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## Investigating the Relationship Between Ethics Program Components, Individual Attributes, and Perceptions of Ethical Climate

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INVESTIGATING THE RELATIONSHIP BETWEEN ETHICS PROGRAM  
COMPONENTS, INDIVIDUAL ATTRIBUTES, AND PERCEPTIONS OF ETHICAL  
CLIMATE.

A thesis submitted in partial fulfillment of the  
requirements for the degree of  
Master of Science

by

AARON BUCHANAN

B.S., Olivet Nazarene University, 2014

2021

Wright State University

WRIGHT STATE UNIVERSITY  
GRADUATE SCHOOL

February 8<sup>th</sup>, 2021

I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY SUPERVISION BY Aaron Buchanan ENTITLED Investigating the Relationship Between Ethics Program Components, Individual Attributes, and Perceptions of Ethical Climate BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Master of Science.

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## ABSTRACT

Buchanan, Aaron. M.S., Department of Psychology, Wright State University, 2021.  
Investigating the Relationship Between Ethics Program Components, Individual  
Attributes, and Perceptions of Ethical Climate.

Though research has identified common outcomes of ethical work climates, less is known regarding its antecedents. Situational components such as ethics programs and individual, moral-related variables such as moral identity and moral attentiveness may influence the way employees perceive the ethical climate of their organization. I conducted t-tests and calculated bivariate correlations to determine if there were significant relationships between ethics program components, individual moral-related variables and ethical climate dimensions. My results ( $N = 422$  recruited from Mechanical Turk) revealed that ethics program components and individual, moral-related variables are significantly related to multiple dimensions of ethical climate. Most significant relationships were observed when caring, law and code, and rules climate dimensions were the outcomes, suggesting conceptual overlap between these climate dimensions. Also, it is likely that climate dimensions influence the types of employees who are attracted and hired.

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The ethical environment of an organization has received increased attention from researchers (e.g., Treviño, Butterfield & McCabe, 1998; Kaptein, 2009). The ethical work climate of an organization or work group influences various organizational outcomes, such as organizational commitment, job satisfaction, and dysfunctional behavior among others (e.g., Barnett & Shubert, 2002; Martin & Cullen, 2006; Victor & Cullen, 1988). Ethical work climate can be conceptualized as shared perceptions related to the practices, policies, and procedures of the organization (Victor & Cullen, 1988). Palmer and Zakhem (2001) discussed the impact of the Federal Sentencing Guidelines on organizations. These researchers suggested that using the Federal Sentencing guidelines as a framework can help organizations to develop and implement ethics programs and an ethical environment to guide behavior toward compliance with ethical standards (Palmer & Zakhem, 2001). In addition to ethics programs, research has suggested that certain moral attributes of individuals influence perceptions of the ethical work climate (e.g., Reynolds, 2006; Reynolds, 2009; Treviño, den Nieuwenboer, & Kish-Gephart, 2014). Though there are separate streams of research that investigate ethics programs (e.g., Delaney & Sockell, 1992; Kaptein, 2009; Weber, 1990b) and individual moral-related attributes (e.g., Aquino & Reed, 2002; Hertz, & Krettenauer, 2016; Rice, 2006), research related to the way in which these variables influence perceptions of ethical climate is lacking (Treviño, den Nieuwenboer, & Kish-Gephart, 2014). Thus, the purpose of my study is to investigate the effects of ethics program components and individual attributes on perceptions of ethical work climates.

## **Organizational Climate**

A dimension of the organizational environment thought to influence employee behavior is organizational climate. Foundational research in the area of organizational climate was conducted by Lewin, Lippitt, and White (1939). Lewin, Lippitt, and White were interested in the effects of different leadership styles on the group behavior of school-aged boys. To test this, these researchers selected three leaders to lead three groups of boys. Each leader was assigned a different leadership style, i.e., authoritarian, democratic, or laissez-faire. Every six weeks, the leaders would switch groups so that each group of boys experienced each leadership style. Group behavior was assessed by counting the number of aggressive behaviors that each group displayed under the differing leadership styles. The results of the experiment showed that the authoritarian style of leadership produced the most aggressive behaviors and that the “social climate” created by that leadership style contributed to the increased aggression (Lewin, Lippitt, & White, 1939).

**Definitions and distinctions within the climate construct.** As research into the climate construct began to increase, James and Jones (1974) differentiated between distinct levels of the climate construct. These researchers noted the difference between organizational climate and psychological climate in that “Organizational climate refers to organizational attributes, main effects, or stimuli whereas psychological climate refers to individual attributes” (James & Jones, 1974, p. 1110). This distinction was crucial when analyzing data regarding climate. Data analyzed at the individual level reflects psychological climate whereas data analyzed as an aggregation reflects organizational climate. Although a useful distinction, this led to a proliferation of definitions for

specific climates reflecting the psychological level and organizational level, respectively. Verbeke and colleagues (1998) identified similarities in the various definitions and noted that organizational climate could be broadly defined as employees' shared perceptions regarding important characteristics of their organizations.

Other climate researchers made important distinctions in the field as well (e.g., Schneider & Snyder, 1975, Zohar, 1980). Schneider and Snyder (1975) investigated the relationship between job satisfaction and organizational climate. Although there were moderate correlations between aspects of satisfaction and organizational climate, Schneider and Snyder's research provided support for satisfaction and climate as distinct constructs. Organizational climate could be thought of as a "characteristic of the organization reflected in the work environment" whereas job satisfaction could be thought of as an "affective response of individuals which is reflected in the evaluations employees make..." (Schneider & Snyder, 1975, pp. 326). Additionally, these researchers suggested that departments within an organization might have different climates. Furthermore, a single department might have multiple climates such as a climate for safety and a climate for ethics. Because of this possibility, investigations into the climate construct should specify a "climate for something" (Schneider & Snyder, 1975, pp.327). This suggestion led researchers to define and find support for specific climates such as the climate for safety (Zohar, 1980) and a climate for ethics (Victor and Cullen, 1988).

**Ethical Climate.** Of interest to me is the climate for ethics identified by Victor and Cullen (1988). Victor and Cullen defined a climate for ethics as "the prevailing perceptions of typical organizational practices and procedures that have ethical content"

(Victor & Cullen, 1988, pp. 101). Victor and Cullen proposed a framework for the ethical climate construct and identified nine potential climate types based on three ethical criteria (i.e., Egoism, Benevolence, Principle) at each of three loci of analysis (i.e., Individual, Local, Cosmopolitan). The ethical criteria defined by Victor and Cullen describe the criteria that individuals use when making ethical decisions. For example, an individual operating within the context of an egoistic climate might make consider self-interest only when making ethical decisions. An individual operating within the context of a benevolent climate might take into consideration the well-being of others when making ethical decisions. Finally, an individual operating within the context of a principled climate might take into consideration the rules and laws of the organization or society when making ethical decisions.

The loci of analysis represent the sources of influence on ethical reasoning (Victor & Cullen, 1988). For example, the individual locus of analysis represents sources within the individual that influence ethical reasoning, such as personal ethics. The local locus of analysis represents sources within the organization that influence ethical reasoning, such as a team or work group. The cosmopolitan locus of analysis represents sources outside of the organization that influence ethical reasoning, such as professional associations (e.g., American Bar Association, American Psychological Association).

The ethical criteria and the loci of analysis have differential relationships that make up the theoretical ethical climate types (e.g., Martin & Cullen, 2006; Victor & Cullen, 1988). In the context of egoism, the focus at the Individual, Local, and Cosmopolitan levels is on self-interest, company profits, and efficiency, respectively. In the context of benevolence, the focus at the Individual, Local, and Cosmopolitan levels is

on friends, the team, and social responsibility, respectively. In the context of Principle, the focus at the Individual, Local, and Cosmopolitan levels is personal morality, company rules, and laws and professional codes.

Victor and Cullen (1988) developed the Ethical Climate Questionnaire to test for the nine climate types they proposed (Figure 1). Factors that emerged supported five of the nine factors with various results both within and between different organizations. These five climate factors (Figure 2) were rules, law and code, instrumental, independence, and caring. A rules climate represents the principles ethical criterion at the local level of analysis, suggesting that ethical decision-making is influenced by internal organizational processes such as codes of conduct (Martin & Cullen, 2006). A law and code climate represents the principled ethical criterion and the cosmopolitan level of analysis, suggesting that ethical decision-making is influenced by external sources such as laws of society or codes of conduct from professional societies. An instrumental climate represents the egoism ethical criterion at the individual and local levels of analysis, suggesting that ethical decision-making is influenced by organizational norms that encourage employees to make decisions in the best interest of themselves or the best interests of the organization. An independence climate represents the principle ethical criterion at the individual level of analysis, suggesting that ethical decision-making is influenced by personal ethics or personal morals. Finally, a caring climate represents the benevolence ethical criteria at the individual and local level of analysis, suggesting that ethical decision-making is influenced by consideration and concern for the well-being of others. Victor and Cullen suggested that the type of ethical climate

affected ethical decision-making as well as the type of ethical issues that are considered within the organization.

**Figure 1**

*Theoretical Factors of Ethical Climate. Adapted from Victor, B. & Cullen, J. B. (1988). The Organizational Bases of Ethical Work Climates. Administrative Science Quarterly, 33(1), 101-125.*

		<i>Locus of Analysis</i>		
		Individual	Local	Cosmopolitan
<i>Ethical Theory</i>	Egoism	Self-Interest	Company Profit	Efficiency
	Benevolence	Friendship	Team Interest	Social Responsibility
	Principle	Personal Morality	Company Rules and Procedures	Law and Code

**Figure 2**

*Factors Resulting from Empirical Analysis. Adapted from Martin, K.D. & Cullen, J.B. (2006) Continuities and Extensions of Ethical Climate Theory: A Meta-analytic Review, Journal of Business Ethics, 69, 175-194.*

		<i>Locus of Analysis</i>		
		Individual	Local	Cosmopolitan
<i>Ethical Theory</i>	Egoism	Instrumental		
	Benevolence	Caring		
	Principle	Independence	Rules	Law and Code

**The effects of ethical climate.** Since the development of the Ethical Climate Questionnaire and Ethical Climate Theory, numerous studies have provided support for relationships between facets of the ethical climate construct and a variety of outcomes (e.g., Agarwal & Malloy, 1999; Banerjee, Cronan, & Jones, 1998; Barnett & Schubert, 2002). For example, Barnett and Schubert (2002) investigated the effects of ethical climate on covenantal relationships between employees and the organization. A covenantal relationship is characterized by commitment of the employer and the employee to shared values (Barnett & Schubert, 2002). Barnett and Schubert found that there was a negative relationship between egoistic ethical climates and covenantal relationships. However, their results provided evidence of a positive relationship between benevolent and principled climates and covenantal relationships. This was

particularly true for benevolent climates in organizations that emphasized social responsibility (Barnett & Schubert, 2002).

Other research has focused on the criterion level of ethical climates and provided evidence for significant relationships with organizational commitment. Cullen, Parboteeah, and Victor (2003) found that egoistic climates have a negative relationship with organizational commitment whereas benevolent and principled climates have positive relationships with organizational commitment. Similarly, Kelley and Dorsch (1991) found evidence for a relationship between ethical climate and organizational commitment. Kelley and Dorsch sampled purchasing executives and found positive relationships for the caring and rules dimensions of ethical climate and organizational commitment and a negative relationship between the instrumental dimension and organizational commitment. These findings suggest that organizations need to consider ethical climate if they want to improve their employees' commitment to the organization.

Additionally, researchers have found evidence of a relationship between ethical climate and job satisfaction (e.g., Deshpande, 1996b; Joseph & Deshpande 1997). Deshpande (1996b) investigated the effects of ethical climate on facets of job satisfaction in the non-profit sector. Deshpande's results suggested that ethical climate dimensions are significant predictors of job satisfaction facets except for pay satisfaction. In a similar study in the non-profit sector, Joseph and Deshpande (1997) found evidence that ethical climate types influence facets of job satisfaction. For example, Joseph and Deshpande found that a caring climate positively influenced overall job satisfaction as well as satisfaction with pay and satisfaction with supervisors. A rules climate had a positive relationship with satisfaction with pay, promotion, supervisor and overall job



satisfaction. Alternatively, an efficiency climate had a negative relationship with satisfaction with supervisors. These results suggest that climate types focused on self-interest result in lower levels of satisfaction with supervisors and that climate types that focus on others or principles and rules have more positive effects on satisfaction (Joseph & Deshpande, 1997).

**Ethical climate and unethical behavior.** Many researchers have focused on ethical climate types and their effects on employee behavior (e.g., Applebaum, Deguire, & Lay, 2005; Peterson, 2002; Treviño, Butterfield, & McCabe, 1998). Peterson (2002) investigated the effects of ethical climate dimensions on forms of workplace deviance. Peterson was interested in whether types of workplace deviance could be predicted by ethical climate types. Peterson used Robinson and Bennet's (1995) definition of workplace deviance as a basis for his investigation. Robinson and Bennet defined workplace deviance as "...voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both." (Robinson & Bennett, 1995, pp. 556). Peterson used the Ethical Climate Questionnaire (Victor & Cullen, 1988) to measure different climate types and used items from Robinson and Bennett's (1995) measure of self-reported workplace deviance. Peterson found that ethical climate types partially predicted workplace deviance. For example, employees in organizations that have egoistic climates are more likely to engage in production deviance (working slow, taking longer than normal breaks, etc.). Additionally, employee-focused climates had reduced political deviance (favoritism, gossiping, etc.). Though workplace deviance differs from unethical behavior, Peterson's results illustrate the influence of ethical climate dimensions on behavior.

Treviño, Butterfield, and McCabe (1998) found mixed results regarding climate and unethical behavior as reported by others. These researchers investigated the effects of the ethical context (which they referred to as both culture and climate) of the organization in their influences on attitudes and behavior. Treviño and her colleagues made a distinction between ethical culture and ethical climate. These researchers suggested that ethical culture reflected formal and informal control systems within an organization whereas ethical climate reflected the qualities or characteristics of the organization (Treviño, Butterfield, & McCabe, 1998). Treviño and her colleagues suggested that ethical climate had a stronger relationship with attitudes and ethical culture had more influence on behavior. However, I assert that formal and informal control systems are qualities or characteristics of the organization, blurring the lines between ethical culture and ethical climate. Thus, I will use the term ethical climate when discussing research related the ethical environment in an organization.

Treviño and her colleagues (1998) used the Ethical Climate Questionnaire to assess relationships between ethical climate and organizational commitment and observed unethical behavior. The sample consisted of a variety of age groups, industries, and organizational sizes as well as whether the organization had a set of ethical codes. The findings indicated differences between code and non-code organizations. For example, ethical climate items explained more variance in unethical conduct in non-code organizations. These findings are intriguing given the definition of ethical climate by Victor and Cullen (1988). If ethical climate consists of perceptions of organizational practices and procedures with ethical content, then one would expect that climate would have a stronger influence on behavior in organizations that have ethics codes rather than

those that do not. In summary, Treviño et al.'s findings suggested that under certain circumstances, ethical climate dimensions predict unethical behavior.

More recent research has connected ethical climate to unethical behavior. In response to critiques of Victor and Cullen's (1988) conceptualization, Arnaud (2010) developed the Ethical Climate Index (ECI), which is a self-report measure based on Rest's (1986) model of ethical behavior. Arnaud argued that the conceptualization of ethical work climate by Victor and Cullen was too narrow and did not accurately reflect the scope of the construct. Arnaud proposed that ethical work climates consisted of four dimensions: collective moral sensitivity, collective moral judgment, collective moral motivation, and collective moral character. Arnaud found that there were moderate to high correlations between ethical climate dimensions and ethical behaviors. However, Arnaud pointed out that factors of the Ethical Climate Index are associated with different types of ethical behavior. If that is the case, then organizations could predict the types of ethical behaviors that employees are likely to engage in (Arnaud, 2010).

**Antecedents of ethical climate.** Research has focused on the outcomes of ethical climate types. However, less research has focused on the antecedents of ethical climate types. Two studies have summarized the literature with respect to antecedents of ethical climate types (Martin & Cullen, 2006; Simha & Cullen, 2012). In their reviews of the ethical climate research, Martin and Cullen (2006) and Simha and Cullen (2012) identified three categories of antecedents to ethical climate types. These researchers identified external organizational context, organizational form, and strategic and managerial orientations as antecedents of ethical climate. External organizational context is characterized by influence on organizations such as codes of conduct of professional

societies or regulations on the industry by a governing body. Organizational form is characterized the normative structure of the organization. Strategic and managerial orientations describe characteristics and orientations of leaders that influence climate perceptions.

