satisfaction with shopping and more confusion (Lee & Lee, 2004). A similar effect may possibly be occurring in the current study as the addition of new information (i.e., displaying both types of safety information as opposed to one type) places more demands on the website viewer, which results in more negative attitudes. Hence, while one type of information was originally associated with a high level of climate when presented by itself, the addition of the other type of information may reduce the favorableness of onlooker attitudes, which now means the originally piece of information is associated with lower levels of the outcome variable. This idea and the bounded rationality perspective are possibilities, and future research should more thoroughly explore why the current interaction existed.

Last, this study identified that some of the effects of safety information can vary by industry (when predicting safety climate). As indicated by the manipulation checks, individuals expected safety to be emphasized on a construction website more in comparison to a finance website. Complementing this finding, there also was a main effect of industry on hazards such that the construction condition was viewed as more hazardous compared to the finance condition. These results identified that there was a general impression or representation of construction as a more hazardous, safety-minded industry in comparison to finance. Hence, when safety was seen on a finance website, this contrasted with participants' general beliefs about the finance industry to a larger extent than when this information was presented on a construction website. Upon seeing safety on a finance page, the subsequent misalignment with participants' industryspecific representations resulted in a more thorough processing that ultimately affected attitude formation.

This finding suggested that when employers in certain industries send messages, these messages may be subject to the general impressions individuals have about the companies' industries. More specifically, if a message does not align with recipient beliefs, this may cause individuals to attune more thoroughly to an organization's signal as opposed to other possibilities such as disregarding the signal because of its bizarre or incongruent nature. This assertion is meaningful because reviews of signaling theory note that more information is needed regarding why messages from organizations are more or less impactful (Connelly, Certo, Ireland, & utzel, 2011).

#### **Predicting Hazards**

Safety content promoted positive attitudes, such as APOS and safety climate, but it was possible that website safety details could backfire by reminding individuals of the hazards in the work environment that require safety precautions in the first place. This possibility aligns with research rooted in signaling theory that suggests that signals may be sent unintentionally and that organizational messages may have unintended negative consequences (Janney & Folta, 2003; Perkins & Hendry, 2005). In the current research, however, there was no main effect of P&P information on hazard perceptions. This null effect may have occurred because individuals had specific beliefs about the hazards inherent in the work performed in different industries. People may believe that these hazards are an implicit part of the work that cannot be drastically changed. From this perspective, as long as a company is in a specific industry with a certain hazard level, organizational safety actions have little impact on hazard perceptions because the inherent danger or lack of danger in the work cannot be altered.

There was, however, an interaction between industry and the presence of P&P information when predicting hazard perceptions. The presence of P&P information appeared to increase hazard perceptions in the finance condition, but its presence seemed to decrease these perceptions in the construction condition. This pattern points to the possibility that the presentation of safety information may backfire under certain circumstances by making individuals think of safety and related topics such as hazards.

Specifically, initial impressions of a finance website may not push individuals to think of safety and hazards, but the unexpected presentation of safety facts may cause viewers to consider the dangers on the job. In contrast, safety content on a construction website is expected, and individuals likely know that there are hazards in the construction industry. Therefore, minimal expectation incongruence arises when safety information is presented on a construction website, and in fact, onlookers may feel more at ease as they consider that the employer is trying to protect them from hazards they expected to encounter in the construction industry. While these ideas are theoretically possible, it should be noted that both simple slopes in the interaction were not statistically different than zero. While the slopes may not be different than zero, they were different from each other as implied by the significant interaction although the effect was small (See Rogosa 1980, 1981 for discussions of these types of interactions).

# CFL Information's Effects did not Vary Based on Industry

While P&P information demonstrated interactive effects, there were no interactions for the CFL information with industry. This may have occurred because it could have been viewed as a general organizational concern for employees' families. The message may not have been surprising for those looking at a finance company's website as many organizations, including finance and construction organizations, can care about employees' lives outside of work. A discussion of procedures and safety inspections at a finance company, in contrast, may still have been unexpected because safety policies are indicators of phenomena often associated with a specific group of organizations (i.e., those who need to vigilantly monitor and structure their work environments to ensure

safety).

#### **Predicting Attraction**

As expected, website attitude was a strong predictor of attraction. In line with previous research highlighted above, this work also identified that APOS positively related to attraction. Hazards perceptions and safety climate, however, did not relate to attraction when controlling for APOS and website attitude. Hazards may have been perceived as a feature of the industry as opposed to a characteristic of the organization. Therefore, it may not have influenced views about the employer specifically. In terms of safety climate, it may be possible that certain individuals did not consider safety when they looked at the attractiveness of an employer. From this perspective, individual differences may have been a factor that impacted the main effect of safety climate on attraction. Future studies could consider the relevance of individual differences.

## **Practical Implications**

This research has implications for the content of websites. In terms of safety content, it is clear that construction companies should have website safety information because it encourages positive perceptions such as support and has minimal effect on hazard perceptions. Companies in other industries with strong safety concerns (e.g., manufacturing) might benefit from providing safety content on their websites as well. In terms of specific content, both types of safety information described above can be placed on websites because they both seem to predict valuable outcomes such as support and safety climate.

Certain companies may have more safety concerns and interest in discussing

safety when compared to others. For instance, construction organizations may be very concerned about safety, while finance companies may be less interested in the topic. The current research suggests that safety can be a valuable discussion point even for organizations that have traditionally not had strong safety considerations. In fact, safety messages may be more effective for companies that are not concerned or associated with safety. Overall, organizations that have not used safety in their recruitment materials could now consider the potential value associated with a discussion of this topic.

#### **Limitations & Future Directions**

The current experimental method strengthens the confidence about the effects of the safety information on APOS, safety climate, and hazards; however, attraction was measured at the same time as the mediators. As noted above, this could raise concerns about common method variance. Despite this, the factor analyses suggested all constructs were distinct. Further, all variables did not correlate with one another. Therefore, common method variance did not appear to be a serious concern. Additionally, the fact that attraction was measured at the same time as APOS, safety climate, and hazards creates questions about causal ordering. The hazard variable did not correlate with any of the central theoretical variables, however, so there is less concern about the relation between hazards and attraction because they do not seem to exhibit any kind of connection.

To remedy some of these limitations and further explore website safety content's effects on potential applicant perceptions and behaviors, future studies could measure attraction at a different time point than APOS, safety climate, and hazards (i.e., measure

attraction after measuring APOS, hazards, and safety climate); Further, additional work could explore the current research questions using a different sample. The individuals in this study were not applying to the companies displayed on the websites. This may explain why the single-item attraction measure did not function well. It asked if individuals wanted more information about organizations, but since participants were not applying, more information about a company would not have been meaningful. Therefore, other research should consider targeting a specific population (e.g., only construction workers) or gathering more background information on participants.

Of additional theoretical interest, more research needs to determine how safety impacts applicants when considered alongside other employer characteristics (e.g., diversity or work-life support policies). Diversity and work-life policies have been shown to predict outcomes such as APOS, but it is not clear if they are stronger predictors of APOS compared to safety or if safety information predicts APOS above and beyond other messages such as those related to diversity. Further, since CFL information is strongly tied to the family, future efforts can determine if CFL information predicts outcomes above and beyond typical work-life support content. Last, as noted above, future research can consider why types of safety information interact.

# Conclusion

This study was the first to specifically examine website safety content's implications for employee recruitment. It identified theoretically how safety information impacts potential job applicants and provided empirical evidence supporting the positive effects of website safety content. Moreover, it showed that safety information does not

seem to backfire by making the job appear more hazardous. As safety concerns are often associated with certain industries, safety information's effects varied based on the type of organization under examination, and perceiver expectations served as a theoretical factor that impacted the strength of employer signals. With the findings from this research, companies who do not normally discuss safety may now want to consider adding this topic to their recruitment materials.

# Table 1

Means, SDs and correlations for the dimensions

Variables	Mean	S.D.	1.	2.	
1. Policies and Procedures	2.21	0.73	1		
2. Concern for Family Life	1.36	0.44	0.17	1	

# Table 2

# Fit values for different models

Model	Chi Square	DF	CFI	TLI	RMSEA
1. 5 factors	311.72	161.00	0.96	0.96	0.06
2.(Climate+APOS),Website					
Attitude, Attraction &	864.54	165.00	0.85	0.83	0.14
Hazards					
3.(APOS+Attraction),					
Climate, Website Attitude, &	795.28	164.00	0.87	0.85	0.13
Hazards					
4.(APOS+Website Attitude),					
Climate,Hazards,&	826.80	164.00	0.86	0.84	0.14
Attraction					
5.(Attraction+Website					
Attitude), Climate, Hazards,	814.043	164.00	0.86	0.84	0.14
APOS					
6.One Factor Model	2690.90	170.00	0.47	0.41	0.26

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Means, SDs, and correlations

Variable	Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.	9
1.P&P	0.49	0.50									
Information	0.48	0.50									
2.CFL	0.50	0.50	0.00								
Information	0.30	0.50									
3. APOS	5.33	1.00	0.18*	0.28*	.94						
4.Safety	5 71	1.20	0.24*	0 27*	68*	06					
Climate	5.74	1.50	0.24	0.57	.08*	.90					
5. Hazards	2.69	1.32	0.03	0.04	0.00	0.06	.95				
6.Attraction	1 78	1 32	0.04	0 22*	68*	0.43*	0.04	07			
Scale	4.78	1.52	0.04	0.22	.08*	0.43	-0.04	.72			
7.Attraction	51	49	- 14*	- 02	12	02	- 02	33*			
Item	.91	.47	14	02	.12	.02	02	.55			
8. Industry	0.50	0.50	0.05	0.01	0.13	0.08	0.5*	0.07	01		
9.Website	4 59	1.40	0.06	0.23*	57*	30*	0.15*	0 59*	26*	26*	95
Attitude	4.59	1.40	0.00	0.23	.57	.59	0.15	0.37	.20	.20	.,,

Note. P&P information= Policies and Procedures, CFL information = Concern for Family Life, APOS = anticipated organizational support. For P&P information and CFL information 1= presence of safety information, 0 = no safety information. For industry 1= construction, 0 = finance. For the attraction item, 1 = yes, 0 = no. Reliabilities are presented on the diagonals.

# Table 4

Predictors	APOS	Hazards	Safety Climate	Attraction
Website Attitude	0.38*	0.02	0.28*	0.31*
Policies & Proc.	0.71*	0.32	1.68*	
Concern for Family	0.63*		1.48*	
Industry	0.28	1.58*	0.37	
Policies*Family	-0.39		-1.32*	
Policies*Industry	-0.39	-0.61*	-0.66*	
Family*Industry	-0.23		08	
APOS				0.69*
Hazards				-0.08
Safety Climate				-0.05

# Unstandardized Estimates for all paths

Note. \* signifies p < .05. Blank spaces indicate that the predictor was not used in the regression for the outcome of interest.



Figure 1. Hypothesized Model. P&P Info = Policies and Procedures information, CFL Info = Concern for family life information, APOS= Anticipated Organizational Support, Attract. = Attraction



Figure 2. Interaction of the two safety dimensions when predicting safety climate



Figure 3. Interaction of P&P information with industry when predicting safety climate.



Figure 4. Interaction of P&P information with Industry when predicting hazards

## **Appendix A: Dissertation Proposal Literature Review**

Many different organizations have safety concerns. In line with this, research has explored how current incumbents perceive safety in the workplace. For instance, safety climate is a prominent topic, and increasing safety climate level has been associated with a safer environment (Christian, Bradley, Wallace, & Burke, 2009). Safety research, whether it is on climate or other subjects, has often only explored the perspective of current employees. In contrast, little work has focused on safety from the perspective of potential applicants. Safety is certainly relevant to applicants if they chose to work for an employer, and they could be exposed to a company's perspective on safety via an organizational website. The current research, therefore, considers how exposure to safety pages on websites impacts potential applicants' perceptions of organizational support, organizational reputation, and on-the-job hazards.

Such an exploration is important because a quick analysis of construction and engineering websites demonstrates that there is variability in the extent to which organizations advertise safety information. Take as an example of this Burns & McDonnell (a construction company). On its website, safety content is prominently displayed (Burns & McDonnell, 2013). Other companies in similar fields do not provide such facts. Otto Construction (2013), for example, gives little information about this topic. In light of this variability, different questions arise, which are addressed in more detail below. First, what is the safety-related content presented on these websites? Are there certain safety dimensions that appear frequently on webpages? Moreover, how do these different dimensions affect applicants compared to websites that offer no safety content?

By identifying website content and its effects on potential applicants, the two present studies seeks to make several contributions to theory and the applied world. They are the first to explore in detail the safety-related content often presented on actual organizational websites. By looking at these sites and their effects, safety can be examined from a new perspective. More specifically, safety can be treated as an independent variable that affects applicants' perceptions. This perspective diverges from other research that often treats safety as a dependent variable (e.g. safety performance; Kaplan & Tetrick, 2011).