Notably lacking in the research on antecedents of ethical climate are individual attributes of employees that might influence climate perceptions. If ethical climate emerges as a result of shared perceptions of practices, policies, and procedures, then attributes of individuals may shape the way individuals perceive these practices, policies, and procedures. Thus, the goal of the current study is to further our understanding of the antecedents of ethical climate perceptions.

In my study, I will focus on two sets of predictors and their influences on perceptions of ethical climate factors. The first set of predictors are features of the organization, specifically components of ethics programs. The second set of predictors are individual moral-related attributes. I will investigate the main effects of each of these predictors on perceptions of ethical climate factors.

### **Organizational Antecedents: Ethics Program Components**

Ethics program components are organizational antecedents. Organizations try to influence and control the ethical behavior of their employees through the institution of ethics programs (Adams, Taschain, & Shore, 2001). Ethics programs consist of a system of components such as a formal code of ethics, ethics training, an ethics office(r), an ethics hotline and a formal disciplinary system (Palmer & Zakhem, 2001). In addition to influencing behavior, researchers have suggested that organizations use ethics programs to institute an ethical environment within an organization (Kaptein, 2009).

Understanding the ways in which ethics programs influence perceptions of the ethical environment and ethical behavior is crucial for organizations wishing to institute an environment that fosters ethical behavior.

One framework from which to understand the influence of ethics program components on climate perceptions and behavior is situational strength theory (e.g., Meyer et al., 2010; Mischel, 1968). Situational strength theory posits that implicit or explicit cues in the environment either enhance or attenuate the effects of individual traits on behavior (Meyer et al., 2010). A strong situation is one in which cues are perceived similarly across individuals providing individuals with uniform expectancies, reducing behavioral variance resulting from individual traits. A weak situation is one in which cues are either nonexistent or ambiguous, increasing the behavioral variance resulting from individual traits. Situational strength theory provides a theoretical basis for investigating the influence of ethics programs on ethical climate perceptions.

The presence (absence) of various components of an ethics program may contribute to strong (weak) situations influencing climate perceptions. As an example, the presence of ethics codes may provide employees with clarity regarding organizational expectations of ethical conduct and communicate to employees the importance of behaving ethically (Meyer et al., 2010). Similarly, the presence of formal ethics training may provide employees with both clarity and consistency, contributing to the strength of the situation and reinforcing the importance of ethical conduct. Finally, the presence of rewards for ethical behavior and sanctions for unethical behavior may provide further clarity and consistency with respect to expected ethical conduct. Ethics program

components provide organizations with an impetus for controlling ethical behavior and influencing perceptions of the organization's ethical environment.

A discussion about ethics program components should begin with a discussion of the Federal Sentencing Guidelines that were passed in 1991. Palmer and Zakhem (2001) outlined the purpose of the Federal Sentencing Guidelines and the implications of the guidelines for organizations. The Federal Sentencing Guidelines were passed with the purpose of establishing set criteria and consistency in the sentencing process (Palmer & Zakhem, 2001). These criteria include sentencing guidelines for organizations that detail a range of fines for offenses of varying degrees. The guidelines list seven requirements that must be implemented by organizations to achieve compliance. Organizations must establish compliance standards and procedures, establish a system for compliance oversight, establish compliance authorities, provide training to explain and communicate requirements, establish monitoring and ethics audits, provide a disciplinary system, and take preventative measures to avoid violation of the guidelines moving forward. Palmer and Zakhem argued that the guidelines provide a framework for implementing ethics and compliance programs and that they allow organizations flexibility to develop their programs in the way they see fit. Palmer and Zakhem suggested that adopting a code of ethics is not enough and that factors such as the ethical context should be taken into consideration when implementing ethical compliance programs (Palmer & Zakhem, 2001).

**Ethics Codes.** Following the establishment of the Federal Sentencing Guidelines, organizations began to create and adopt ethics codes and standards (Palmer & Zakhem, 2001). Researchers began investigating the effectiveness of ethics codes on employee

behavior (e.g., Adams, Taschain, & Shore, 2001; Delaney & Sockell, 1992; Kaptein, 2009). Delaney and Sockell (1992) sampled graduates of an MBA program and asked whether the companies in which they worked had formal programs to assist employees with ethical issues and whether the companies had a system of exposing employees to ethical issues that might arise. Their results indicated that the presence of a formal ethics program reduced the likelihood that employees would act unethically in the face of an ethical dilemma and reduced the likelihood that employees felt they had to act unethically to get ahead (Delaney & Sockell, 1992).

Adams, Taschain, and Shore (2001) extended Delaney and Sockell's (1992) research by investigating the relationship between ethics codes and observed unethical behavior. Adams and colleagues conducted interviews with 766 business professionals who had experienced ethical dilemmas at work. Participants indicated whether their company had an ethics code and whether they could recall the content of the code, rated the ethical behavior of top managers, supervisors, peers, subordinates, and themselves, and rated the level of company support they felt. Those who worked in companies with a code of ethics reported higher levels of company support, higher levels of satisfaction with outcomes of ethical dilemmas, more frequent encouragement to behave ethically, and felt less pressure to behave unethically than those who worked in a company without a code of ethics. Adams and colleagues suggested that the presence of an ethics code might be enough to influence ethical behavior because most participants could not remember the specifics of their ethics code.

There has been limited research on the effect of ethics codes on employees' perceptions of their ethical work climate (e.g., Kaptein, 2009; Martin & Cullen, 2006;

Treviño et al., 2014). Related research by Kaptein (2009) investigated the effects of ethics program components on ethical climate and components of ethical climate. Kaptein defined ethical climate as an aspect of the organizational environment that represents shared values, beliefs, and experiences that influence (un)ethical behavior. He used a multi-dimensional approach for both ethical climate and ethics programs to investigate the relationships between the components. Kaptein found that the presence of ethics codes was a significant predictor of total climate scores as well as a significant predictor of multiple components of ethical climate. Consistent with this research, I expect that the presence of ethics codes will be related to levels of ethical climate factors.

**Hypothesis 1:** The presence versus absence of an ethics code is related to levels of the ethical climate dimensions of rules, law and code, instrumental, independence, and caring.

**Formal Ethics Training.** Ethics training is used by organizations to improve the moral reasoning of their employees, communicate ethics-related policies, and raise awareness about ethics-related issues in the workplace (e.g., Loe & Weeks, 2000; Martin & Cullen, 2006). Research on ethics training has investigated the effects of formal training programs on various organizational outcomes (e.g., Valentine, 2009; Warren, Gaspar, & Laufer, 2014). For example, Valentine and Fleishman (2004) found that hours of ethics training were positively related to job satisfaction. In related research, Valentine (2009) surveyed salespeople and found that hours of ethics training were positively related to employees' satisfaction with supervisors and coworkers. Additionally, Valentine found that hours of ethics training were positively related to corporate ethical values and the ethical culture of the organization.



Much of the research on ethics training has investigated behavior or attitudinal outcomes (e.g., Martin & Cullen, 2006; Waples et al., 2009). Other researchers have suggested that ethics training could have important implications for perceptions of a climate regarding ethics (Valentine & Fleischman, 2004; White & Lam, 2000). For example, Valentine and Fleischman (2004) found a significant positive relationship between the presence of formal ethics training and employee perceptions of the ethical environment. Though these researchers did not study a climate regarding ethics directly, their results suggest that the mere presence of ethics training indicates to employees that ethics is valued by the organization. Consistent with this research, I expect that the presence of formal ethics training will be associated with climate dimensions as identified by Victor and Cullen (1988).

**Hypothesis 2:** The presence versus absence of formal ethics training is related to levels of the ethical climate dimensions of rules, law and code, instrumental, independence, and caring.

**Ethics hotline.** Another component important to ethics programs is an ethics hotline. An ethics hotline is a communication system that employees can use to discuss ethical issues they might have encountered (Kaptein, 2009). Typically, ethics hotlines are studied in conjunction with other elements of ethics programs (Weaver, Treviño, & Cochran, 1999). For example, Kaptein (2009) included ethics hotlines as a variable in his study of ethics programs and their effect on ethical climate. Kaptein found that ethics hotlines significantly predicted perceptions of ethical climate, suggesting the influence of this ethics program component on employee perceptions of a component of the ethical environment.

Much of the research involving ethics hotlines investigated their effect on behavior or ethical climate (e.g., Weaver, Treviño, & Cochran, 1999; Kaptein, 2009). To my knowledge, this will be the first study to investigate the effects of ethics hotlines on employees' perceptions of ethical climate dimensions as defined by Victor and Cullen (1988). I expect that the presence of an ethics hotline will be associated with climate dimensions.

**Hypothesis 3:** The presence versus absence of an ethics hotline is related to the levels of the ethical climate dimensions of rules, law and code, instrumental, independence, and caring.

**Disciplinary system.** The Federal Sentencing Guidelines' recommendations for ethics programs included a disciplinary system (Palmer & Zakhem, 2001). Some researchers have investigated the effect that disciplinary systems have on various organizational outcomes (e.g., Kaptein, 2009; Treviño et al., 1999). Treviño and colleagues (1999) investigated the effects of rewarding ethical behavior and punishing unethical behavior. These researchers found significant relationships between reward and punishment for various organizational outcomes, such as ethical conduct, ethics awareness, likelihood of reporting violations, and employee commitment. However, Treviño and colleagues considered the reward and punishment of ethical and unethical conduct a component of ethical culture rather than a component of an ethics program.

Others have considered the disciplinary system as a component of an ethics program (Kaptein, 2009). Kaptein (2009) considered "incentive and reward policies" as a component of an ethics program. He operationalized ethics programs components as existing or non-existing. Kaptein found that the presence of a disciplinary system was a

significant predictor of perceptions of ethical climate. In addition, his results suggested that the disciplinary system had a significant effect across multiple components of ethical climate, with its strongest effect on the transparency of the organization. Kaptein's work focused on one aspect of the ethical environment of the organization. To my knowledge, there has not been any empirical research on the presence of a disciplinary system and perceptions of a climate regarding ethics. Because ethical climate perceptions are perceptions of the organization's practices, policies, and procedures regarding ethical conduct, I expect that the presence of a disciplinary system for ethical and unethical conduct will be associated with climate dimensions.

**Hypothesis 4:** The presence versus absence of a disciplinary system for (un)ethical conduct is related to the levels of the ethical climate dimensions of rules, law and code, instrumental, independence, and caring.

**Ethics Office(r).** An ethics office or an ethics officer are considered part of an organization's ethics program. This entity might be in charge of developing policies regarding ethics, auditing ethical conduct of employees, and evaluating current ethical policies enacted by the organization (Weaver, Treviño, & Cochran, 1999). Kaptein (2009) included the ethics office(r) as a component of an ethics program in his investigation of ethics programs and ethical climate. He found that the presence of an ethics office(r) significantly predicted perceptions of ethical climate. In addition, Kaptein found that presence of an ethics office(r) had a significant influence across multiple components of ethical climate such as clarity, feasibility, congruency management, congruency supervision, and sanctionability. Again, Kaptein operationalized the ethics office(r) component of ethics programs as the presence or absence. His results suggested

that the presence of an ethics office(r) had a significant effect on perceptions of ethical climate. Consistent with this research, I expect that the presence of an ethics office(r) will be associated with ethical climate dimensions.

**Hypothesis 5:** The presence versus absence of an ethics office(r) is related to the levels of the ethical climate dimensions of rules, law and code, instrumental, independence, and caring.

### **Individual Antecedents: Moral Attributes and Values**

Although organizational environment variables are important to consider in behavioral ethics research, attributes of the individual cannot be overlooked (e.g., Reynolds, 2006; Treviño, 1986). Research on moral development and ethical decision-making (Kohlberg, 1969; Rest, 1986) laid the groundwork for more recent research on individual moral attributes. One of these individual attributes is moral awareness, which is thought to be the first crucial step an individual takes in the ethical decision-making process (Rest, 1986). Similar to the moral awareness construct is the construct of moral attentiveness (Reynolds, 2008). Moral identity is another important characteristic that influences moral behavior (Hertz & Krettenauer, 2016). Finally, personal values might influence moral behavior (Schwartz, 1994). Each of these variables has important implications for ethical behavior and perceptions of the organizational environment.

**Moral Awareness.** Researchers have defined the moral awareness construct in three different ways (Jordan, 2006). Rest's (1986) original definition of moral awareness (moral sensitivity) was multidimensional. Rest suggested that not only is moral awareness composed of an individual's ability to recognize the moral content of a situation, but it includes also an individual's affective response to the situation and to

those involved in the situation. Other researchers have defined moral awareness in terms of recognition only (e.g., Hebert et al., 1990; Reynolds, 2006). For example, Hebert and colleagues (1990) operationalized moral sensitivity in terms of the number of ethical issues that medical students were able to identify in five different vignettes. Similarly, Reynolds (2006) defined moral awareness as an individual's recognition that the dilemma in question can be considered from a moral point of view. Finally, some researchers have defined moral awareness in terms of recognition and the importance of the moral issue in question (e.g., Hunt & Vitell, 2006; Robin et al., 1996). For example, an individual may recognize that a certain situation has moral content (recognition). The individual will then judge whether the moral issue is important or relevant. Perceived importance of the moral issue is thought to activate the ethical decision-making process (Robin et al., 1996). Individuals will perceive moral issues differently, depending on their own personal attributes as well as characteristics of their environment. Researchers have argued that unless the moral issue in consideration is deemed important, the issue will not be considered from a moral point of view. However, for an individual to deem a moral issue important or not first requires the recognition that an issue has moral content. Thus, for the purposes of this research, I will define moral awareness as an individual's ability to recognize the moral content of a situation.

Rest's (1986) model of ethical decision making has served as the foundation of the moral awareness research (Jones, 1991; Reynolds, 2006). This model has four components, consisting of moral sensitivity, moral reasoning, moral motivation, and moral character. Rest's moral sensitivity component is what many researchers refer to as moral awareness and that is how I will refer to the component throughout the rest of this

paper (e.g., Jordan, 2009; Reynolds, 2006). As moral awareness is the first step in the ethical decision-making process, it is arguably the most important step. An individual's ability to recognize the moral content of a situation can determine how that individual approaches that situation as well as how that individual decides to act in that situation (Jordan, 2009; Sturm, 2017).

**Moral Awareness Cues.** Researchers have suggested that there are a variety of factors that trigger an individual's moral awareness (e.g., Jones, 1991; Reynolds, 2006). For example, Jones (1991) proposed that an issue's moral intensity will trigger an individual's moral awareness. Jones defined moral intensity in terms of the characteristics of the moral issue itself, including magnitude of the consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect. Moral intensity increases if there is an increase in any of these variables. Jones argued that a combination of these issue characteristics worked to influence an individual's moral awareness through the salience and vividness of the moral issue in question. In addition, Jones suggested that individuals must be able to recognize that they are moral agents. This means that individuals must recognize that the decision they make in the face of a moral dilemma will affect others and that a choice must be made. If individuals fail to recognize that they are moral agents and that their decision may affect others, then activation of a moral schema is unlikely and they will consider the dilemma from the perspective of a different framework.

Researchers have found support for Jones' (1991) framework (e.g., Butterfield et al., 2000; Jordan, 2009). Jordan (2009) found that business managers identified fewer moral-related issues in a provided vignette than did academics. These results suggested

that moral awareness is influenced by an individual's dominant schema. Jordan argued that managers spend a majority of their time making decisions based on a business schema whereas academics spend a majority of their time making decisions based on a moral schema. In addition, Jordan found that second year business students had significantly lower perceptions of moral content than did first year business students, suggesting that professional socialization affects moral awareness. Butterfield and colleagues (2000) found that multiple variables such as the magnitude of consequences, a competitive context, and perceived social consensus were significant predictors of moral awareness.

Other researchers have investigated how factors external to the dilemma itself trigger moral awareness (e.g., Decelles et al., 2012; VanSandt et al., 2006). For example, Decelles and colleagues (2012) investigated the influence of power on moral awareness. Their results suggested that power and an individual's moral identity interact to influence moral awareness such that the relationship between power and moral awareness is positive when moral identity was high but negative when moral identity was low. VanSandt and colleagues (2006) examined the relationship between the organization's ethical climate and moral awareness. Based on the ethical climate construct proposed by Victor and Cullen (1988), Vansandt and colleagues found that ethical climate was a significant predictor of an individual's level of moral awareness. Although moral awareness was studied as an outcome in their research, they suggested that the relationship between ethical climate and moral awareness could be reciprocal in that, "individuals with certain levels of moral awareness may help to alter an organization's ethical climate to a different locus of analysis and/or ethical criterion..." (Vansandt et al.,

2006, pp. 425). Consistent with this suggestion, I propose that moral awareness is related to ethical climate dimensions.

**Hypothesis 6:** Moral awareness is related to the ethical climate factors of rules, law and code, instrumental, independence, and caring.

**Moral Attentiveness.** Reynolds (2008) defined moral attentiveness as the extent to which individuals perceive and attend to moral-related content in their everyday experiences. Unlike moral awareness, which requires the presence of a dilemma, morally attentive individuals code incoming information and recognize moral-related content more than morally inattentive individuals. Reynolds argued that individuals high in moral attentiveness perceive incoming stimuli using a chronically accessible moral framework. Individuals who continually access a moral cognitive framework become increasingly aware of the moral aspects of everyday life, implying that moral attentiveness is a stable construct. Reynolds determined that moral attentiveness was made up of two factors, perceptual moral attentiveness and reflective moral attentiveness. Perceptual moral attentiveness describes how an individual perceives incoming information. Other research on chronic accessibility have suggested that these frameworks operate automatically (Bargh & Pratto, 1986). Conversely, reflective moral attentiveness requires that individuals examine past experiences, suggesting a more deliberate process.

Research has provided support for the moral attentiveness construct and its influence on moral awareness and behavior (e.g., Reynolds, 2008; Sturm, 2017). Through validation of his moral attentiveness measure, Reynolds (2008) found perceptual moral attentiveness to be a significant predictor of self-reported moral behavior as well as



other-reported moral behavior. In addition, his results suggested that there was a positive relationship between moral attentiveness and moral awareness, but only reflective moral attentiveness was a significant predictor of moral awareness. Sturm (2017) found evidence of a relationship between moral attentiveness and moral awareness and moral attentiveness and ethical behavior. Sturm found a negative relationship between perceptual moral attentiveness and moral awareness and a positive relationship between reflective moral attentiveness and moral awareness. In addition, Sturm found that the relationship between reflective moral attentiveness and ethical behavior was mediated by moral awareness.

Much of the focus of behavioral ethics research has focused on ethical behavior as an outcome. This is true as well for the more recent research on moral attentiveness (e.g., Reynolds, 2008; Sturm, 2017). However, moral attentiveness has important implications for how individuals perceive their organizational environment. Similar to moral awareness, I expect that perceptual moral attentiveness will be associated with ethical climate dimensions. Furthermore, I expect that higher levels of reflective moral attentiveness will be associated with perceptions of climate dimensions because reflective moral attentiveness and climate perceptions both require conscious examination of the work environment.

**Hypothesis 7:** Perceptual moral attentiveness is related to the ethical climate factors of rules, law and code, instrumental, independence, and caring.

**Hypothesis 8:** Reflective moral attentiveness is related to the ethical climate factors of rules, law and code, instrumental, independence, and caring.

**Moral Identity.** Another individual characteristic important to the behavioral ethics literature is moral identity (e.g., Aquino & Reed, 2002; Blasi, 1983). Research on moral identity is rooted in social identity theory (Erikson, 1964). According to social identity theory, individuals have multiple social identities that are conceptions of the self that can be activated or suppressed by the immediate context. This would suggest that social identities consist of relatively stable individual attributes that can be triggered by different situations. Aquino and Reed (2002) proposed that moral identity is “a self-conception organized around a set of moral traits” (pp. 1424). Erikson argued that an identity is a representation of the self and that people will act in a way that is consistent with how they view themselves. Aquino and Reed’s (2002) definition of moral identity is consistent with Erikson’s conceptualization. Individuals will be motivated to act based on how they see themselves. In this case, moral behavior is motivated by a desire to behave in a way that reflects moral identity (Blasi, 1983). Blasi (1983) argued that an individual’s moral identity will be determined by the traits that are most central to the self and that this will guide an individual’s behavior. For example, individuals whose identities center around compassion might engage in more donation behavior than those individuals whose identities center around other traits.

Through the process of development and validation of their moral identity measure, Aquino and Reed (2002) discovered that their measure tapped two different factors of moral identity. These factors were internalization and symbolization. Internalization represents how close moral traits are to an individual’s conceptualization of the self. Symbolization represents the consistency with which individuals act upon their moral traits.

Researchers have found support for the notion that individuals will act in accordance with their moral identity (e.g., Decelles et al., 2012; Hertz, & Krettenauer, 2016; Shao, Aquino, & Freeman, 2008). Aquino and Reed (2002) found the internalization factor of moral identity positively predicted donation behavior. Shao and colleagues (2008) found a positive relationship between moral identity and prosocial behaviors, such as volunteering and charitable giving. In addition, these researchers found a negative relationship between moral identity and antisocial behaviors, such as deceiving and harming others. In their meta-analysis of moral identity research, Hertz and Krettenauer (2016) found that the overall effect size of the relationship between moral identity and moral behavior was  $r = .22$ . Furthermore, these researchers found a positive relationship between moral identity and prosocial behavior, avoidance of antisocial behavior, and ethical behavior. These findings support the assertion that moral identity motivates moral behavior.

Much of the research within the organizational context has focused on the relationship between moral identity and ethical behavior (e.g., Aquino et al., 2009; Shao, Aquino, & Freeman, 2008). Mayer et al. (2012) found that moral identity internalization and moral identity symbolization of a leader had positive relationships with ethical leadership. In addition, their results indicated that moral identity had an indirect influence on work group unethical behavior through ethical leadership. These results provided support for the notion that individuals will act in accordance with their moral self-concept.

Though research has demonstrated a relationship between moral identity and behavior, there is a lack of focus on the relationship between moral identity and

perceptions of the organizational environment (Hertz & Krettenauer, 2016; Krettenauer & Hertz, 2015). Prior research has demonstrated that moral identity can weaken the influence of the organizational environment on moral intentions and behavior (Aquino et al., 2009). Others have found that ethical climate can influence the relationship between moral identity and ethical behavior. For example, Aquino and Becker (2005) found that perceived moral attributes and the ethical climate of the organization interacted to influence ethical behavior in a negotiation task. These researchers found a negative relationship between self-perceived moral attributes in an ethical climate and ethical behavior. These results indicated that when self-perceived moral attributes were high and individuals perceived an ethical climate, individuals were less likely to unfairly criticize someone that they just finished negotiating with. There was no such relationship between self-perceived moral attributes and criticizing behavior in the presence of an unethical climate. Though Aquino and Becker found evidence of a relationship between the ethical climate and self-perceived moral attributes, they did not test this relationship directly. I will investigate this relationship through the current research. I propose that moral identity will be positively associated with ethical climate dimensions.

**Hypothesis 9:** Moral identity will be positively associated with the ethical climate factors of rules, law and code, instrumental, independence, and caring.

**Values.** Another individual characteristic thought to influence attitudes, beliefs, perceptions, and behaviors is individuals' values (e.g., Meglino & Ravlin, 1998, Schwartz, 1994). Researchers have defined values in a variety of ways over the years (Connor & Becker, 1975; Rohan, 2000; Schwartz, 1994). Despite these variations, it is widely accepted that values represent stable, global beliefs that influence individuals'

attitudes, perceptions, and behaviors (Meglino & Ravlin, 1998). Through their work across cultures, Schwartz and Bilsky (1987) and Schwartz (1992; 1994) developed a unified theory based on individuals' universal values. Schwartz' model is composed of two higher order global dimensions of self-transcendence versus self-enhancement and openness to change versus conservation. Each global dimension is comprised of multiple motivational domains (Figure 3). These motivational domains represent the goals of the values that make up the motivational domains. For example, the motivational domain of *Power* is composed of social power, authority, wealth, preserving my public image, and social recognition. These values comprise a circumplex model in which similar values are located closer to each other and competing values are opposite each other. Using a limited number of values allowed Schwartz to theorize a basic structure of universal human values.

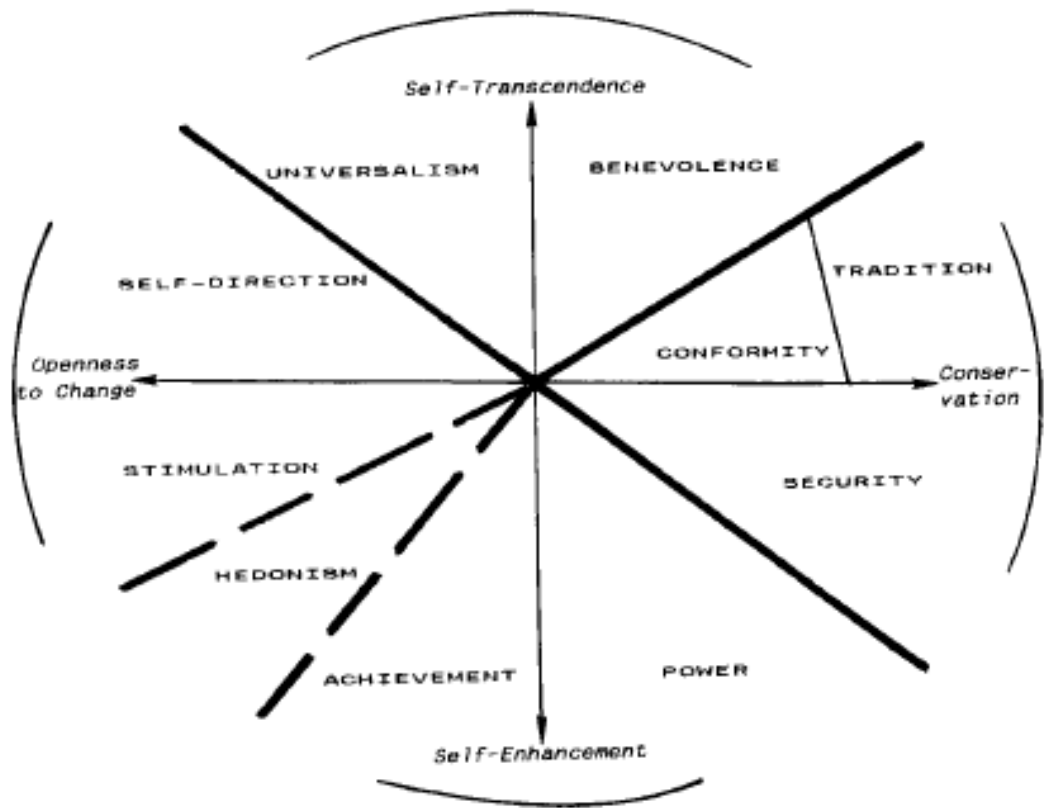
Individuals' values can have an impact on the organization in a variety of ways (e.g., Arhaud-day, Rode, & Turnley, 2012; Harris, 1990; Rice, 2006). For example, researchers have found that values can affect perceptions of the organizational environment, the types of jobs that people choose, as well as affective and behavior outcomes of both individuals and groups (e.g., Judge & Bretz, 1992; Kristof, 1996). I am interested in the effect that values have on perceptions of the organizational climate regarding ethics. My research will attempt to integrate Schwartz' Value Theory (1992) with ethical climate research to understand further the relationship between these two constructs.

Understanding individuals' values can provide a glimpse into the conscious thought processes that guide behavior. Values are relatively stable, formed by previous

experiences (Meglino & Ravlin, 1998). Some researchers have argued that dominant values form a cognitive framework through which individuals view incoming information (Rohan, 2000). Rohan suggested that values are central to individuals' beliefs, which implies that individuals act in accordance with their values. This perspective has important implications for the ways in which individuals view their organizational environment. Individuals' dominant values would determine the information individuals attend to, and individuals would use their dominant values to screen and evaluate incoming information.

**Figure 3**

*Circumplex Structure of Global Domains Made up of Motivational Value Categories. Adapted from Schwartz, S. H. (1992). Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries. Advances in Experimental Social Psychology, 53, 45.*



Organizational researchers have investigated relationships between values and the organizational environment (e.g. Harris, 1990; Rice, 2006). For example, Rice (2006) investigated the influence of values and perceptions of the organizational environment on employee creative behavior. She found that both individual values and perceptions of the organizational environment positively predicted employee creative behavior. Furthermore, perceptions of the organizational environment explained more of the variance than did the values variables, suggesting the powerful influence of perceptions

of the organizational environment on employee creative behavior. Notably, Rice did not investigate the possible interaction between individuals' values and perceptions of the organizational environment, leaving a gap in understanding how these two constructs interact to influence behavior.

Other researchers have investigated the effect of values on specific climates such as a climate for ethics (Grojean et al., 2004). Grojean and colleagues (2004) suggested that leader and member values contribute to the formation of an ethical climate. Leaders influence the formation of ethical climate because they are in a position of authority and communicate the values of the organization to their employees. In addition, Grojean and colleagues suggested that individuals' values might change slightly over time to the extent that individuals assimilate the values espoused by their organization. It is this slight change in values over time that contributes to the creation of an ethical climate. If individuals' values shift to match those of the organization, perceptions of the organization's practices, policies, and procedures should be similar and reflect ethical climate. However, it is notable that Grojean and colleagues did not conduct an empirical investigation to test this hypothesis.

The purpose of my research is to provide an empirical investigation into the relationship between values and ethical climate. Rohan (2000) suggested that individuals have multiple value systems: personal, social, and cultural. Rohan argued that personal value systems are the most stable and individuals only have one of these. Individuals might have multiple social value systems based on the context. For example, individuals might have a social value system reflecting shared values of the organization in which they work and might have a separate social value system reflecting shared values among



their family members. These social value systems influence the way individuals perceive other people and institutions. If individuals share a social value system, then it is likely they will perceive organizational aspects in a similar way. Kristof (1996) offered a different perspective with respect to person-organization fit. She suggested that individuals are likely to be attracted to organizations that have values similar to their own personal values. In this respect, organizations will attract individuals with similar values, which could lead to shared perceptions of the organization's practices, policies, and procedures.

Though research has investigated the influence of individual values on behavior, there has yet to be an empirical investigation of the relationship between individual values and ethical climate perceptions (Grojean et al., 2004). Based on Schwartz' Values Theory (1992), I expected to find that values with the goal of self-transcendence and openness to change will be associated with ethical climate dimensions of Rules, Law and Code, Independence, and Caring and negatively related to the ethical climate dimension of Instrumental. Furthermore, values with the goal of self-enhancement and conservation will be positively associated with ethical climate dimension of Instrumental and negatively associated with the ethical climate dimensions of Rules, Law and Code, Independence, and Caring.

**Hypothesis 10a:** Self-transcendence and openness to change values are positively related to the ethical climate factors of rules, law and code, independence, and caring and negatively related to the ethical climate factor of instrumental.

**Hypothesis 10b:** Self-enhancement and conservation values are positively related to the ethical climate factor of instrumental and negatively related to the ethical climate factors of rules, law and code, independence, and caring.

### **Effects of Ethical Climate on Performance**

Research has demonstrated the influence of perceptions of ethical climate on performance (e.g. Martin & Cullen, 2006; Newman et al., 2017). For example, Numminen and colleagues (2015) found that perceptions of ethical climate had a significant influence on self-perceived competence. Additionally, Briggs and colleagues (2012) found that perceptions of ethical climate indirectly influence performance of salespeople through what they called the “lone wolf tendency” such that positive perceptions of ethical climate reduced lone wolf tendencies resulting in increased performance. Whereas the previous researchers focused on individual outcomes of ethical climate, others have found evidence that perceptions of ethical climate influence team performance (e.g., Arnaud, 2010; Choi, Moon, & Ko, 2013). For example, Arnaud’s (2010) assessment of ethical climate revealed a relationship between perceptions of ethical climate and perceived organizational performance.

Similar to previous research findings (e.g., Arnaud, 2010; Numminen et al., 2015), I expect that perceptions of ethical climate will be related to academic performance such that the ethical climate factors of Caring, Instrumental, Law and Code, Rules, and Independence will be related to academic performance.

**Hypothesis 11:** The ethical climate factors of caring, law and code, rules, instrumental and independence will be related to academic performance.