Aside from a different perspective, this manuscript can explicate theoretically how safety information affects those who may apply to an organization, which represents a theoretical area of inquiry that has not been explored previously. Given the little research on this topic, it is not clear through which mechanisms safety information impacts applicants, and this work begins to expand upon this topic. To perform this expansion, the current work draws primarily from signaling theory (Spence, 1973) and treats safety dimensions as signals about an organization, which potential applicants then use to form perceptions such as anticipated perceived organizational support (APOS; Casper & Buffardi, 2004). Moreover, by viewing studies in social cognition, this research considers the interactive effects of these signals and explores how multiple pieces of information from organizations function to impact perceptions. This area of inquiry adds theoretically to the current understanding of signaling theory in the recruitment context because little work has explored the effects of multiple employer signals.

This manuscript has practical implications as well. First, it can serve as a benchmarking study for certain employers because it provides information about the safety content organizations in contracting, construction, and related industries place on their websites. It can also determine if this content impacts favorable perceptions that draw individuals to organizations (e.g., anticipated organizational support). Such findings can provide guidance for employers regarding what written content they can put on their websites in order to seem more appealing to potential applicants.

To make these contributions, the current research will proceed as follows. After a review of existing website recruitment literature, the safety content of actual websites is reviewed in an initial qualitative study in order to determine if certain safety dimensions are often displayed. Based on findings from this evaluation, an experimental manipulation of these dimensions is presented to determine if and how they impact applicant perceptions.

## **Internet Recruitment**

Given the emerging prominence of website recruitment research, different theoretical and empirical studies exist that explain how organizational websites affect potential applicants who are trying to learn about employers. These studies are often experimental, but the proliferation of organizational websites has also enabled researchers to study reactions to actual materials. This section, therefore, highlights these different research efforts. First, theoretical work on this topic is described, and then empirical support for this theory is presented.

Cober, Brown, Keeping, and Levy (2004) proposed a theoretical model that explains how websites affect potential applicants. These researchers focused on applicant attraction to the organization. Central to the prediction of applicant attraction are individuals' attitudes toward organizational websites, which are themselves a function of the affective reactions elicited by the site along with factors such as its usability. According to the model, firms want potential applicants to have favorable reactions and attitudes toward their sites because these beliefs encourage organizational attraction and further exploration of websites. This website viewing allows individuals to become familiar with the organization as it is portrayed on the website. Moreover, Cober et al.'s model suggests that organizations want their websites to leave favorable impressions in individuals' minds. In other words, potential applicants ought to have favorable representations or images of organizations in their minds after looking at websites because positive impressions encourage attraction (Cober et al. 2004, Wayne & Casper, 2012). Ultimately, these favorable impressions may arise from a variety of factors on websites, such as the objective organizational characteristics presented on the page (e.g. benefits offered).

Empirically, considerable research has focused on the characteristics of the websites such as their physical design and usability. As examples, Ehrhart, Mayer, & Ziegert (2012) found that website usability (the extent to which one could move around a site and find desired content) positively predicted organizational attraction. Braddy, Meade, and Kroustalis (2008) found similar effects. Others have noted that a favorable website design, such as a visual appealing layout, promotes attraction to an organization (De Goede, Van Vianen, & Klehe, 2011). Lastly, a general positive attitude about a website (e.g., viewers believe it is enjoyable and likable) promotes favorable attitudes about organizations (e.g. Allen, Mahto, & Otondo, 2007). Due to the importance of one's views about a website, general website attitude is used as a control variable that predicts attraction in the experimental study.

Turning to specific topics mentioned by organizations, empirical research has focused on diversity. For instance, Avery (2003) studied perceptions of diversity and attraction to organizations by presenting organizational advertisements to both African American and Caucasian viewers. The number of African American and Caucasian individuals in these advertisements was manipulated to determine what effect this had on subjects. The results suggested that white viewers were not affected by diversity to the same extent as African American individuals. Other researchers have performed similar studies. Walker, Feild, Berneth, and Becton, (2012), for instance, found that African American and Caucasians individuals spent more time looking at websites when they had diversity-related cues compared to when they did not. This effect was even stronger for African American participants.

In terms of safety content, minimal work exists, but Braddy Meade, and Kroustalis (2006) briefly touched on this subject. They had students examine websites to see what inferences they could draw about organizational culture. The qualitative analyses suggested different cultural perceptions: innovativeness, emphasis on rewards, supportiveness, outcome-orientation, attention-to-detail, team orientation, aggressiveness, decisiveness, and diversity. To provide specific illustrations, companies with employee testimonials about innovation along with those that depicted innovative products seemed to have an innovative culture compared to companies that did not present such information. Websites that explicitly stated the importance of teamwork during projects seemed to have a team orientation. Moving to safety, the researchers noted that organizational commitment to promoting safety signaled that the organizational culture was detail oriented.

Braddy et al. (2006) performed a cursory and very general examination of safety (the word "safety" only appeared twice in their article), and the sections below greatly expand upon their work. Like Braddy et al.'s study, actual websites are explored, but the current focus on safety allows for a more detailed analysis of the safety-related content dimensions organizations present to potential applicants. Study 1 identifies examples of these safety dimensions.

#### Study 1

Safety content is presented in different manners on websites, but the current literature seems to lack a systematic evaluation of it. Therefore, Study 1 explores safety pages from firms in contracting, engineering and construction. The Engineering News-Record, which lists the top contractors in the United States, was used to select websites that would be relevant (Engineering News-Record, 2013). The companies on this list were deemed relevant because they work in industries where safety concerns are prominent. As a result, at least some of these companies would likely have safety content
on their websites.

#### **Preliminary examination**

The first author studied 50 randomly selected websites from the list above to identify potential dimensions. Of these sites, 36 had identifiable sections where safety was discussed. Examination of those 36 suggested the presence of three dimensions. The first dimension highlights the extent to which companies provide details about their safety policies and procedures. On one end of the continuum, employers say nothing about their policies. As an example, one company writes "Regardless of the project, safety remains, and always will be, our number one priority. A core value of each project is a commitment to the safety of all team members" (JEDunn Construction, 2013). On the other side of this continuum, websites provide many details about their mandatory trainings along with the rules supervisors must follow. Given these details, there appeared to be a *policies and procedures* dimension, which was present on 75% of websites that commented on safety.

A second dimension appeared on 47 % of the websites that had a safety section. In it, certain companies say that their safety record is superior or exemplary. For instance, they state that their safety record is better than the industry average. Or, they identify that they have won many awards, which implicitly signals that they are superior to competitors because they win awards while others do not. For instance, Mowat Construction (2013) identified that they won a National Construction Safety Excellence Award. This award is only given to a limited number of organizations (AGC of America, 2013), and its receipt demonstrates a superior level of performance relative to competitors. Based on these findings, there appeared to be a *recognized excellence* dimension.

Lastly almost 20% of websites had a dimension noting that safety has implications for life outside of the workplace. High levels on this dimension seem to indicate that employers recognize that safety will enable workers to go home and take part in their family lives. For instance, Manson Construction (2013) says the following on their webpage when referencing their safety precautions: "It means that our employees, subcontractors and worksite visitors will return home to their families each night absent a workplace injury or illness." Hoffman Construction's (2011) website states: "First of all, we have a duty to the families of Hoffman Construction to make certain our workers return home in the same condition they came to work." Such words contrast with websites on the other end of this dimension, which reference nothing about family. Based

on this evidence, there appeared to be a *concern for family life* dimension.

## **Coding Task**

In line with other qualitative research (e.g. Baddly et al., 2006), the current task used independent coders in order to verify the existence of the dimensions identified above. The details of this task are described below.

**Participants.** Three working-age adults performed the coding task. They had no specific knowledge of IO psychology research or of the purposes of the study. Their average age was 47. They worked independently of one another.

**Materials & Procedure.** The first author provided participants with a spreadsheet that contained a list of 14 randomly chosen organizational websites from the list of contractors mentioned above. If a safety page existed, participants received a link directly to that page so they did not have to search through the website. If it did not exist, the raters were told that they could search for it, but they never found a safety page that the first author had missed. For each site, they rated the extent to which the website contained information on safety policies and procedures, receipt of recognition and rewards for safety, and consideration of family life relative to safety. For the policies and procedures question, they were asked to what extent the website displayed details about safety policies and procedures (1 = not at all, 2 = somewhat, 3 = to a great extent). Using the same response scale, they were also asked to identify the extent to which the organization made itself seem superior to competitors by mentioning awards or a superior safety record. Lastly, with the three-point scale they were asked to note the extent to which the employer said that safety at work would promote one's family life.

**Results.** There was a large discrepancy in ratings for one site, so the first author verified that the raters had all seen the safety page of this site. This was appropriate because for one site the first author found a safety page but mistakenly linked individuals to a different part of the website, which caused one rater to miss the page while the others found it because they searched the site. This naturally resulted in discrepancies in ratings, and the first author verified that all safety pages had been seen and asked for new ratings for the missed site.

After verifying that the same safety content had been seen by the coders, interrater-reliability was examined for each of the dimensions using a two-way random average measure ICC(2,k). The *policies and procedure* dimension had an ICC of .86. The *concern for family life* dimension had an ICC of .75, and *recognized excellence* had an ICC of .86. These ICC values are higher than the common .70 cutoff seen in

organizational research (Lebreton & Senter, 2008). Moreover, Table 1 presents the means, standard deviations, and inter-correlations for all the dimensions.

**Discussion.** The results of Study 1 support the notion that organizations differ in the safety content reflected on their websites. These differences can be reliability rated on three dimensions. The first, *policies and procedures*, reflects the level of detail organizations provide about their safety related policies. The second, *concern for family life*, emphasizes that organizations want employees to be safe with the hopes that they can leave work healthy in order to have time with their families. The last dimension, *recognized excellence*, reflects variability in the extent to which employers emphasize their superior safety records. Not only did these dimensions exist, but *policies and procedures* and *recognized excellence* had a large correlation. This may be the case because having many policies and procedures in place allows for enhanced safety performance, which is ultimately recognized in the form of awards.

#### **Study 2: Experimental Study**

Having identified three content dimensions that exist on actual websites, Study 2 seeks to determine how they impact potential applicants' perceptions of anticipated support, organizational reputation, and on-the-job hazards. These perceptions and their relations to safety content are depicted in figure 1. These applicant beliefs are important because they represent the mechanisms through which safety information may impact subsequent applicant attitudes such as attraction. In other words, they may represent the theoretical reasons why safety makes an employer seem more appealing. Ultimately, linking safety content to these perceptions represents a theoretical connection that has not been explored in previous safety research. Moreover, APOS and reputation have been connected to attraction (Wayne & Casper, 2012), but this experiment also creates a new link between perceptions of on-the-job hazards and attraction by drawing from consumer psychology.

## Anticipated Perceived Organizational Support

Research has demonstrated that individuals use a variety of resources prior to employment to determine how much support they will receive on the job (Casper & Buffardi, 2004). More specifically, they form perceptions of the extent to which they believe their employer will care for them and consider their opinions once they are on the job. This research is often framed in the context of signaling theory (Spece, 1973; Ehrhart & Ziegert, 2005). This theory states that firms provide signals to individuals that allow them to make inferences about employers. Research suggests that many organizationally related elements have been construed as signals. For instance, recruiter behaviors and characteristics have been viewed in this regard, and they predicted perceptions of organizational characteristics and attraction (Turban, 2001). In addition, organizational policies have been viewed as signals (Aiman-Smith et al., 2001; Cable & Judge, 1994, Lievens, Decaesteker, Coetsier & Geirnaert, 2001). Using this information, individuals form cognitive schemas or representations of organizations.

Research in the APOS domain has demonstrated that these signals can come in many different forms. For instance, promises from an employer have been empirically connected to APOS. Haimann, Vega, Buffardi, and Eisenberger (2012) found that two types of promises positively predicted APOS. The first were promises suggesting the employee would have control over his or her work. The second type consisted of promises about good pay.

Moreover, research by Casper and her colleagues has documented that HR strategies act as signals. In one study, Casper and Buffardi (2004) experimentally manipulated work schedule flexibility, dependent care benefits, and salary of an organization. Their results suggested that increasing scheduling flexibility and dependent care assistance resulted in more APOS. These expectations of support then predicted job pursuit intentions because individuals had more favorable impressions or representations of an employer. In a second study, Wayne and Casper (2012) manipulated the compensation (pay and benefits), diversity programs, and work-family policies offered by an organization. The findings suggested that all of these organizational characteristics positively related to expectations of organizational support. Moreover, this anticipated support predicted job pursuit intentions. In line with these studies, the current research is treating, *policies and procedures, concern for family life* and *recognized excellence* as potential signals to applicants. Like other signals (e.g., HR policies), the safety dimensions represent information designed and supported by the organization, and hence, applicants can use them to make inferences about employers.

APOS and the *policies and procedures* dimension. The current section argues that the *policies and procedures* dimension positively relates to APOS. First, it may signal that conditions are favorable on the job, and perceptions of favorable job conditions can encourage anticipated organizational support (Eisenberger & Stinglhamber, 2011). Conditions may appear favorable because in line with signaling theory (Spence, 1973) the presence of safety procedures and rules may signal to

individuals that the organization has invested resources and effort into ensuring a safe work environment. The many references to safety inspections and meetings in the *policies and procedure* dimension may provide evidence supporting the notion that the employer has put effort into bettering workplace conditions.