## **Pilot Study**

I conducted a pilot study using a work sample in which I used exploratory factor analyses to examine psychometric properties of the measures used to ensure my measures demonstrated appropriate psychometric properties. Please see Appendix A for the pilot study method and results. Tests of my predictions were conducted in Study 1 which are reported below.

## **Study 1 Method**

### **Participants**

Data were collected online from participants recruited from the Mechanical Turk (MTurk) service provided by Amazon.com. Participants received a payment of \$0.50 for participating in this study. To detect significant results for a small to moderate effect size, I conducted a power analysis. This analysis suggested that I needed approximately 540 participants to obtain 95% power to observe a significant effect.

### **Measures**

**Ethics program components.** For current study, I developed a measure to assess perceptions of ethics programs. In this measure, I asked participants questions about each of five ethics program components (see Appendix B).

***Ethics codes.*** I defined an ethics code as a formal document describing appropriate conduct in the workplace with respect to clients, coworkers, and shareholders (Kaptein, 2009). I asked participants to report on the presence of an ethics code within their organization (2 = yes, 1 = no, 0 = I don't know). In addition, for those reporting the presence of an ethics code, I asked participants how familiar they are with the content of their organization's code of ethics (1 = very unfamiliar, 5 = very familiar). High scores

on familiarity with the ethics codes indicated that employees know the content of the ethics code.

***Ethics training.*** I asked participants to report on the presence of formal ethics training in their organization (2 = yes, 1 = no, 0 = I don't know). For those reporting the presence of ethics training, I asked participants how many hours of ethics training they have received in the past year (participants will give their best estimate), and their rating of the effectiveness of the training they received (1 = not at all effective, 5 = Very effective). High scores on the perceived effectiveness item indicated that employees generally perceive the ethics training they receive to be effective.

***Ethics hotline.*** I asked participants to indicate whether their company has an ethics hotline in a yes or no format (2 = yes, 1 = no, 0 = I don't know). In addition, for those reporting the presence of an ethics hotline, I asked participants to indicate whether they have used the ethics hotline (1 = yes, 0 = no) and their rating of the effectiveness of the hotline (1 = not at all effective, 5 = very effective).

***Disciplinary system.*** I asked participants to indicate whether their company rewards ethical behavior (2 = yes, 1 = no, 0 = I don't know). For those reporting the presence of a disciplinary system, I asked participants to indicate whether their company punishes unethical behavior (2 = yes, 1 = no, 0 = I don't know) and their rating of the effectiveness of the disciplinary system (1 = not at all effective; 5 = very effective).

***Ethics office(r).*** I asked participants to indicate whether their company has an ethics office(r) (2 = yes, 1 = no, 0 = I don't know). For those reporting the presence of an ethics officer, I asked participants to indicate whether they have contacted the ethics

officer (1 = yes, 0 = no) and their rating of the effectiveness of the ethics officer (1 = not at all effective, 5 = very effective).

***Scope of ethics program.*** To assess the scope of the ethics program, I summed the number of ethics program components participants report as being present in their organization. This will yield a maximum score of 5 and a minimum score of 0. High scores indicate the presence of multiple components of an ethics program, suggesting broader scope of the ethics program. I included this measure for purposes of exploratory analyses.

***Individual attributes.*** I administered three measures of moral attributes and also assessed values.

***Moral awareness.*** I used a 3-item scale to measure moral awareness ( $\alpha = .76$ , Reynolds, 2006). The scenario presented to participants is one in which there is harm and a violation of a behavioral norm. A sample item for this scale is “There are very important ethical aspects to this situation.” Participants will be asked to respond to what extent they agree with each item, ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores on this measure indicated higher level of moral awareness for the individual. Item scores were averaged. Refer to Appendix C for the full measure.

***Moral attentiveness.*** I used a 12-item scale to measure moral attentiveness (Reynolds, 2008). This measure consisted of two subscales: a seven-item measure of perceptual moral attentiveness ( $\alpha = .87$ ) and a five-item measure of reflective moral attentiveness ( $\alpha = .84$ ). Participants were asked to respond to what extent they agree with each statement, ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores on these subscales indicated higher levels of perceptual and reflective moral

attentiveness, respectively. A sample item from the “Perceptual Moral Attentiveness” measure is “In a typical day, I face several ethical dilemmas.” A sample item from the “Reflective Moral Attentiveness” measure is “I often reflect on the moral aspects of my decisions.” Item scores were averaged. Refer to Appendix D for the full measure.

***Moral identity.*** I used a 10-item scale to measure moral identity (Aquino & Reed, 2002). This measure consisted of two subscales: a five-item measure of “Internalization” ( $\alpha = .83$ ) and a five-item measure of “Symbolization” ( $\alpha = .82$ ). Participants were given a list of nine moral traits and prompted to think of someone (or themselves) that has one, a few, or any combination of the listed characteristics. Once participants have thought of this person (themselves or someone else) they responded to 10 items on a scale from 1 (strongly disagree) to 5 (strongly agree). Scores on these measures were averaged. Higher average scores on these subscales indicated a greater extent to which individuals find traits to be central to their self-concept (internalization) and a greater extent to which individuals believe traits are reflected in their actions (symbolization). A sample item from the internalization scale is “It would make me feel good to be a person who has these characteristics.” A sample item from the symbolization scale is “The kinds of books and magazines that I read identify me as having these characteristics.” Refer to Appendix E for the full measure.

***Values.*** I used a 56-item scale to measure individual values (Schwartz, 1992). Participants were presented with each guiding principle and asked whether the guiding principle was “opposed to my values”, “not important to my values”, or “seen as a possible value”. Each of these options were associated with a numerical score, -1, 0, and 1 respectively. Participants that selected “seen as a possible value” were then prompted

to indicate how important that guiding principle was to them using a seven-point scale ranging from 7 (of supreme importance) to 1 (slightly important). Scores on the importance rating scale were combined with scores on the “possible value” item and yielded a score ranging from negative one to seven. Higher scores indicated greater importance of the guiding principle. The scores for each guiding principle, i.e., each item, were averaged to obtain an average strength of importance score for the higher order value category. The higher the score, the greater the importance of the higher order value of the individual. Please refer to Appendix F for the full list of values.

Each of the guiding principles falls into a higher order category describing a type of value. For example, the guiding principles of social power, authority, wealth, preserving my public image, and social recognition fall into the higher order value of *Power*. The guiding principles of ambitious, influential, capable, intelligent, and successful fall into the higher order value of *Achievement*. The guiding principles of enjoying life and pleasure fall into the higher order category of *Hedonism*. The higher order value of *Power*, along with the higher order values of *Achievement* and *Hedonism*, make up the highest order category of *Self-enhancement*. The guiding principles of curious, creativity, freedom, choosing own goals, self-respect, and independent, make up the higher order value of *Self-direction*. The guiding principles of an exciting life, a varied life, and daring fall into the higher order value of *Stimulation*. The guiding principles of enjoying life and pleasure fall into the higher order value of *Hedonism*. *Self-direction* along with the higher order values of *Stimulation* and *Hedonism* make up the highest order category of *Openness to Change*. The guiding principles of obedient, honoring parents and elders, politeness, and self-discipline make up the higher order

value of *Conformity*. The guiding principles of accepting my portion in life, humble, devout, respect for tradition, detachment, and moderate fall into the higher order value of *Tradition*. The guiding principles of clean, national security, reciprocation of favors, social order, family security, sense of belonging, and healthy fall into the higher order value of *Security*. *Conformity* along with the higher order values of *Security* and *Tradition* make up the highest order category of *Conservation*. The guiding principles of helpful, honest, forgiving, loyal, responsible, a spiritual life, true friendship, mature love, and meaning in life make up the higher order value of *Benevolence*. The guiding principles of protecting the environment, unity with nature, a world of beauty, broad-minded, social justice, wisdom, equality, a world at peace, and inner harmony fall into the higher order value of *Universalism*. *Benevolence* and the higher order value of *Universalism* make up the highest order category of *Self-transcendence*. The highest order values compose two continuums, *Self-Transcendence* to *Self-Enhancement*, and *Openness to Change* to *Conservation*. These two continuums form the structure of the circumplex model shown in Figure 3.

**Ethical climate.** I used the 26-item Ethical Climate questionnaire (Victor & Cullen, 1988) to capture the five dimensions of ethical climate. The five factors are: caring, law and code, rules, instrumental, and independence. Participants were asked to rate how accurately each statement reflects the general climate of their organization. Participants responded to all items using a five-point scale, ranging from Completely false (1) to Completely true (5). Item scores were averaged. Higher scores indicated higher levels of an ethical climate dimension. Refer to Appendix G for the full measure.



The caring subscale contained seven items ( $\alpha = .80$ ). A sample item is “What is best for everyone in the company is the major consideration here.”

A sample item from the law and code factor ( $\alpha = .79$ ) is “People are expected to comply with the law and professional standards over and above other considerations.” This subscale contained four items.

A sample item from the rules factor ( $\alpha = .79$ ) is “It is very important to follow the company’s rules and procedures here.” This subscale contained four items.

A sample item from the instrumental factor ( $\alpha = .71$ ) is “In this company, people protect their own interests above all else.” This subscale contained seven items.

Finally, a sample item from the independence factor ( $\alpha = .60$ ) is “In this company, people are expected to follow their own personal and moral beliefs.” This subscale contained four items.

**Demographics.** I assessed demographic information, including gender (0 = men; 1 = women), age, location of unit (0 = corporate headquarters, 1 = other location), and level in the hierarchy (0 = individual contributor [not supervising]; 1 = supervisory; 2 = local management; 3 = middle management; 4 = executive/senior leader). Refer to Appendix H for the full measure.

***Insufficient Effort Responding.*** To improve the quality of my data, I removed participants who engaged in insufficient effort responding (Huang et al., 2012). Based on the procedures of Huang and colleagues (2012), I used a cutoff of less than two seconds per item per page. For example, if a participant takes less than two seconds on average per item on a page, then their data was removed from the data set. In addition, I included a few attention checks throughout the course of the survey. For the first attention check,

participants were presented with the following item “I can run ten miles in ten minutes.” Response options for this item were “yes”, “I don’t know”, and “no”. Selecting “I don’t know” or “no” to this item resulted in a failure of this attention check. For the second attention check, participants were instructed to “Please respond ‘Completely True’ to this item.” Any response other than completely true resulted in a failure of this attention check. For the final attention check, participants were given the instructions “Please respond ‘Neutral’ to this item.” Any response other than neutral resulted in a failure of this attention check. Participants who failed to follow the instructions for these items were terminated by the software, they were not paid, and were thanked for their time. These attention checks contributed to the overall quality of the data.

**Procedure.** Study 1 data was collected using Amazon’s Mechanical Turk (Mturk). The sample was made up of working adults from a variety of companies. I purchased responses through Amazon’s Mechanical Turk (Mturk) until I obtained usable data from 953 participants. Using Excel’s random number generator function RAND(), I randomly sampled the data and extracted 200 participants to use as the pilot study. After participants clicked on the survey link they were directed to an informed consent page. Once consent has been obtained, participants were directed to the first measure. Participants first responded to items created to assess ethics program components, followed by measures of moral awareness (Reynolds, 2006), moral attentiveness (Reynolds, 2008), moral identity (Aquino & Reed, 2002), Schwartz Value Survey (Schwartz, 1992), and the Ethical Climate Questionnaire (Victor & Cullen, 1988).

Once all the above measures were completed, participants were directed to a page on which they were asked demographic information regarding their race, gender, age,

length of time in their current position, location of their work, and their hierarchical status within the company. After completing the demographic information, participants were directed to additional survey measures such as Interpersonal and Organizational deviance scale (Bennett & Robinson, 2000), Organizational Citizenship Behavior (Lee & Allen, 2002), Voice (Van Dyne & Lepine, 1998), Job Satisfaction (Cammann et al., 1979; Cammann et al., 1983), Unethical behavior (Kaptein, 2008), and big five personality traits (Saucier, 1994). Full measures can be found in Appendices I through N respectively. After completing the additional measures, participants were directed to a debriefing page where they were informed of the purpose of the study, found contact information if they had further questions, and were thanked for their time. Participants then received their code in order to get paid. Participants were not paid if they failed the attention checks discussed earlier. I expected that it would take participants 30 minutes to complete the survey. Participants who provided usable data were paid \$0.50.

## **Study 1 Results**

### **Data Cleaning**

Of the 953 participants that participated in the study, 200 were extracted for the pilot study and 293 were removed because they did not spend an adequate amount of time per item per page as suggested by Huang et al. (2012). This left me with 460 participants. Next, I reverse-coded appropriate items from each scale as necessary. Then, I calculated the scale scores by averaging the scores for each measure. Before conducting any analyses, I randomly sampled the data by creating a random number column in the data set. In the random number column, I generated random numbers for each participant using the RAND() function in Excel and applied this function to each

row in the data. Once generated, I sorted the cells from smallest to largest based on the random number column and split the data into two smaller samples: one with a sample size of 200 for factor analytic work and a second with a sample size of 460 for cross-validation and hypothesis testing. I conducted a longstring analysis to identify and remove participants with 14 or more invariant responses (Desimone et al., 2015; Huang et al., 2012). The longstring analysis 38 participants in who had 14 or more invariant responses. These participants were removed from the sample before the start of analyses.

### **Demographics**

Participants ( $N = 422$ ) were recruited from Amazon's Mechanical Turk and received \$0.50 for participating in this study. The average age was 37.96 years ( $SD = 12.65$ ). The majority of participants were female (51.7%) and Caucasian (71.32%). The majority of the participants had served in their current position for 2-5 years (45.26%), worked outside of corporate headquarters (58%), and were individual contributors in their company (44.68%). The majority of participants worked in educational services (11.84%), professional, scientific, and technical services (10.17%), health care and social assistance (8.51%), information (7.09%), retail trade (6.86%), and finance and insurance (6.86%).

### **Scale Construction**

I examined the means,  $SD$ s, dimensionality, and internal consistency of each measure. I used Cronbach's alpha to measure internal consistency. I provided scree plots for all measures with issues related to psychometric properties. I provided all tables and figures related to psychometric properties in Appendix O.

**Moral Awareness.** Results suggested that my sample demonstrated high levels of moral awareness ( $M = 5.78$ ,  $SD = 1.12$ ). Individuals scoring closer to seven

demonstrated higher levels of moral awareness. I completed an exploratory factor analysis with one factor. Results from the exploratory factor analyses indicated that items loaded onto one factor. Results demonstrated acceptable alpha internal reliability ( $\alpha = .78$ ).

**Moral Attentiveness.** Results suggested that my sample demonstrated middle levels of moral attentiveness ( $M = 4.31, SD = 1.02$ ). Participants demonstrated slightly lower perceptual moral attentiveness ( $M = 4.12, SD = 1.32$ ) than reflective moral attentiveness ( $M = 4.73, SD = 1.24$ ). Individuals scoring closer to seven demonstrated higher levels of both perceptual and reflective moral attentiveness. I completed an exploratory factor analysis of the entire measure with two factors and an oblique rotation. Results from the exploratory factor analysis indicated that items loaded onto two factors. Items from the perceptual facet loaded onto one factor whereas items from the reflective facet loaded onto the second factor. Additionally, I completed an exploratory factor analysis on each facet of the measure, each with one factor. Results from the exploratory analyses indicated that the items for each facet loaded onto one factor. Results demonstrated good alpha internal reliability for moral attentiveness ( $\alpha = .93$ ), the perceptual facet of moral attentiveness ( $\alpha = .91$ ), and the reflective facet of moral attentiveness ( $\alpha = .87$ ).

**Moral Identity.** Results suggested that my sample demonstrated middle levels of moral identity ( $M = 3.67, SD = 0.51$ ). Participants demonstrated higher internalization of moral identity ( $M = 4.08, SD = 0.40$ ) than symbolization of moral identity ( $M = 3.25, SD = 0.82$ ). Individuals scoring closer to five demonstrated higher levels of both internalization and symbolization of moral identity. I completed an exploratory factor

analysis of the entire measure with two factors and an oblique rotation. Results from the exploratory factor analysis indicated that items loaded onto two factors. Items from the internalization facet loaded onto one factor whereas items from the symbolization facet loaded onto the second factor. Additionally, I completed an exploratory factor analysis on each facet of the measure, each with one factor. Results from the exploratory analyses indicated that the items for each facet loaded onto one factor. Results demonstrated acceptable alpha internal reliability for moral identity ( $\alpha = .78$ ) and the internalization facet of moral identity ( $\alpha = .73$ ). Results demonstrated good alpha internal reliability for the symbolization facet of moral identity ( $\alpha = .85$ ).