Second, the policies and procedures in this safety content dimension are indicators of safety climate, which " centers on the policies, procedures, and practices in an organization relative to the importance and priority given to safety... (Kaplan, & Tetrick, 2011, p. 463). More specifically, it represents the shared perceptions of these policies within a work group (Kaplan, & Tetrick, 2011). This type of climate has been shown to positively correlate with perceptions of organizational support (Idris, Dollard, Coward, & Dormann, 2012). The idea behind these relations is that procedures and policies to ensure safety suggest to employees that organizations are investing resources and time in order protect incumbents' interests. This concern for employee interests is a central component of perceived organizational support, which represents the support beliefs of current incumbents (POS; Eisenberger et al, 1986). While the safety climate research has focused on job incumbents, it may be the case that analogous processes occur for those who are looking to apply for a particular job.

Lastly, common in the *policies and procedures* dimension is the notion that employers offer safety training and other learning opportunities for workers. Such training signals an investment in the employee, which serves to increase organizational support perceptions (Rhoades & Eisenberger, 2002). Empirical work supports this idea because meta-analytic evidence shows that training positively relates to POS (Rhoades & Eisenberger, 2002). Based on this theory and evidence, it is hypothesized:

H1: The presence of the *policies and procedures* dimension positively relates to APOS.

*Concern for family life* dimension and APOS. Like the *policies and procedures* dimension, this website content feature is expected to positively relate to APOS. Central to this idea is the fact that the dimension signals to employees that employers care about their family lives. As will be illustrated below, firm characteristics, which are representative of this concern for employees' family lives (e.g., offering family friendly benefits), have been connected to APOS. While this safety dimension signals this concern, it is qualitatively different from other indicators because its central focus is on the relation between work-related injury and employees' home lives, which is distinct from other predictors of APOS that have been studied such as diversity and scheduling flexibility.

Grover and Crooker (1995) performed some of the original work showing that a concern for employees' families promotes favorable incumbent attitudes. They argued that family-friendly benefits were a symbol of organizational concern for employees, and their work suggested that such benefits induced favorable organizational perceptions not only for those who needed them, but also for individuals who did not use them. This finding highlighted the symbolic nature of family-friendly benefits. As symbols, therefore, the benefits could signal to employees that employers care for their well-being, which would serve to promote favorable incumbent attitudes. Supporting this, Casper and Buffardi (2004) and Wayne and Casper (2012) found that the provision of family-friendly benefits predicted APOS.

Aside from anticipations of support, a consistent finding in the POS domain is that benefits encourage perceptions of support. Casper and Harris (2008) argued that work family benefits could affect employees through two methods. Using self-interest theory (Lind & Tyler, 1988), one could predict that those who use the policies perceive support because of their personal gain. In contrast, signaling theory could be used to demonstrate that benefits encourage perceptions of support because they act as indicators of organizational concern for employee well-being. Both of these perspectives received support in Casper and Harris's work, and this research provides evidence for the idea that symbols of organizational concern for employees' family lives promote organizational support perceptions.

Overall, to the extent that the *concern for family life* dimension is an indicator of organizational concern for safety's implications in employees' homes, this dimension positively relates to APOS.

H2: The presence of the concern for family life dimension positively relates to APOS

**Comparing the effects of** *concern for family life* and *policies and procedures.* The hypotheses above examined main effects for two safety dimensions that may predict APOS; however, there is a theoretical basis to believe that the effect of the *concern for family life* dimension is stronger than the effect for the *policies and procedure dimension.* This may be the case because the details presented in the *policies and procedure dimension*. This may be the case because the details presented in the *policies and procedure dimension* as opposed to discretionary action on the part of the employer. As is noted below, discretionary employer actions are generally more predictive of organizational support.

Evidence for the importance of discretionary actions can be seen in the work of Eisenberger et al., (1997). Drawing from social exchange theory, they argued that

discretionary actions on the part of an employer are valued more in comparison to acts seen as less discretionary. They stated, therefore, that discretionary acts should relate more to POS compared to nondiscretionary acts. To test this idea, they had applicants rate the favorableness of work conditions/ organizational characteristics such as job security and opportunities for advancement. They also asked participants to identify how much control organizations had over each of the work characteristics. The results suggested that the high discretion characteristics correlated more with POS in comparison to characteristics over which organizations had less control.

Extending these ideas to APOS, one would expect that increasing discretion would be associated with more APOS. While this idea was not explicitly examined, research from Casper and Buffardi (2004) suggested that discretion is important. For instance, they found that salary did not correlate with APOS while schedule flexibility and dependent care assistance were related to APOS. Organizations are required by law to offer some form of compensation to employees, and hence, salary's correlation with APOS was weak. In contrast, there is no legal obligation to offer dependent care assistance or flexible scheduling, and these benefits may have appeared as more discretionary, which subsequently strengthened their relation with APOS.

Turning to safety in particular, having safety policies and procedures may be seen as a non-discretionary employer action because they may be viewed as the result of legal regulations. In line with this, Eisenberger et al., (1997) said that government health and safety regulations could limit the discretion organizations have over many practices. Showing regard for workers' families in the *concern for family life* dimension, in contrast, may seem more discretionary because there is no clear guideline in this particular domain. Hence, the *concern for family life* dimension can be seen as an indicator of the employer's character because the employer chose to portray this content as opposed to acting because of regulations or external pressures. Since the details portrayed in the *policies and procedures dimension* may be seen as less discretionary in comparison to the information in *concern for family life*, the *policies and procedures*-APOS relation is weaker than the connection between APOS and *concern for family life*. H3: The *policies and procedures*- APOS relation is weaker than the *concern for family life*.

The interaction of dimensions in predicting APOS. The section above identified that *concern for family life* may be a stronger predictor of APOS than the *policies and procedures* dimension. This possibility may have implications for the

combined effect of these two dimensions. Specifically, research in social cognition suggests that when individuals form initial impressions of targets using multiple sources of information, which is common during recruitment (Kanar, Collins, and Bell, 2008), the effects of highly predictive or informative signals can be diluted by the addition of information that is not as informative.

This idea was supported in the work of Nisbett, Zukier, and Lemley (1981). They had individuals form impressions of targets using information that was both diagnostic and less diagnostic. Diagnostic information represents facts that allow individuals to make effective categorizations of targets. Or, it is information that is predictive of an outcome according to Nisbett et al. (1981). For instance, if one wants to determine if a person is mischievous, watching the target steal is diagnostic while viewing the target walking down the street is less diagnostic. Analogously, applicants may want to form an impression of an organization's supportive nature, and HR benefits may allow for inferences about support (i.e. they are more diagnostic), while the organization's name may be less diagnostic.

With this in mind, Nisbett et al. (1981) examined how individuals formed impressions of targets when they had diagnostic information and information that was not as predictive. For instance, they had participants rate targets' electrical shock tolerances and movie attendance patterns. They were given information that was more diagnostic, such as major (engineering vs. music), along with other information such as hometown, which was viewed as less diagnostic. The results in multiple studies suggested that individuals gave more extreme responses when they had only diagnostic information compared to when they had mixed information. In other words, the less diagnostic information diluted the effects of diagnostic information. Nisbett et al., (1981) argued that this occurred because of Tversky's (1977) features of similarity model. In this conceptualization, individuals compare targets to some outcome. Similarity between target and outcome leads to categorization as the outcome, and this similarity is positively related to common features and negatively related to distinct features. Diagnostic information promotes similarities between the target and outcome, while less diagnostic information creates distinctions. Ultimately, more distinctions will make categorization less likely even in the presence of diagnostic information (Nisbett et al., 1981). Based on this thinking, the presence of less diagnostic or predictive safety dimensions (policies and *procedures*) may weaken the effects of more diagnostic or predictive dimensions such as concern for family life.

The idea above suggests that the presence of the *policies and procedures* moderates the relation between the presence of *concern for family life* and APOS such that the relation becomes weaker when the *policies and procedures* dimension is present as opposed to absent. In the domain of POS, Casper and Buffari (2004) found some empirical support for a similar moderating effect even though they did not comment theoretically about their finding. They examined antecedents of APOS (scheduling flexibility and dependent care benefits) and found a negative interaction effect for these benefits while predicting APOS. Moreover, in this case, one antecedent was more predictive of the outcome than the other. Given the theoretical and empirical evidence above:

H4: The *policies and procedures* dimension moderates the relation between *concern for family life* and APOS such that the relation becomes weaker when the *policies and procedures* dimension is present as opposed to absent.

### **Organizational Reputation**

Organizational reputation is defined as the public evaluation of a firm compared to its competitors (Turban & Cable, 2003; Wayne & Casper, 2012). The section below will describe this concept and how it relates to the *recognized excellence* dimension. A central point about reputation is that it is meaningful to individuals because they want to associate themselves with groups of high status because this group membership positively impacts self-concept beliefs, which is a tenet of social identity theory (Tajfel & Turner, 1979).

Various research efforts have focused on the antecedents of applicant perceptions of organizational reputation. Cable and Graham (2000) performed several studies to address this topic. Using a verbal protocol analysis where individuals provided their thoughts while viewing job descriptions, these researchers qualitatively determined the antecedents of reputation. Of note, offering more opportunities for advancement seemed to be a prominent correlate. Other predictors included strong financial performance/ profitability, history, size, and familiarity. In a field study, they had individuals rate several organizational characteristics, such as profitability, culture, and familiarity. These subjects then provided their perceptions of organizational reputation of this topic, Wayne and Casper (2012) gave participants a rankings list that illustrated how a company's work-family polices and pay compared to other organizations. Higher ranking characteristics positively related to an organization's reputation.

Given these antecedents of reputation, safety messages emphasizing the superior performance of an organization may positively relate to organizational reputation. High levels on the *recognized excellence* dimension emphasize an employer's favorable safety performance, and this performance is often compared to others in the industry. Moreover, employers advertise that they won various awards for safety. In line with signaling theory, since these awards are granted by external organizations, advertising them implicitly signals to applicants that the organization is viewed favorably in the field. Such a favorable impression may encourage perceptions of organizational reputation.

**H5:** The presence of the *recognized excellence* dimension positively relates to organizational reputation.

#### **Perceptions of On-the-job Hazards**

While the hypotheses above have identified that three safety dimensions from websites may encourage many positive perceptions such as those of support, there is the possibility that safety information on a webpage may elicit negative reactions. This may be the case because having a safety page may remind individuals that there are dangers on the job that require safety precautions in the first place. This may make work or the work environment seem more hazardous. The following section, therefore, presents theory that may explain why seeing safety content could elicit thoughts of hazards and danger. In spite of this theory, the section that follows stresses that additional empirical and theoretical work has shown that safety content does not seem to have a negative effect, and in fact, it actually makes the job seem less hazardous to individuals. Given the comfort safety information can bring, this section argues that the information in *the policies and procedures* dimension may be especially reassuring to applicants.

Research in cognitive psychology helps to explain why safety content may elicit thoughts of hazard and danger. According to cognitive models of semantic networks, such as the work of Collins and Loftus (1975), individuals have representations of concepts that are linked together in a network in the mind. When an individual thinks of one concept, activation spreads throughout the network and related concepts come to mind as well. So, if one thinks of the color red, a fire engine may also come to mind due to its close association with the color. Given this cognitive representation of concepts, if safety thoughts are pertinent, spreading activation may mean that other related concepts, such as hazards and danger, could be brought to consciousness as well.

In spite of this theoretical idea, research in ergonomics suggests that thinking of safety does not elicit strong negative reactions. Wogalter et al. (1998) explored hazard

ratings when individuals saw signs containing words such as deadly, danger, warning, caution and safety first, which was supposed to "indicate general instructions about safe work practices, procedures..." (p. 127). Participants identified what level of hazards these signs indicated, and "safety first" was connected to a very low hazard rating. Words like danger, deadly, and warning were connected to significantly higher ratings of hazards compared to safety first. The words that were strongly tied to hazards, such as deadly and warning, did not seem to appear on safety websites previously examined (see Study 1 above). Therefore, evidence from ergonomics suggests that websites discussing safety are not likely to elicit strong perceptions of hazards in the workplace.

In fact, other evidence suggests that being surrounded by safety stimuli makes individuals feel less as opposed to more concerned about hazards. For instance, Leiter, Zanaletti, and Regentero (2009) found that perceptions of adequate safety training were negatively related to perceptions of risk on the job. Leiter and Robichaud (1997) complemented this finding as they discovered that adequate safety training and perceptions of organizational adherence to safety policies and procedures encouraged fewer perceptions of risk. Theoretically, these authors argued that safety training and other policies and procedures made workers feel that they were in control at work and that the working conditions were safe.

Given this previously described research, it seems that an emphasis on training and procedures relates to perceptions of fewer hazards. Extending this research to job applicants and signaling theory, the *policies and procedure* safety dimension may signal to workers that conditions will be safe and that they will have control in their environment. Such beliefs may cause applicants to think that the environment will be less hazardous. Based on this, it is hypothesized:

**H6:** The presence of the *policies and procedures* dimension negatively relates to perceptions of hazards on the job.

### Mediation: connecting APOS, reputation, and on-the-job hazards to attraction

The previous sections have identified that three safety content dimensions relate to APOS, reputation and perceptions of on-the-job hazards. The current section relates these three constructs to organizational attraction, which creates the foundation for a mediated relation between the safety dimensions and organizational attraction. APOS and reputation have been found to mediate the relation between organizational characteristics and attraction (Wayne & Casper, 2012); therefore, the current section briefly highlights the connection between these variables and attraction in order to ensure replication. Further, it describes how hazard perceptions may relate to organizational attraction, which is an avenue that has not been thoroughly explored in IO psychology.