**Values.** Results suggested that my sample had differing levels of highest order values groupings. For example, my sample demonstrated middle levels of the higher order value of self enhancement ( $M = 3.07, SD = 1.40$ ), middle levels of the higher order value of openness to change ( $M = 4.05, SD = 1.35$ ), middle levels of the higher order value of conservation ( $M = 3.62, SD = 1.36$ ), and middle levels of the higher order value of self-transcendence ( $M = 4.60, SD = 1.34$ ). Individuals scoring closer to seven demonstrated higher levels of self enhancement, openness to change, conservation, and self transcendence. I completed an exploratory factor analysis of the entire measure with 4 factors and an oblique rotation. Results from the exploratory factor analysis provided some evidence that items loaded onto four factors. Results demonstrated acceptable alpha internal reliability for self-transcendence ( $\alpha = .87$ ), conservation ( $\alpha = .85$ ), openness to change ( $\alpha = .80$ ), and self-enhancement ( $\alpha = .82$ ).

Results suggested that my sample had differing levels of intermediate values groupings. For example, my sample demonstrated low levels of power ( $M = 1.64, SD =$

1.71), stimulation ( $M = 2.45$ ,  $SD = 1.97$ ), and tradition ( $M = 2.48$ ,  $SD = 1.59$ ). My sample demonstrated higher levels of achievement ( $M = 4.20$ ,  $SD = 1.63$ ), hedonism ( $M = 3.83$ ,  $SD = 2.10$ ), self-direction ( $M = 4.93$ ,  $SD = 1.35$ ), conformity ( $M = 4.28$ ,  $SD = 1.73$ ), security ( $M = 4.21$ ,  $SD = 1.46$ ), universalism ( $M = 4.45$ ,  $SD = 1.57$ ), and benevolence ( $M = 4.74$ ,  $SD = 1.42$ ). I completed an exploratory factor analysis on each of the intermediate values, each with one factor. Results from the exploratory factor analysis provided some evidence that the items for each of the intermediate values loaded onto one factor. Results demonstrated acceptable internal reliability for power ( $\alpha = .75$ ), achievement ( $\alpha = .75$ ), security ( $\alpha = .70$ ), universalism ( $\alpha = .82$ ), and benevolence ( $\alpha = .79$ ). Results demonstrated poor alpha internal reliability for hedonism ( $\alpha = .54$ ), stimulation ( $\alpha = .69$ ), self-direction ( $\alpha = .69$ ), conformity ( $\alpha = .69$ ), and tradition ( $\alpha = .66$ ).

**Ethical Climate.** Results suggested that my sample demonstrated middle levels of the caring climate ( $M = 3.48$ ,  $SD = 0.70$ ), law and code climate ( $M = 3.94$ ,  $SD = 0.81$ ), and rules climate ( $M = 3.90$ ,  $SD = 0.77$ ). Results demonstrated lower levels of an instrumental climate ( $M = 2.67$ ,  $SD = 0.84$ ) and an independence climate ( $M = 2.68$ ,  $SD = 0.89$ ). Individuals scoring closer to five demonstrated higher levels of each climate type. I completed an exploratory factor analysis on the entire measure with five factors and an oblique rotation. Results from the factor analysis indicated that items loaded onto five factors. Additionally, I completed a factor analysis on each of the climate types, each with one factor. Results from these factor analyses indicated that items for each climate type loaded onto one factor. Results demonstrated good alpha internal reliability

for caring climate ( $\alpha = .83$ ), law and code climate ( $\alpha = .85$ ), rules climate ( $\alpha = .85$ ), instrumental climate ( $\alpha = .86$ ), and independence climate ( $\alpha = .86$ ).

**Interpersonal and Organizational Deviance.** Results suggested that my sample demonstrated low interpersonal and organizational deviance behaviors ( $M = 1.81$ ,  $SD = 0.92$ ). Participants demonstrated slightly higher organizational deviance behavior ( $M = 1.84$ ,  $SD = 0.94$ ) than interpersonal deviance behaviors ( $M = 1.77$ ,  $SD = 1.05$ ). Individuals who scored closer to seven demonstrated more interpersonal and organizational deviance behaviors. I completed an exploratory factor analysis of the entire measure with two factors and an oblique rotation. Results from the exploratory factor analysis indicated that items loaded onto two factors. Items from the interpersonal deviance facet loaded onto one factor and items from the organizational deviance facet loaded onto a second factor. Additionally, I completed an exploratory factor analysis of each facet of the measure, each with one factor. Results from the exploratory factor analyses indicated that the items for each facet loaded onto one factor. Results demonstrated good alpha internal reliability for interpersonal and organizational deviance behaviors ( $\alpha = .95$ ), the interpersonal deviance facet ( $\alpha = .92$ ) and the organizational deviance facet ( $\alpha = .92$ ).

**Organizational Citizenship Behaviors.** Results suggested that my sample demonstrated high levels of organizational citizenship behaviors ( $M = 4.82$ ,  $SD = 1.13$ ). Participants demonstrated slightly higher organizational citizenship behaviors directed toward individuals ( $M = 4.85$ ,  $SD = 1.21$ ) than the organization ( $M = 4.78$ ,  $SD = 1.30$ ). Individuals who scored closer to seven demonstrated more organizational citizenship behaviors. I completed an exploratory factor analysis on the entire measure with two



factors and an oblique rotation. Results from the exploratory factor analysis indicated that the items loaded onto two factors. Items from the individual facet loaded onto one factor and items from the organizational facet loaded onto a second factor. Additionally, I completed an exploratory factor analysis of each facet of the measure, each with one factor. Results from the exploratory factor analyses indicated that the items for each facet loaded onto one factor. Results demonstrated good alpha internal reliability for organizational citizenship behaviors ( $\alpha = .93$ ), the individual facet of organizational citizenship behaviors ( $\alpha = .91$ ) and the organizational facet of organizational citizenship behaviors ( $\alpha = .92$ ).

**Voice.** Results suggested that my sample demonstrated high levels of voice behaviors ( $M = 5.03$ ,  $SD = 1.17$ ). Individuals scoring closer to seven demonstrated more voice behaviors. I completed an exploratory factor analysis with one factor. Results from the exploratory factor analysis indicated that the items loaded onto one factor. Results demonstrated good alpha internal reliability ( $\alpha = .93$ ).

**Job Satisfaction.** Results suggested that my sample demonstrated middle levels of job satisfaction ( $M = 4.49$ ,  $SD = 0.58$ ). Individuals scoring closer to seven demonstrated higher job satisfaction. I completed an exploratory factor analysis on the entire measure with one factor. Results from the exploratory factor analysis indicated that the items loaded onto one factor. Results demonstrated good alpha internal reliability ( $\alpha = .91$ ).

**Unethical Behavior.** Results suggested that my sample demonstrated low levels of unethical behaviors ( $M = 1.31$ ,  $SD = 0.61$ ). Individuals scoring closer to five demonstrated more unethical behaviors. I completed an exploratory factor analysis on

the entire measure with one factor. Results from the factor analysis indicated that the items loaded onto one factor. Results demonstrated good alpha internal reliability ( $\alpha = .98$ ).

**Personality.** Results suggested that my sample demonstrated middle levels of conscientiousness ( $M = 4.79, SD = 0.72$ ), extraversion ( $M = 4.91, SD = 0.85$ ), agreeableness ( $M = 4.87, SD = 0.72$ ), and neuroticism ( $M = 3.89, SD = 1.24$ ). Results suggested that my sample demonstrated higher levels of openness ( $M = 6.68, SD = 1.11$ ). Individuals scoring closer to nine demonstrated higher levels of each of the personality traits. I completed an exploratory factor analysis with one factor for each facet. Results indicated that the items loaded onto one factor for each facet. Item 8 of the neuroticism scale did not load on to any factor above .3. Results demonstrated acceptable alpha internal reliability for openness ( $\alpha = .75$ ) and good alpha internal reliability for conscientiousness ( $\alpha = .85$ ), extraversion ( $\alpha = .81$ ), neuroticism ( $\alpha = .83$ ), and agreeableness ( $\alpha = .85$ ).

### **Descriptive Statistics**

I calculated the internal consistency reliability estimates for Study 1 measures. I reported measure means, standard deviations, alpha coefficients, and intercorrelations for all moral-related variables, values, and the ethical climate subscales (Table 1).

**Table 1***Means, Standard Deviations, and Correlations Between Study 1 Variables*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Moral Awareness	5.77	1.13	.78								
2. Perceptual Matt	4.12	1.32	.12*	.87							
3. Reflective Matt	4.73	1.24	.23**	.66**	.91						
4. MI - Internalization	4.08	0.40	-.08	.17**	.16**	.73					
5. MI - Symbolization	3.25	0.82	.04	.27**	.34**	.34**	.85				
6. Power	1.64	1.71	-.11*	.22**	.12*	.18**	.23**	.75			
7. Achievement	4.20	1.63	.08	.16**	.15**	.14**	.18**	.50**	.75		
8. Hedonism	3.83	2.10	.06	.14**	.10*	.10*	.07	.35**	.41**	.56	
9. Stimulation	2.45	1.97	-.02	.1*	.11*	.07	.14**	.37**	.44**	.51**	.69
10. Self-Direction	4.93	1.35	.09	.09	.12*	.08	.05	.28**	.65**	.43**	.50**
11. Tradition	2.48	1.59	.06	.19**	.23**	.13*	.27**	.38**	.43**	.12*	.22**
12. Conformity	4.28	1.73	.03	.18**	.16**	.16**	.30**	.29**	.51**	.18**	.21**
13. Security	4.22	1.46	.07	.11*	.11*	.10*	.20**	.42**	.58**	.34**	.30**
14. Universalism	4.45	1.57	.16*	.14**	.26**	.10*	.24**	.17**	.43**	.30**	.40**
15. Benevolence	4.75	1.42	.1	.16**	.27**	.15**	.27**	.16**	.48**	.20**	.28**
16. Self-Enhancement	3.07	1.39	.00	.23**	.16**	.19**	.22**	.84**	.84**	.63**	.53**
17. Openness to Change	4.05	1.35	.05	.13*	.13*	.10*	.10*	.40**	.64**	.72**	.82**
18. Conservation	3.62	1.34	.07	.19**	.19**	.15**	.29**	.44**	.59**	.25**	.29**
19. Self-Transcendence	4.60	1.34	.15*	.16**	.30**	.14**	.28**	.18**	.51**	.28**	.38**
20. Caring Climate	3.48	0.70	.14**	.04	.14**	.18**	.31**	.15**	.19**	.04	.08
21. Law and Code Climate	3.94	0.81	.20**	-.02	.07	.07	.10*	.04	.12*	.02	0
22. Rules Climate	3.90	0.77	.18**	-.02	.09	.07	.18**	.09	.15**	.01	0
23. Instrumental Climate	2.67	0.84	-.15**	.22**	.14**	.18**	.08	.25**	.10*	.13*	.11*

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table 1 (continued)**

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
24. Independence Climate	2.68	0.89	-.07	.12*	.07	.26**	.15**	.15**	.05	.15**	.14**
25. CWB	1.81	0.92	-.26**	.19**	.11*	.21**	.06	.26**	-.09	.09	.04
26. CWB-Interpersonal	1.77	1.05	-.24**	.22**	.12*	.18**	.08	.31**	-.06	.07	.04
27. CWB-Organizational	1.84	0.94	-.25**	.15**	.09	.21**	.04	.20**	-.11*	.10*	.04
28. OCB	4.82	1.13	.19**	.08	.15**	.15**	.28**	.01	.16**	0	.05
29. OCB-Individual	4.85	1.21	.16**	.05	.12*	.09	.17**	-.08	.08	-.05	.02
30. OCB-Organizational	4.78	1.30	.18**	.10*	.15**	.19**	.32**	.10*	.20**	.05	.07
31. Voice	5.03	1.17	.21**	.10	.18**	.10*	.17**	.06	.21**	.06	.04
32. Job Satisfaction	4.49	0.58	.05	.02	.07	.14**	.21**	.10*	.14**	.03	.06
33. Unethical Behaviors	1.31	0.61	-.16**	.21**	.16**	.26**	.15**	.21**	-.06	.06	-.01
34. Conscientiousness	4.80	0.72	-.11*	.18**	.16**	.11*	.11*	.18**	.07	.02	.05
35. Extraversion	4.91	0.85	-.06	.23**	.25**	.16**	.20**	.20**	.13*	.16**	.15**
36. Neuroticism	4.14	1.27	-.15**	.24**	.18**	.03	.07	.16**	-.03	.12*	.01
37. Agreeableness	4.88	0.73	-.09	.19**	.20**	.13*	.10*	.14**	.01	.03	.05
38. Openness	6.68	1.12	.16**	.04	.21**	.02	.05	-.04	.20**	.04	.09

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table 1 (continued)***Means, Standard Deviations, and Correlations Between Study 1 Variables*

	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Moral Awareness													
2. Perceptual Matt													
3. Reflective Matt													
4. MI - Internalization													
5. MI - Symbolization													
6. Power													
7. Achievement													
8. Hedonism													
9. Stimulation													
10. Self-Direction	.69												
11. Tradition	.38**	.66											
12. Conformity	.40**	.67**	.69										
13. Security	.52**	.51**	.63**	.70									
14. Universalism	.59**	.40**	.38**	.49**	.82								
15. Benevolence	.53**	.61**	.63**	.55**	.62**	.79							
16. Self-Enhancement	.56**	.43**	.44**	.58**	.37**	.37**	.82						
17. Openness to Change	.87**	.33**	.35**	.50**	.57**	.46**	.70**	.80					
18. Conservation	.51**	.85**	.87**	.85**	.50**	.69**	.58**	.47**	.85				
19. Self-Transcendence	.63**	.55**	.55**	.58**	.91**	.89**	.41**	.57**	.66**	.87			
20. Caring Climate	.10*	.33**	.31**	.24**	.25**	.30**	.18**	.10*	.34**	.31**	.83		
21. Law and Code Climate	.16**	.24**	.23**	.23**	.18**	.23**	.08	.09	.27**	.23**	.49**	.85	
22. Rules Climate	.12*	.25**	.26**	.25**	.20**	.22**	.12*	.07	.29**	.23**	.54**	.68**	.85
23. Instrumental Climate	.01	.06	.05	.01	-.03	-.10	.21**	.09	.05	-.07	-.18**	-.27**	-.22**

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table 1 (continued)***Means, Standard Deviations, and Correlations Between Study 1 Variables*

	10	11	12	13	14	15	16	17	18	19	20	21	22
24. Independence Climate	0	-.02	-.03	-.05	.05	-.02	.14**	.10*	-.04	.02	.26**	-.05	-.08
25. CWB	.18**	-.08	.16**	.17**	.21**	.28**	.11*	-.05	.16**	.27**	-.12*	.21**	.18**
26. CWB-Interpersonal	.17**	.01	-.06	-.13*	.18**	.23**	.14**	-.05	-.07	.22**	-.07	.18**	.15**
27. CWB-Organizational	.16**	-.13*	.21**	.18**	.20**	.28**	.08	-.05	.20**	.27**	.14**	.21**	.18**
28. OCB	.16**	.22**	.24**	.2**	.28**	.34**	.09	.11*	.26**	.34**	.42**	.37**	.34**
29. OCB-Individual	.11*	.16**	.16**	.13*	.25**	.31**	-.01	.06	.17**	.31**	.27**	.25**	.24**
30. OCB-Organizational	.18**	.23**	.26**	.24**	.26**	.30**	.16**	.14**	.28**	.31**	.48**	.41**	.37**
31. Voice	.21**	.12*	.10*	.16**	.24**	.24**	.15**	.15**	.15**	.27**	.26**	.35**	.21**
32. Job Satisfaction	.08	.15**	.13*	.12*	.10*	.13*	.13*	.08	.16**	.13*	.44**	.35**	.35**
33. Unethical Behaviors	.14**	-.02	-.09	.14**	-.12*	.18**	.09	-.07	-.10*	.17**	-.08	.20**	.19**
34. Conscientiousness	-.02	.09	-.03	-.03	-.04	-.01	.13*	.01	.02	-.03	.05	-.04	-.02
35. Extraversion	.06	.12*	.06	.04	.09	.09	.20**	.14**	.08	.10*	.10*	-.04	.03
36. Neuroticism	-.13*	-.06	.19**	.16**	-.1*	.18**	.09	-.03	.16**	.15**	.18**	.20**	.15**
37. Agreeableness	-.06	0	-.06	-.06	-.04	-.03	.08	-.01	-.05	-.04	-.05	-.03	-.02
38. Openness	.36**	0	-.03	.05	.28**	.17**	.09	.24**	.01	.25**	.09	.12*	.12*

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table 1 (continued)***Means, Standard Deviations, and Correlations Between Study 1 Variables*

	23	24	25	26	27	28	29	30	31	32	33
23. Instrumental Climate	.86										
24. Independence Climate	.09	.86									
25. CWB	.34**	.23**	.95								
26. CWB-Interpersonal	.37**	.24**	.90**	.92							
27. CWB-Organizational	.28**	.19**	.96**	.74**	.92						
28. OCB	-.22**	.06	-.18**	-.10*	-.21**	.93					
29. OCB-Individual	-.20**	.02	-.17**	-.13*	-.18**	.89**	.91				
30. OCB-Organizational	-.20**	.09	-.16**	-.06	-.20**	.91**	.63**	.92			
31. Voice	-.18**	.02	-.17**	-.12*	-.18**	.58**	.47**	.58**	.93		
32. Job Satisfaction	-.18**	.20**	.01**	.06	-.03	.41**	.27**	.47**	.29**	.91	
33. Unethical Behaviors	.39**	.18**	.73**	.71**	.66**	-.08	-.08	-.06	-.07	.03	.98
34. Conscientiousness	.21**	.09	.34**	.35**	.29**	.07	.03	.09	.06	.20**	.35**
35. Extraversion	.19**	.11*	.36**	.40**	.30**	.15**	.10*	.16**	.08	.24**	.35**
36. Neuroticism	.21**	.09	.47**	.45**	.44**	-.18**	-.17**	-.15**	-.12**	.01	.38**
37. Agreeableness	.15**	.10*	.36**	.38**	.31**	.08	.09	.05	.08	.18**	.34**
38. Openness	-.16**	-.04	-.21**	-.21**	-.19**	.23**	.18**	.22**	.29**	.12*	-.12*

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table 1 (continued)***Means, Standard Deviations, and Correlations Between Study 1 Variables*

	34	35	36	37	38
34. Conscientiousness	.85				
35. Extraversion	.55**	.81			
36. Neuroticism	.51**	.51**	.83		
37. Agreeableness	.64**	.61**	.57**	.85	
38. Openness	.03	.08	-.22**	-.01	.75

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.



## Hypothesis Testing

In the following sections, I examined posited effects on ethical climate dimensions. First, I examined the individual effects of each ethics program component on each of the ethical climate dimensions. I examined ethics program component effects using *t*-tests because the components reflected dichotomous categories. Next, I examined the effects of moral awareness and moral attentiveness. Finally, I examined the effects of values on each of the ethical climate dimensions. I examined moral and value effects using correlations because morals and values were continuous variables.

**Ethics code component.** Hypothesis 1 stated that the presence versus absence of an ethics code is related to levels of the ethical climate dimensions of rules, law and code, instrumental, independence, and caring. To test this hypothesis, I performed five *t*-tests in which I compared climate dimension scores of those participants who answered “Yes” to having an ethics codes to those who answered “No”. I adjusted the critical *p*-value to accommodate for a large number of tests. The scores on the climate dimensions of caring, law and code, and rules were significantly higher in the presence of an ethics code than when an ethics code was absent (see Table 2). These results partially supported Hypothesis 1.

**Table 2**

*Means, Standard Deviations, and t-tests Comparing the Presence vs. Absence of Ethics Codes for Each Ethical Climate Dimension.*

		Caring	Law and Code	Rules	Instrumental	Independence
Yes	M	3.54	4.03	3.97	2.66	2.69
	SD	0.67	0.74	0.72	0.84	0.90
No	M	2.94	3.26	3.41	2.73	2.73
	SD	0.79	1.03	1.00	0.89	0.85
Don't Know	M	3.23	3.54	3.71	2.81	2.41
	SD	0.54	0.75	0.77	0.85	0.72
<i>t</i>		-5.14	-5.82	-4.28	0.497	0.233
<i>df</i>		400	400	400	400	400
<i>p</i>		< .0016	< .0016	< .0016	0.619	0.816
<i>d</i>		0.89	1.01	0.74	0.09	0.04

*Note.* Adjusted critical  $p = .00166$ . Yes = 0 and No = 1 meaning a negative  $t$  indicated a higher mean climate score for Yes.

**Ethics training component.** Hypothesis 2 stated that the presence versus the absence of ethics training is related to the ethical climate dimensions of caring, law and code, rules, instrumental, and independence. To test this hypothesis, I performed five  $t$ -tests in which I compared climate dimension scores of those participants who answered “Yes” to having ethics training to those who answered “No”. I adjusted the critical  $p$ -value to accommodate for a large number of tests. The scores on the climate dimensions of caring, rules, and law and code were significantly higher when ethics training was present than when it was absent (see Table 3). Hypothesis 2 was partially supported.

**Table 3**

*Means, Standard Deviations, and t-tests Comparing the Presence vs. Absence of Ethics Training for Each Ethical Climate Dimension.*

		Caring	Law and Code	Rules	Instrumental	Independence
Yes	M	3.64	4.14	4.04	2.67	2.75
	SD	0.65	0.70	0.69	0.84	0.92
No	M	3.20	3.62	3.64	2.70	2.56
	SD	0.73	0.89	0.87	0.88	0.81
Don't Know	M	3.23	3.62	3.86	2.57	2.67
	SD	0.47	0.79	0.6	0.68	0.89
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	<i>t</i>	-6.11	-6.35	-4.99	0.356	-2.00
	<i>df</i>	390	390	390	390	390
	<i>p</i>	<.0016	<.0016	<.0016	0.722	0.0457
	<i>d</i>	0.65	0.68	0.53	0.04	0.21

*Note.* Adjusted critical  $p = .00166$ . Yes = 0 and No = 1, meaning a negative  $t$  indicated a higher mean climate score for Yes.

**Ethics hotline component.** Hypothesis 3 stated that the presence versus absence of an ethics hotline was related to the ethical climate dimensions of caring, law and code, rules, instrumental, and independence. To test this hypothesis, I performed five t-tests in which I compared climate dimension scores of those participants who answered “Yes” to having an ethics hotline and those who answered “No”. I adjusted the critical p-value to accommodate for a large number of tests. The score on the climate dimension of caring was significantly higher when an ethics hotline was present than when it was absent (see Table 4). Hypothesis 3 was supported for only one of the five climate dimensions.

**Table 4**

*Means, Standard Deviations, and t-tests Comparing the Presence vs. Absence of an Ethics Hotline for Each Ethical Climate Dimension.*

		Caring	Law and Code	Rules	Instrumental	Independence
Yes	M	3.61	4.02	3.95	2.83	2.72
	SD	0.73	0.77	0.75	0.85	0.94
No	M	3.35	3.81	3.82	2.62	2.67
	SD	0.66	0.86	0.8	0.84	0.82
Don't Know	M	3.48	4.03	3.99	2.5	2.66
	SD	0.68	0.73	0.72	0.77	0.91
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	<i>t</i>	-3.43	-2.3	-1.52	-2.302	-0.538
	<i>df</i>	329	329	329	329	329
	<i>p</i>	< .0016	0.022	0.129	0.022	0.591
	<i>d</i>	0.38	0.25	0.17	0.25	0.06
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*Note.* Adjusted critical  $p = .00166$ . Yes = 0 and No = 1, meaning a negative  $t$  indicated a higher mean climate score for Yes.

**Disciplinary system for unethical behavior.** Hypothesis 4 stated that the presence versus absence of a disciplinary system for (un)ethical conduct was related to the levels of the ethical climate dimensions of caring, law and code, rules, instrumental, and independence. I ran two sets of tests for this hypothesis. One set assessing the effect of rewards for *ethical* behavior on climate scores and one set assessing the effect of sanctions for *unethical* behavior on climate scores. To assess the effect of rewards for *ethical* behavior on climate scores, I performed five t-tests in which I compared climate dimension scores of those participants who answered “Yes” to having a reward system for *ethical* behavior and those who answered “No”. The scores on the climate dimensions of caring and independence were significantly higher in the presence of

rewards for *ethical* behavior than when rewards were absent (See Table 5). Hypothesis 4 was partially supported in relation to rewards for *ethical* behavior.

To assess the effects of sanctions for *unethical* behavior on climate scores, I performed five additional t-tests in which I compared climate dimensions scores of those participants who answered “yes” to having a disciplinary system for *unethical* behavior and those who answered no. I adjusted the critical p-value to accommodate for a large number of tests. The scores on the climate dimensions of caring, law and code, rules, and instrumental were significantly higher when punishment for *unethical* behavior was present than when it was absent (See Table 6). Hypothesis 4 was partially supported for in relation to punishment for *unethical* behavior. Also, results provided stronger support for the effects of punishment for *unethical* behavior than for the effects of rewards for *ethical* behavior.

**Table 5**

*Means, Standard Deviations, and t-tests Comparing the Effect of the Presence vs. Absence of Being Rewarded for Ethical Behavior for Each Ethical Climate Dimension.*

		Caring	Law and Code	Rules	Instrumental	Independence
Yes	M	3.69	4.05	3.96	2.78	2.90
	SD	0.59	0.68	0.7	0.85	0.89
No	M	3.30	4.82	3.84	2.67	2.52
	SD	0.76	0.87	0.83	0.85	0.85
Don't Know	M	3.45	3.97	3.92	2.53	2.65
	SD	0.68	0.85	0.75	0.79	0.88
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	<i>t</i>	-4.95	-2.48	-1.35	-1.11	-3.823
	df	303	303	303	303	303
	<i>p</i>	< .0016	0.0138	0.178	0.266	< .0016
	<i>d</i>	0.57	0.29	0.16	0.13	0.44

*Note.* Adjusted critical  $p = .00166$ . Yes = 0 and No = 1, meaning a negative  $t$  indicated a higher mean climate score for Yes.

**Table 6**

*Means, Standard Deviations, and t-tests Comparing the Effect of the Presence vs. Absence of Being Punished for Unethical Behavior for Each Ethical Climate Dimension.*

		Caring	Law and Code	Rules	Instrumental	Independence
Yes	M	3.59	4.05	4.00	2.62	2.66
	SD	0.65	0.72	0.69	0.83	0.86
No	M	3.04	3.50	3.43	3.03	2.81
	SD	0.69	0.89	0.91	0.75	0.97
Don't Know	M	3.35	3.79	3.85	2.64	2.67
	SD	0.67	0.94	0.83	0.9	0.92
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	<i>t</i>	-5.306	-4.92	-5.19	3.32	1.08
	df	342	342	342	342	342
	<i>p</i>	< .0016	< .0016	< .0016	< .0016	0.281
	<i>d</i>	0.81	0.75	0.79	0.51	0.16

*Note.* Adjusted critical  $p = .00166$ . Yes = 0 and No = 1, meaning a negative  $t$  indicated a higher mean climate score for Yes.

**Ethics office(r) component.** Hypothesis 5 stated that the presence versus absence of an ethics office(r) was related to the ethical climate dimensions of caring, law and code, rules, instrumental, and independence. To test this hypothesis, I performed five t-tests in which I compared climate dimension scores of those participants who answered “Yes” to having an ethics office(r) and for those who answered “No”. I adjusted the critical p-value to accommodate for a large number of tests. The scores on the ethical climate dimensions of caring and law and code were significantly higher when an ethics officer(r) was present than when one was absent (see Table 7). Hypothesis 5 was partially supported.

**Table 7**

*Means, Standard Deviations, and t-tests Comparing the Effect of the Presence vs. Absence of an Ethics Office(r) for Each Ethical Climate Dimension.*

		Caring	Law and Code	Rules	Instrumental	Independence
Yes	M	3.67	4.08	3.98	2.84	2.73
	SD	0.68	0.74	0.74	0.87	1.01
No	M	3.36	3.76	3.79	2.60	2.70
	SD	0.72	0.81	0.80	0.80	0.76
Don't Know	M	3.38	4.09	4.02	2.53	2.56
	SD	0.63	0.83	0.70	0.85	0.90
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	<i>t</i>	-4.00	-3.76	-2.22	-2.63	-0.26
	<i>df</i>	331	331	331	331	331
	<i>p</i>	< .0016	< .0016	0.0269	0.0091	0.797
	<i>d</i>	0.44	0.41	0.25	0.29	0.03
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*Note.* Adjusted critical  $p = .00166$ . Yes = 0 and No = 1, meaning a negative  $t$  indicated a higher mean climate score for Yes.

### **Summary of Effects of Ethics Program Components on Ethical Climate**

**Dimensions.** In summary, I observed that each of the ethic program components had a significant effect on caring. Four of the components (codes, training, punishment, and ethics officer) had an effect on law and code, and three of the components (codes, training, and punishment) had an effect on rules. Instrumental was affected only by punishment, and independence was affected only by a hotline. See Table 8 for a summary of these results.



**Table 8**

*Summary Table of the Individual Effects of Each Ethics Program Component on Each Ethical Climate Dimension.*

Program Components	Df	<u>Caring</u>		<u>Law and Code</u>		<u>Rules</u>		<u>Instrumental</u>		<u>Independence</u>	
		<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>	<i>t</i>	<i>p</i>
Codes	400	-5.14	< .0016	-5.82	< .0016	-4.28	< .0016	--	--	--	--
Training	390	-6.11	< .0016	-6.35	< .0016	-4.99	< .0016	--	--	--	--
Hotline	329	-3.43	< .0016	--	--	--	--	--	--	--	--
Rewards	303	-4.95	< .0016	--	--	--	--	--	--	-3.82	< .0016
Punish	342	-5.31	< .0016	-4.92	< .0016	-5.19	< .0016	3.32	< .0016	--	--
Officer	331	-4.00	< .0016	-3.76	< .0016	--	--	--	--	--	--

*Note.* Each "--" indicates a nonsignificant effect. Yes = 0 and No = 1 meaning that negative t-values represent higher climate scores for the presence of an ethics component.

**Moral awareness.** Hypothesis 6 stated that moral awareness was related to the ethical climate factors of caring, law and code, rules, instrumental, and independence. To test this hypothesis, I calculated the bivariate correlation between moral awareness and each of the ethical climate dimensions. There was a significant relationship between moral awareness scores and scores on the ethical climate dimensions of caring, law and code, rules, and instrumental (See Table 9). Hypothesis 6 was partially supported.

**Table 9**

*Bivariate Correlations Between Moral-Related Variables, Values, and Ethical Climate Dimensions.*

Variables	Climate Type				
	Caring	Law and Code	Rules	Instrumental	Independence
Moral awareness	<b>.14</b>	<b>.20</b>	<b>.18</b>	<b>-.15</b>	-.07
Perceptual moral attentiveness	.04	-.02	-.02	<b>.22</b>	<b>.12</b>
Reflective moral attentiveness	<b>.14</b>	.07	.09	<b>.14</b>	.07
MI – Internalization	<b>.15</b>	<b>.22</b>	<b>.20</b>	<b>-.26</b>	<b>-.19</b>
MI – Symbolization	<b>.31</b>	.10	<b>.18</b>	.08	<b>.15</b>
Values - Self-Transcendence	<b>.31</b>	<b>.23</b>	<b>.23</b>	-.07	.02
Values - Openness to Change	.10	.09	.07	.09	<b>.10</b>
Values - Self-Enhancement	<b>.18</b>	.08	.12	<b>.21</b>	<b>.14</b>
Values – Conservation	<b>.34</b>	<b>.27</b>	<b>.29</b>	.05	-.04

*Note:* Large bold font represents  $p < .01$ , and small bold font represents  $p < .05$ . MI = moral identity.

**Perceptual moral attentiveness.** Hypothesis 7 stated that perceptual moral attentiveness was related to the ethical climate factors of caring, law and code, rules, instrumental, and independence. To test this hypothesis, I calculated the bivariate correlation between perceptual moral attentiveness and each of the ethical climate

dimensions. There were significant relationships between perceptual moral attentiveness and the ethical climate dimensions of instrumental and independence (See Table 9).

Hypothesis 7 was partially supported.