In terms of APOS, in the context of signaling theory, Wayne and Casper (2012) said that applicants who expect support have more favorable schemas or representations of organizations, which should make the organizations more appealing. This idea is further supported by Cober et al.'s (2004) theoretical model that describes how websites affect attraction. They noted that organizational image, which they defined as "an individual's representation of an organization's character that exists at a given point in time" (p. 634), relates directly to attraction. So if an organization has a supportive image, this would serve to increase applicant attraction. Given APOS's relation with attraction and the previous hypotheses about the safety dimensions, it is hypothesized:

**H7:** APOS mediates the relation between the presence of the *policies and procedures* dimension and organizational attraction.

**H8:** APOS mediates the relation between the presence of the *concern for family life* dimension and organizational attraction.

Turning to organizational reputation, Turban and Cable (2003) studied why reputation may promote attraction. Social identity theory (Tajfel & Turner, 1979), for instance, suggests that the groups individuals belong to impact their self-concepts. By being a member or potential member of a prestigious organization, this may reflect well on individuals and enhance their self-concepts, which should make these organizations more appealing. Supporting this, Turban and Cable (2003) said: "Because corporate reputation reflects an organization's social status and provides information about how well the organization is perceived relative to its competitors, organizational affiliation reflects social status on members of the organization as well as potential members (i.e., job applicants)" (p. 735).

Moreover, they performed two studies to examine this topic. In the first, they coded the reputations of the companies that had come to campus by using different publically available rankings. They also coded the resumes of candidates who applied to these companies. The results showed reputation was positively related to number of applicants and the grade point averages of those who applied. A second study with a different sample found similar results. Given this research and the hypotheses above, it is hypothesized:

**H9:** Organizational reputation mediates the relation between the presence of the *recognized excellence* dimension and organizational attraction.

Perceptions of on-the-job hazards have not been explored as a predictor of organizational attraction; therefore, there is little research in IO psychology that sheds light on this topic. However, one can draw from the consumer psychology literature to address this topic, which is a tactic others have taken previously when discussing attraction (e.g., Cober et al., 2004).

Research in this domain has emerged that suggests that perceived risks make products less appealing. Theoretically, in the consumer literature, when individuals consider buying a product, they are concerned with the potential risk associated with their purchase. This may mean that they are concerned about the product underperforming or that financial loss may result from the purchase. Such risk often negatively impacts purchasing intentions (Yeung & Morris, 2006). For instance, Change and Wu (2012) found that risk, which was defined as concern over loss or injury (the loss in this case centered on the loss of privacy or financial injury), made individuals less likely to take part in online shopping. In other studies, when a trip was perceived as more risky (i.e., that it would lead to financial loss), individuals were less likely to have travel desires (Quintal, Lee, & Soutar, 2010). Yeung and Morris (2006) showed that individuals are less likely to buy food that is perceived as dangerous or potentially hazardous. Other studies have shown how risks associated with food discourage willingness to pay for products (e.g. Dillaway, Messer, Benard & Kaiser, 2011).

Extending these findings to the recruitment literature, if individuals feel an employment opportunity is more hazardous, they may feel that there is a higher probability of loss or injury (the loss or injury here is physical as opposed to financial). In line with the research above, this concern over loss may make an organization less appealing. Given this possibility and the evidence presented above about the formation of hazard perceptions, it is hypothesized:

**H10:** Perceptions of on-the-job hazards mediate the *policies and procedures*-organizational attraction relation.

#### Method

The hypotheses above can be tested via a 2 (presence vs. absence of *policies and procedures*) x 2 (presence vs. absence of *concern for family life*) x 2 (presence vs. absence of *recognized excellence*) between subjects design. The specifics of this design are described below<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> On many websites, the information from these dimensions is present or not present. The current

## Participants

This research will utilize undergraduate students because they are often looking for jobs and are familiar with searching the internet to explore organizations given the prominence of online recruitment through career services. They will be from diverse backgrounds, and relevant characteristics will be considered in the control variables section. Sample size requirements will be addressed during the discussion of the proposed analyses.

## Materials

**Websites.** Via Google Sites, websites will be made for a hypothetical organization known as Prezley Construction. The website will contain a home page describing the engineering, contracting, and construction work performed at the organization. It will also have an "About Us" page that describes the company's values. Finally, the site will have a safety page. This safety page will contain the different dimensions.

For the *policies and procedures* dimension, the condition will emphasize the importance of different safety procedures and policies. It will state: "We have various policies and procedures in place to ensure worker safety. We require monthly safety inspections, safety meetings for all staff, and 10 hours of various individualized trainings such as scaffold training." For the *recognized excellence* dimension, the site will read: "Our safety record is exemplary. It has proven to be better than many of our competitors. Our injury rate is well below the industry average, and in fact, we just received the National Construction Safety Excellence Award, which is given to an elite group of organizations in the industry." Last, for the remaining dimension, the condition will read: "Safety means more quality time with your family. At end of the day we want all employees to go home and enjoy time with their families. We want everyone to leave work happy and injury-free so time outside of the workplace can as productive as possible." For the site with no safety information, there will be a neutral filler page that presents the location of the office and contact information.

#### Measures.

**APOS.** To measure perceptions of support expectations, participants will respond to five items asking for the extent to which they agree with different statements. The scale will range from 1 (Strongly Disagree) to 7 (Strongly Agree). The items, which are

experimental design, therefore, would mirror real life websites.

taken directly from Wayne & Casper (2012), read: "If I were working at this company, I would feel supported at work"; "This company does little to support its employees;" "This company provides adequate support for its employees;" "Prezley Construction treats its employees well"; and "This company cares about its employees."

**Organizational Reputation.** Highhouse, Lievens, and Sinar's (2003) five item measure of organizational reputation will be used. Participants will rate the extent to which they agree with the following statements using a scale of 1 (strongly disagree) to 7(strongly agree). A sample item reads: Employees are probably proud to say that they work at this company.

*Perceptions of hazards.* This construct will be measured by a scale developed by Leiter and Robichaud (1997). They asked individuals to what extent they feel at risk of injury from various hazards using a scale of 1 (not at all at risk) to 7 (could not be more at risk). Their study explored airplane mechanics, so airplane related hazards (e.g. interaction with aircraft when the engines are off) are not included here. Instead, hazards were chosen only if they were general hazards that could apply to many organizations in the construction and contracting industry. The are: falling, lifting heavy objects, being cut by sharp objects, and being hit by large objects.

**Organizational attraction.** This will be measured with Highhouse, et al's (2003) five- item scale. Participants will rate the extent to which they agree with the following statements using a scale of 1 (strongly disagree) to 7(strongly agree). A sample item reads: For me, this company would be a good place to work.