**Reflective moral attentiveness.** Hypothesis 8 stated that reflective moral attentiveness was related to the ethical climate dimensions of caring, law and code, rules, instrumental, and independence. To test this hypothesis, I calculated the bivariate correlation between reflective moral attentiveness and each of the climate dimensions. There were significant relationships between reflective moral attentiveness and the ethical climate dimensions of caring and instrumental (See Table 9). Hypothesis 8 was partially supported.

**Moral identity.** Hypothesis 9 stated that moral identity was positively associated with the ethical climate dimensions of caring, law and code, rules, instrumental, and independence. To test this hypothesis, I calculated the bivariate correlations between the internalization facet of moral identity and each of the ethical climate dimensions. There were significant, positive relationships between the internalization facet of moral identity and the ethical climate dimensions of caring, law and code, and rules, providing partial support for Hypothesis 9 (See Table 9). There were significant negative relationships between the internalization facet of moral identity and the ethical climate dimensions of instrumental and independence, relationships that were opposite the predicted direction.

Additionally, I calculated the bivariate correlations between the symbolization facet of moral identity and each of the ethical climate dimensions. There were significant, positive relationships between symbolization and the ethical climate

dimensions of caring, law and code, rules, and independence (See Table 9). These results provided partial support for Hypothesis 9.

**Self-transcendence and openness to change values.** Hypothesis 10a stated that self-transcendence and openness to change values were positively related to the ethical climate dimensions of caring, law and code, rules, and independence and negatively related to the ethical climate dimension of instrumental. To test this hypothesis, I calculated the bivariate correlations between self-transcendence values and each of the ethical climate dimensions. There were significant, positive relationships between self-transcendence values and the ethical climate dimensions of caring, law and code, and rules (See Table 9).

To further test Hypothesis 10a, I calculated the bivariate correlations between openness to change values and each of the ethical climate dimensions. There were significant, positive relationships between openness to change values and the ethical climate dimensions of caring and independence (See Table 9). Hypothesis 10a was partially supported.

**Self-enhancement and conservation values.** Hypothesis 10b stated that self-enhancement and conservation values were negatively related to the ethical climate dimensions of caring, law and code, rules, and independence and positively related to the ethical climate dimensions of instrumental. To test this hypothesis, I calculated the bivariate correlations between self-enhancement values and each of the ethical climate dimensions. There were significant, positive relationships between self-enhancement values and the ethical climate dimensions of caring, instrumental, and independence (See Table 9).

To further test Hypothesis 10b, I calculated the bivariate correlations between conservation values and each of the ethical climate dimensions. There were significant, positive relationship between conservation values and the ethical climate dimensions of caring, law and code, and rules (See Table 9). Hypothesis 10b was partially supported.

### **Summary of Effects of Moral and Value Variables on Ethical Climate**

**Dimensions.** In summary, I observed significant relationships involving caring for eight of the nine moral and value variables (all variables except perceptual moral attentiveness). I observed that moral awareness, moral identity internationalization, moral identity symbolization, values-conservation, and values-self-transcendence each has a significant relationship with law and code as well as rules. Five of the moral and value variables were significantly related to instrumental and four to independence although the moral and value variables involved differed for these two outcomes. Each of the ethics program components had a significant effect on caring. Four of the components (codes, training, punishment, and ethics officer) had an effect on law and code, and three of the components (codes, training, and punishment) had an effect on rules. Instrumental was affected only by punishment, and independence was affected only by a hotline. See Table 8 for a summary of these results.

**General summary of results.** The following describes answers to questions I was focused on involving ethics program component effects first followed by moral and value variable effects.

*Ethics program components.* Relating to ethics program components, the first question that I addressed was which ethical climate dimensions had the greatest number of dichotomous predictors. The caring climate dimension had the greatest number of

significant predictors such that the presence of the ethics program components resulted in higher caring climate scores. In contrast, the instrumental and independence climate dimensions had the smallest number of significant predictors at one each. The absence of punishment for unethical behavior resulted in significantly higher instrumental climate scores, and the presence of an ethics hotline resulted in significantly higher independence climate scores.

The second question that I addressed was which of the ethics program components influenced the greatest number of ethical climate dimensions. The presence of punishment for unethical behavior had the greatest number of effects with effects observed for four out of the five ethical climate dimensions: caring, law and code, rules, and instrumental. The effects of punishment on the caring, law and code, and rules climate dimensions were such that the presence of punishment for unethical behavior resulted in significantly higher climate scores on each of these three climate dimensions. The effect of punishment on the instrumental climate dimension was such that the absence of punishment for unethical behavior resulted in higher instrumental climate scores. Rewards for ethical behavior affected the smallest number of ethical climate dimensions at one. The effect of rewards for ethical behavior was such that the presence of rewards for ethical behavior significantly increased caring climate scores.

*Moral variables.* Next, I examined the relationship between each of the moral variables and each of the ethical climate dimensions. The first question that I addressed was which ethical climate dimensions had the greatest number of significant relationships with the moral variables. The caring climate had the greatest number of significant relationships with caring climate being significantly related to all of the continuous

variables with the exception of moral attentiveness. Interestingly, moral identity internalization and symbolization were related to the independence climate dimension in opposite directions. The relationship between internalization and the independence climate was negative, and the relationship between symbolization and the Independence climate was positive.

The second question that I addressed was which moral variable influenced the greatest number of ethical climate dimensions. Moral identity internalization had the greatest number of significant relationships with ethical climate dimensions. Moral identity internalization relationships were in the expected direction for all of the ethical climate dimensions except for the independence climate dimension. For example, internalization was positively related to the caring, law and code, and rules climate dimensions and negatively related to the instrumental and independence climate dimensions. Moral awareness and moral identity symbolization were each significantly related to four of the five ethical climate dimensions. Moral awareness was significantly related to the caring, law and code, rules, and instrumental ethical climate dimensions. Moral identity symbolization was significantly related to the caring, law and code, rules, and independence ethical climate dimensions.

*Values variables.* Lastly, I examined the relationship between each of the value variables and each of the ethical climate dimensions. The first question that I addressed was which ethical climate dimensions had the greatest number of significant relationships with the values variables. The caring climate had the greatest number of significant relationships with caring climate being significantly related to all values variables. All of the values variables, self-enhancement, openness to change, conservation, and self-

transcendence were significantly related to the caring climate dimension in the positive direction. This result was surprising because I expected self-enhancement values and conservation values were negatively related to the caring climate dimension.

The second question that I addressed was which values variable influenced greatest number of ethical climate dimensions. Self-enhancement values had the greatest number of significant relationships with ethical climate dimensions. Self-enhancement values were significantly, positively related to the ethical climate dimensions of caring, rules, instrumental, and independence. Only the relationship between self-enhancement values and the instrumental climate dimensions was in the expected direction.

Conservation values and self-transcendence values each had significant relationships with three of the ethical climate dimensions, caring, law and code, and rules. All of these relationships were in the positive direction. This result was surprising because I expected that conservation values were negatively related to the caring, law and code, and rules climate dimensions. The relationships between self-transcendence values and the caring, law and code, and rules climate dimensions were in the expected direction. Openness to change values had the fewest significant relationships with ethical climate dimensions, only being significantly, positively related to the caring climate dimension. This relationship was in the expected direction.

The purpose of the above analyses was to examine the effects of each ethics program component and each moral and value variable on each ethical climate dimension. Reflecting dichotomous predictors, I compared ethical climate dimension scores in the presence or absence of each ethics program component using t-tests. For the continuous variables, I calculated and examined the bivariate correlations between each



moral and value variable and each ethical climate dimension. These results were the basis of my hypothesis testing. Additionally, I examined the ethics program components as a set by performing five ANOVAs to determine examine the unique variance accounted for by each ethics program component in each ethical climate dimension. Similarly, I examined the moral and value variables as a set by performing five multiple regression analyses to examine the unique variable accounted for by each moral and value variable in each ethical climate dimension. A summary of these results are detailed below.

### **Additional Tests**

#### **Effects of set of ethics program components excluding “don’t know”**

**responses.** I used five ANOVAs to examine relationships between the five ethics program components as a set with each of the ethics climate dimensions in turn. As in tests of hypotheses, I compared the effects of the dichotomous predictors (i.e., “yes”/presence versus “no”/absence of the component), excluding participants who responded “don’t know”. Examined as a set, the ethics training component had an unique effect on caring, law and code, and rules. The presence of ethics training resulted in higher climate scores. This provided additional support for Hypothesis 2. The rewards component had an unique effect on independence. The presence of rewards for ethical behavior resulted in higher independence climate scores. This provided additional support for Hypothesis 4. The ethics officer component had an unique effect on instrumental. The presence of an ethics officer resulted in higher instrumental climate scores. This provided additional support for Hypothesis 5. Complete details of the analyses can be found in Appendix P.

**Effects of set of ethics program components combining “don’t “know” and “no” responses.** Also, I used five ANOVAs to examine relationships between the five ethics program components as a set with each of the ethics climate dimensions in turn including participants who gave “don’t know” responses. I created dichotomous predictors by combining the “don’t know” with the “no” responses into one category and contrasting those responses with “yes” responses. Examined as a set, the effects of ethics codes, ethics training, rewards for *ethical* behavior and punishment for *unethical* behavior remained in a main-effects ANOVA with caring as an outcome, but the effects of ethics codes and reward for *ethical* behavior disappeared when I included all of the two-way interactions in the ANOVA. Ethics codes, ethics training, and punishment for *unethical* behavior had significant effects on law and code climate scores, but the effects of ethics codes and punishment for *unethical* behavior disappeared when all two-way interactions were included in the ANOVA. Ethics codes, ethics training, and punishment for *unethical* behavior had significant effects on rules climate scores, but the effect of ethics codes disappeared when I included all of the two-way interactions. Punishment for *unethical* behavior had a significant effect on instrumental climate scores, but this effect disappeared when I included all of the two-way interactions in the ANOVA. No ethics program components had significant effects on independence or instrumental climate dimensions. Effects were all in the predicted direction. Complete details of the analyses can be found in Appendix P.

**Additional analyses of moral and value variables.** When assessed as a set of predictors, the effects of moral awareness, moral identity symbolization, openness to change values, conservation values, and self-transcendence values remained. The effects

of moral awareness and conservation values remained as significant predictors. Moral awareness remained as a significant, positive predictor of rules climate scores. Moral awareness, perceptual moral attentiveness, moral identity internalization, and self-enhancement values were significant predictors of instrumental climate scores. Perceptual moral attentiveness, moral identity internalization, and moral identity symbolization remained as significant predictors of independence climate scores. Effects were all in the predicted direction. Complete details of the analyses can be found in Appendix P. It is worth noting that moral awareness was a significant predictor of all ethical climate dimensions with the exception of the independence climate dimension. This suggests that moral awareness is a robust predictor of ethical climate perceptions. It is also worth noting that the caring climate had the highest number of significant predictors.

## **Study 2**

It was my intention to conduct another study using the same measures as Study 1 adapted to an academic setting using a student sample. Due to complications arising from the COVID pandemic, I was unable to collect the number of responses needed to conduct an additional study. The measures that I used that were adapted to an academic are included in Appendices Q through S.

## **General Discussion**

The purpose of this study was to examine the effects of ethics program components, individual moral-related variables, and values variables on perceptions of ethical climate. Though I predicted that all ethics program components were related to each ethical climate dimension in some way, this was only partially supported by my

results. Regarding the ethics program components, the majority of effects observed related to the caring, law and code, and rules climate dimensions. A similar pattern of effects was observed for the morals and values variables and the ethical climate dimensions though there were a greater number of effects attributed to the instrumental and independence climate dimensions. This study raised important issues concerning the relationships and distinctions between ethical climate dimensions, the independent effects of ethics program components, and the nature of relationships between morals and values variables and ethical climate dimensions.

### **Theoretical Implication, Practical Implications, and Future Research**

**Relationships and distinctions between ethical climate dimensions.** The first issue relates to the similarities and differences between the ethical climate dimensions. My results suggest that the caring, law and code, and rules climate dimensions are distinct from the instrumental and independence climate dimensions. For example, the caring dimension was strongly related to both the law and code dimension ( $r = .49$ ) and rules dimension ( $r = .54$ ), and the law and code and rules dimensions were strongly related ( $r = .68$ ). Additionally, the majority of significant relationships between the ethics program components and climate dimensions were observed when the caring, law and code, and rules climate dimensions were the outcomes. For example, all ethics program components significantly influenced caring climate scores. The presence of ethics codes, ethics training, punishment for unethical behavior, and an ethics office(r) significantly influenced law and code. The same ethics program components influenced rules climate scores with the exception of an ethics office(r). These results demonstrate the overlap between the caring, law and code, and rules climate dimensions.

Additionally, my results demonstrated the differences between the caring, law and code, and rules climate dimensions and the instrumental and independence climate dimensions. For example, the instrumental climate was significantly but moderately related to the caring ( $r = -.18$ ), law and code ( $r = -.27$ ), and rules climate dimensions ( $r = -.22$ ) and not related to the independence dimensions ( $r = .09$ ). The independence dimension was significantly but moderately related to the caring dimension ( $r = .26$ ) and not significantly related to any of the other climate dimensions. The distinctiveness of the instrumental and independence climate dimensions was further demonstrated by their relationships with ethics program components. For example, both the instrumental and independence climate dimensions were significantly influenced by only one ethics program component, the absence of punishment for unethical behavior and an ethics hotline, respectively.

Given the evidence from the correlations among ethical climate dimensions and the pattern of relationships between ethics program components and ethical climate dimensions, the ethical climate dimensions represent three distinct groups despite measuring five separate dimensions. These results have theoretical implications with respect to the measurement of ethical climate perceptions using the Ethical Climate Questionnaire (Victor & Cullen, 1988). Though the ECQ attempts to measure five dimensions of ethical climate, there is a considerable amount of conceptual overlap between the caring, rules, and law and code dimensions. Future research might consider revising the ECQ to more broadly capture the construct domain of ethical climate. Alternatively, future research might consider developing a new measure of ethical

climate due to the age of the ECQ and the possibility that the ECQ might not reflect workplace-related changes that have occurred since its development.

This has practical implications for organizations attempting to implement ethics program components to influence climate perceptions. For example, organizations wishing to influence perceptions of caring, law and code, and rules climates can choose from multiple ethics program components to influence perceptions of all three climate dimensions. This gives organizations flexibility when choosing which ethics program components to implement, depending on the cost. For example, organizations might consider implementing ethics codes, ethics training, or punishment for unethical behavior to influence perceptions of multiple climate dimensions. In this way, organizations can maximize the effectiveness of ethics program components while controlling costs.

**Independent effects of ethics program components.** The second issue relates to the independent effects of ethics program components on ethical climate perceptions. Ethics training had a unique effect on caring, law and code, and rules climate dimensions in the presence of all other ethics program components. These effects were observed in my hypothesis tests and in more detailed exploratory analyses. For example, ethics training accounted for unique variance in caring, law and code, and rules scores. This effect was observed when including and excluding any participants who responded “Don’t know” to any of the ethics program component questions. Thus, my results suggest that ethics training is capturing unique information compared to the other ethics program components.

One reason for this effect might be due to the information that organizations are able to communicate to their employees through formal ethics training. Implementing

formal ethics training sessions is a tangible way in which organizations can communicate to employees and other stakeholders that the organization takes ethical conduct seriously. Whether ethics training is conducted during the onboarding process or annually, ethics training provides organizations with the opportunity to introduce and reinforce the organizational value of ethical conduct to its employees. Additionally, ethics training provides organizations with a control mechanism through which they can teach employees the importance of ethical decision-making, teach employees how to approach situations that have ethical considerations, tell them who to consult about situations with ethical considerations, and inform employees about other ethics program components that are important for the regulation of ethical conduct.

This finding relating to the presence of ethics training has multiple practical effects. First, my results provide information regarding the relative importance of ethics program components. For example, my results suggest that ethics training should be implemented or retained whether the organization is adopting ethics program components or cutting components to control costs. Second, my results suggest that the other ethics program components are capturing similar and overlapping information whereas training is capturing distinct information. As mentioned above, this provides managers and organizations with flexibility when it comes to choosing which ethics program components to either implement or cut. Managers and organization can choose to adopt one or a combination of ethics program components other than ethics training with similar effect.

**Nature of relationships between moral and values variables and ethical climate dimensions.** The third issue relates to the nature of the relationships between

morals and values variables and ethical climate dimensions. My predictions imply that morals and values variables influence perceptions of ethical climate dimensions.