*Control variables*. Students will be asked for age, gender, and major. They will also rate the extent to which they agree with the following statement using a 1 (strongly disagree) to 5 (strongly agree) scale. The item will read: "I use the internet to learn about potential employers when I look for jobs or internships." They will also provide their general attitude about the website using the scale from Bruner and Kumar (2000). Last they will state if they know someone who has been injured on the job, and they will identify using a scale of 1 (strongly disagree) to 5 (strongly agree) how much they agree with the following statement: I would consider pursing a job in the industry in which Presley Construction operates. These will be added as predictors of attraction, support, reputation, and perceptions of hazards.

*Manipulation Checks.* Individuals will rate the extent they agree with three statements using a scale of 1(strongly disagree) to 5 (strongly agree). The first reads: This company specifically highlighted the safety policies and procedures they have by

referencing mandatory trainings and safety inspections. The second check reads: This company advertised their superior safety record relative to competitors and referenced safety awards it had won. Lastly, they will respond to the following statement: this company specifically made it clear that safety means workers can return home at night to enjoy time with family.

#### Procedure

Participants will receive a link from Qualtrics. This program has a mechanism to randomly assign individuals to conditions, so it will assign subjects to one of the 8 different website conditions where they will be asked to read the content of Prezley's website. A physical website will be made, but for the ease of survey administration, participants will simply view images of individual pages as opposed to searching through the site. In other words, individuals will be told that they will see pictures from an organization's website. They will then see a picture of the website home page. They will click next and see a picture of the "About Us" page, and the safety page will come last. All individuals will see this safety page last to ensure consistency of ordering, and it will contain different content depending on the condition. After this, they will be asked to complete the measures of APOS, reputation, hazard perceptions, and website attitude. This will be followed by a filler task<sup>3</sup> where individuals are asked to take part in a word completion task. It will be described to subjects as a newly discovered predictor of website attitudes, and they will be given the first three letters of words and asked to complete each word. This will be followed by the measure of attraction, the manipulation checks, and the remaining control variables.

## **Proposed Analyses**

All hypotheses can be tested via path analysis. The model in figure 1 could be

<sup>&</sup>lt;sup>3</sup> I understand that the mediation I am proposing is dependent on two variables measured with the same method at essentially the same time. I argue, however, that this is one of the most feasible routes to examine mediation in the context of this study. To alleviate this problem with mediation, I could add time between the measurement of the mediator and final outcome, (e.g. ask participants a week later how attracted they are to an employer). This option, however, does not seem feasible because it seems unlikely that individuals will remember what they felt about the organization a week after seeing it for a very short period of time. I think they will basically be guessing or providing responses I would label as "junk variance." A filler task, in contrast, seems to be a reasonable way to separate the measurement of the mediator and outcome.

tested, and the covariates can be added. To test hypotheses three, equality constraints can be used to see how models fit when paths are set to be equal (here it is the *policies and procedures*- APOS path, and the *concern for family*- APOS paths that are of interest). A worse fitting model when these paths are set to be equal suggests that one path is different from another.

Using the work of MacCullum, Browne, & Sugawara (1996), 150 to 160 individuals will be needed to run these regressions. These authors offer approximations for sample size requirements needed to obtain power of .80. These sample size requirements correspond to values for the RMSEA, which should be no larger than .08 according to these authors. The sample size for this study may seem small, but there are 15 variables (7 values for the central variables, 7 values for the control variables, and a product term for the interaction) for a total of 120 distinct elements. This large number means the degrees of freedom are high, which reduces sample size requirements.

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#### **Appendix 1: Measures**

## APOS

- 1- Strongly Disagree
- 2- Disagree
- 3- Somewhat Disagree
- 4-Neither Agree nor Disagree
- 5- Somewhat Agree
- 6- Agree
- 7-Strongly Agree

If I were working at this company I would feel supported at work This company does little to support its employees This company provides adequate support for its employees Presley Engineering treats its employees well This company cares about its employees

# **Organizational Reputation**

- 1- Strongly Disagree
- 2- Disagree
- 3- Somewhat Disagree
- 4-Neither Agree nor Disagree
- 5- Somewhat Agree
- 6- Agree
- 7-Strongly Agree

Employees are probably proud to say they work at this company

This is a reputable company to work for.

This company probably has a reputation as being an excellent employer

I would find this company a prestigious place to work.

There are probably many who would like to work at this company.

## **Perceptions of Hazards**

Using the scale below, to what extent would you feel at risk of injury from the following hazards while working at this company:

1= not at all at risk

- 2= at minimal risk
- 3 = at some risk
- 4= at a noticeable amount of risk
- 5= at a large amount of risk
- 6= at a very large amount of risk
- 7 =could not be at any more risk

Hazards: Falling, lifting heavy objects, being cut by sharp objects, and being hit by large objects.

## **Organizational Attraction**

- 1- Strongly Disagree
- 2- Disagree
- 3- Somewhat Disagree
- 4-Neither Agree nor Disagree
- 5- Somewhat Agree
- 6- Agree
- 7-Strongly Agree
- 1. For me, this company would be a good place to work.
- 2. I would not be interested in this company except as a last resort.
- 3. This company is attractive to me as a place for employment.
- 4. I am interested in learning more about this company.
- 5. A job at this company is very appealing to me.

# **General Website Attitude**

- 1- Strongly Disagree
- 2- Disagree
- 3- Somewhat Disagree
- 4-Neither Agree nor Disagree
- 5- Somewhat Agree
- 6- Agree
- 7-Strongly Agree

I like the website I think it is a good website I think it is a nice website

## Age

Write Number What is your age? **Gender** Male or Female What is your gender?

# Major

List major

# **Internet Searching Behavior**

- 1- Strongly Disagree
- 2- Disagree
- 3- Somewhat Disagree
- 4-Neither Agree nor Disagree
- 5- Somewhat Agree
- 6- Agree
- 7-Strongly Agree

I use the Internet to learn about potential employers when I look for jobs or internships

# **Industry Preference**

- 1- Strongly Disagree
- 2- Disagree
- 3- Somewhat Disagree
- 4-Neither Agree nor Disagree
- 5- Somewhat Agree
- 6- Agree
- 7-Strongly Agree

I would consider pursing a job in the industry in which Presley Construction operates.

# Hurt on the job?

Yes or No

Do you know someone who has been injured at work?

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# **Biography**

Clifford R. Haimann received his Bachelor of Arts in Psychology and Economics from Northwestern University in 2010. He went on to receive his Master of Arts in Psychology at George Mason University in 2012, concentrating in Industrial & Organizational Psychology. He finished his Doctor of Philosophy in Psychology at George Mason University in 2014.