However, my results do not provide me with the opportunity to assess the direction of the relationships between morals and values variables and ethical climate dimensions because my results are correlational. Contrary to my predictions, it is likely that ethical climate dimensions influence morals and values variables. For example, organizations that score higher on caring climate dimensions might hire employees that display higher levels of morals and values variables. Additionally, potential employees that display higher levels of morals and values variables may be selective in the jobs that they apply for. They may seek out organizations that are socially responsible or have an ethically sound reputation. Furthermore, potential employees may selectively apply to organizations that share the same ethical orientation or values as themselves.

Moreover, given that ethical climates constitute shared perceptions among employees, it is possible that the relationship between ethical climates and individual morals and values variables is reciprocal. For example, organizations that score higher on ethical climate dimensions might hire employees with higher levels of morals and values variables. This works to reinforce the current climate at the organization or within the work group by hiring employees that have similar morals and values orientations with both the organization and other employees. Thus, the current ethical climate influences the organization to hire employees that have morals and values orientations that match the current climate. Once hired, these employees contribute to and reinforce the current ethical climate via their morals and values orientations.



## Limitations

This study has a few limitations to consider. First, I used a conservative critical value when conducting my *t*-tests. Due to the number of tests conducted, I adjusted the critical p-value to accommodate for the likelihood of detecting significant effects by chance. However, this reduced power, and thus it is possible that other substantive effects were not detected by adjusting the critical value in this way. Future research should consider using a different research design with greater power to detect the effects of ethics program components on perceptions of ethical climate.

Second, ethics program components and individual moral and values variables were assessed separately. Whereas this approach provided partial support for my hypotheses, little can be said about the way in which these variables interact to influence perceptions of ethical climate. For example, an individual with a high level of moral awareness may be more aware of whether their organization has a set of ethics codes and may be more aware of the content of those codes. Moral awareness and the presence(absence) of ethics codes may interact to significantly influence the way in which that individual perceives the ethical climate of their work group or organization. Future research should investigate the way in which organizational components and individual characteristics influence perceptions of the ethical environment.

Third, this study did not include an assessment of social desirability. Whereas social desirability is unlikely to influence awareness of ethics program components, responses to moral variables measures and values variable measures could have been influenced by social desirability to a degree. Morals and values are highly personal and sensitive, and it is possible that respondents wanted to appear as moral individuals or as

having desirable values. However, using Mturk to recruit participants may have mitigated some of the effects of responding in a socially desirable way because Mturk responses are anonymous.

Finally, this study used a single item to assess each component of ethics programs. However, the use of single items to assess ethics program components may not have impacted my results. Whereas single item measures are not ideal when attempting to measure a complex psychological construct, my assessment of ethics program components merely asked participants to state whether each ethics program component was present versus absent in their organization.

## **Conclusion**

The purpose of my research was to examine relationships between ethics program components and individual moral and values variables and their influence on perception of ethical climate. My results provided evidence for three ethical climate dimensions rather than the five that were measured. Additionally, my results provided evidence that most ethics program components had similar and overlapping effects on ethical climate dimensions, suggesting that some program components might be interchangeable. In contrast, my results highlighted the robust effect of ethics training on ethical climate perceptions, suggesting the importance of including this component and implementing it effectively. Finally, though I predicted that morals and values variables influenced perceptions of ethical climate, it is likely that the nature of this relationship is such that climate dimensions influence the types of employees who are attracted and hired. From a theoretical perspective, my study contributes to the existing literature regarding ethical climate perceptions by replicating previous research related to ethical climate and ethics

program components. Furthermore, my study uniquely contributes to the ethical climate literature by describing the relationships between morals and values variables and ethical climate perceptions. From a practical perspective, my study provides practitioners with information related to the relative importance of ethics program components in influencing ethical climate perceptions. Furthermore, my study provides practitioners with an understanding of the way in which morals and values variables may influence the hiring process and reinforce an organization's current ethical climate. Understanding the unique effects of ethics program components and morals and values variables on ethical climate perceptions provides researchers and practitioners with the understanding and the tools necessary for addressing these variables in the workplace.

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## Appendix A

### **Pilot Study Method**

I conducted a pilot study using a work sample in which I used exploratory factor analyses to examine psychometric properties of the measures used to ensure my measures demonstrated appropriate psychometric properties. Following the pilot study, I tested my predictions using a work sample (Study 1). Due to the Covid-19 pandemic, I was unable to collect the proposed academic sample (Study 2).

### **Participants**

Data were collected online from participants recruited from the Mechanical Turk (MTurk) service provided by Amazon.com. Participants received a payment of \$0.50 for participating in this study.

### **Measures**

**Ethics program components.** For current study, I developed a measure to assess perceptions of ethics programs. In this measure, I asked participants questions about each of five ethics program components (see Appendix B).

**Ethics codes.** I defined an ethics code as a formal document describing appropriate conduct in the workplace with respect to clients, coworkers, and shareholders (Kaptein, 2009). I asked participants to report on the presence of an ethics code within their organization (2 = yes, 1 = no, 0 = I don't know). In addition, for those reporting the presence of an ethics code, I asked participants how familiar they are with the content of their organization's code of ethics (1 = very unfamiliar, 5 = very familiar). High scores on familiarity with the ethics codes indicated that employees know the content of the ethics code.

***Ethics training.*** I asked participants to report on the presence of formal ethics training in their organization (2 = yes, 1 = no, 0 = I don't know). For those reporting the presence of ethics training, I asked participants how many hours of ethics training they have received in the past year (participants will give their best estimate), and their rating of the effectiveness of the training they received (1 = not at all effective, 5 = Very effective). High scores on the perceived effectiveness item indicated that employees generally perceive the ethics training they receive to be effective.

***Ethics hotline.*** I asked participants to indicate whether their company has an ethics hotline in a yes or no format (2 = yes, 1 = no, 0 = I don't know). In addition, for those reporting the presence of an ethics hotline, I asked participants to indicate whether they have used the ethics hotline (1 = yes, 0 = no) and their rating of the effectiveness of the hotline (1 = not at all effective, 5 = very effective).

***Disciplinary system.*** I asked participants to indicate whether their company rewards ethical behavior (2 = yes, 1 = no, 0 = I don't know). For those reporting the presence of a disciplinary system, I asked participants to indicate whether their company punishes unethical behavior (2 = yes, 1 = no, 0 = I don't know) and their rating of the effectiveness of the disciplinary system (1 = not at all effective; 5 = very effective).

***Ethics office(r).*** I asked participants to indicate whether their company has an ethics office(r) (2 = yes, 1 = no, 0 = I don't know). For those reporting the presence of an ethics officer, I asked participants to indicate whether they have contacted the ethics officer (1 = yes, 0 = no) and their rating of the effectiveness of the ethics officer (1 = not at all effective, 5 = very effective).

***Scope of ethics program.*** To assess the scope of the ethics program, I summed the number of ethics program components participants report as being present in their organization. This will yield a maximum score of 5 and a minimum score of 0. High scores indicate the presence of multiple components of an ethics program, suggesting broader scope of the ethics program. I included this measure for purposes of exploratory analyses.

***Individual attributes.*** I administered three measures of moral attributes and also assessed values.

***Moral awareness.*** I used a 3-item scale to measure moral awareness ( $\alpha = .76$ , Reynolds, 2006). The scenario presented to participants is one in which there is harm and a violation of a behavioral norm. A sample item for this scale is “There are very important ethical aspects to this situation.” Participants will be asked to respond to what extent they agree with each item, ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores on this measure indicated higher level of moral awareness for the individual. Item scores were averaged. Refer to Appendix C for the full measure.

***Moral attentiveness.*** I used a 12-item scale to measure moral attentiveness (Reynolds, 2008). This measure consisted of two subscales: a seven-item measure of perceptual moral attentiveness ( $\alpha = .87$ ) and a five-item measure of reflective moral attentiveness ( $\alpha = .84$ ). Participants were asked to respond to what extent they agree with each statement, ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores on these subscales indicated higher levels of perceptual and reflective moral attentiveness, respectively. A sample item from the “Perceptual Moral Attentiveness” measure is “In a typical day, I face several ethical dilemmas.” A sample item from the



“Reflective Moral Attentiveness” measure is “I often reflect on the moral aspects of my decisions.” Item scores were averaged. Refer to Appendix D for the full measure.

***Moral identity.*** I used a 10-item scale to measure moral identity (Aquino & Reed, 2002). This measure consisted of two subscales: a five-item measure of “Internalization” ( $\alpha = .83$ ) and a five-item measure of “Symbolization” ( $\alpha = .82$ ). Participants were given a list of nine moral traits and prompted to think of someone (or themselves) that has one, a few, or any combination of the listed characteristics. Once participants have thought of this person (themselves or someone else) they responded to 10 items on a scale from 1 (strongly disagree) to 5 (strongly agree). Scores on these measures were averaged. Higher average scores on these subscales indicated a greater extent to which individuals find traits to be central to their self-concept (internalization) and a greater extent to which individuals believe traits are reflected in their actions (symbolization). A sample item from the internalization scale is “It would make me feel good to be a person who has these characteristics.” A sample item from the symbolization scale is “The kinds of books and magazines that I read identify me as having these characteristics.” Refer to Appendix E for the full measure.

***Values.*** I used a 56-item scale to measure individual values (Schwartz, 1992). Participants were presented with each guiding principle and asked whether the guiding principle was “opposed to my values”, “not important to my values”, or “seen as a possible value”. Each of these options were associated with a numerical score, -1, 0, and 1 respectively. Participants that selected “seen as a possible value” were then prompted to indicate how important that guiding principle was to them using a seven-point scale ranging from 7 (of supreme importance) to 1 (slightly important). Scores on the

importance rating scale were combined with scores on the “possible value” item and yielded a score ranging from negative one to seven. Higher scores indicated greater importance of the guiding principle. The scores for each guiding principle, i.e., each item, were averaged to obtain an average strength of importance score for the higher order value category. The higher the score, the greater the importance of the higher order value of the individual. Please refer to Appendix F for the full list of values.

Each of the guiding principles falls into a higher order category describing a type of value. For example, the guiding principles of social power, authority, wealth, preserving my public image, and social recognition fall into the higher order value of *Power*. The guiding principles of ambitious, influential, capable, intelligent, and successful fall into the higher order value of *Achievement*. The guiding principles of enjoying life and pleasure fall into the higher order category of *Hedonism*. The higher order value of *Power*, along with the higher order values of *Achievement* and *Hedonism*, make up the highest order category of *Self-enhancement*. The guiding principles of curious, creativity, freedom, choosing own goals, self-respect, and independent, make up the higher order value of *Self-direction*. The guiding principles of an exciting life, a varied life, and daring fall into the higher order value of *Stimulation*. The guiding principles of enjoying life and pleasure fall into the higher order value of *Hedonism*. *Self-direction* along with the higher order values of *Stimulation* and *Hedonism* make up the highest order category of *Openness to Change*. The guiding principles of obedient, honoring parents and elders, politeness, and self-discipline make up the higher order value of *Conformity*. The guiding principles of accepting my portion in life, humble, devout, respect for tradition, detachment, and moderate fall into the higher order value of

*Tradition*. The guiding principles of clean, national security, reciprocation of favors, social order, family security, sense of belonging, and healthy fall into the higher order value of *Security*. *Conformity* along with the higher order values of *Security* and *Tradition* make up the highest order category of *Conservation*. The guiding principles of helpful, honest, forgiving, loyal, responsible, a spiritual life, true friendship, mature love, and meaning in life make up the higher order value of *Benevolence*. The guiding principles of protecting the environment, unity with nature, a world of beauty, broad-minded, social justice, wisdom, equality, a world at peace, and inner harmony fall into the higher order value of *Universalism*. *Benevolence* and the higher order value of *Universalism* make up the highest order category of *Self-transcendence*. The highest order values compose two continuums, *Self-Transcendence* to *Self-Enhancement*, and *Openness to Change* to *Conservation*. These two continuums form the structure of the circumplex model shown in Figure 3.

**Ethical climate.** I used the 26-item Ethical Climate questionnaire (Victor & Cullen, 1988) to capture the five dimensions of ethical climate. The five factors are: Caring, Law and Code, Rules, Instrumental, and Independence. Participants were asked to rate how accurately each statement reflects the general climate of their organization. Participants responded to all items using a five-point scale, ranging from Completely false (1) to Completely true (5). Item scores were averaged. Higher scores indicated higher levels of an ethical climate dimension. Refer to Appendix G for the full measure.

The Caring subscale contained seven items ( $\alpha = .80$ ). A sample item is “What is best for everyone in the company is the major consideration here.”

A sample item from the Law and Code factor ( $\alpha = .79$ ) is “People are expected to comply with the law and professional standards over and above other considerations.”

This subscale contained four items.

A sample item from the Rules factor ( $\alpha = .79$ ) is “It is very important to follow the company’s rules and procedures here.” This subscale contained four items.

A sample item from the Instrumental factor ( $\alpha = .71$ ) is “In this company, people protect their own interests above all else.” This subscale contained seven items.

Finally, a sample item from the Independence factor ( $\alpha = .60$ ) is “In this company, people are expected to follow their own personal and moral beliefs.” This subscale contained four items.

**Demographics.** I assessed demographic information, including gender (0 = men; 1 = women), age, location of unit (0 = corporate headquarters, 1 = other location), and level in the hierarchy (0 = individual contributor [not supervising]; 1 = supervisory; 2 = local management; 3 = middle management; 4 = executive/senior leader). Refer to Appendix H for the full measure.

***Insufficient Effort Responding.*** To improve the quality of my data, I removed participants who engaged in insufficient effort responding (Huang et al., 2012). Based on the procedures of Huang and colleagues (2012), I used a cutoff of less than two seconds per item per page. For example, if a participant takes less than two seconds on average per item on a page, then their data was removed from the data set. In addition, I included a few attention checks throughout the course of the survey. For the first attention check, participants were presented with the following item “I can run ten miles in ten minutes.” Response options for this item were “yes”, “I don’t know”, and “no”. Selecting “I don’t

know” or “no” to this item resulted in a failure of this attention check. For the second attention check, participants were instructed to “Please respond ‘Completely True’ to this item.” Any response other than completely true resulted in a failure of this attention check. For the final attention check, participants were given the instructions “Please respond ‘Neutral’ to this item.” Any response other than neutral resulted in a failure of this attention check. Participants who failed to follow the instructions for these items were terminated by the software, they were not paid, and were thanked for their time. These attention checks contributed to the overall quality of the data.

**Procedure.** Pilot data was collected using Amazon’s Mechanical Turk (Mturk). The sample was made up of working adults from a variety of companies. I purchased responses through Amazon’s Mechanical Turk (Mturk) until I obtained usable data from 953 participants. Using Excel’s random number generator function RAND(), I randomly sample the data and extracted 200 participants to use as the pilot study. After participants clicked on the survey link they were directed to an informed consent page. Once consent has been obtained, participants were directed to the first measure. Participants first responded to items created to assess ethics program components, followed by measures of moral awareness (Reynolds, 2006), moral attentiveness (Reynolds, 2008), moral identity (Aquino & Reed, 2002), Schwartz Value Survey (Schwartz, 1992), and the Ethical Climate Questionnaire (Victor & Cullen, 1988).

Once all the above measures were completed, participants were directed to a page on which they were asked demographic information regarding their race, gender, age, length of time in their current position, location of their work, and their hierarchical status within the company. After completing the demographic information, participants were

directed to additional survey measures such as Interpersonal and Organizational deviance scale (Bennett & Robinson, 2000), Organizational Citizenship Behavior (Lee & Allen, 2002), Voice (Van Dyne & Lepine, 1998), Job Satisfaction (Cammann et al., 1979), Unethical behavior (Kaptein, 2008), and big five personality traits (Saucier, 1994). After completing the additional measure, participants were directed to a debriefing page where they were informed of the purpose of the study, found contact information if they had further questions, and were thanked for their time. Participants then received their code in order to get paid. Participants were not paid if they failed the attention checks discussed earlier. I expected that it would take participants 30 minutes to complete the survey. Participants who provided usable data were paid \$0.50.

### **Pilot Study Results**

#### **Data Cleaning**

Of the 953 participants that participated in the study, 293 were removed because they did not spend an adequate amount of time per item per page as suggested by Huang et al. (2012). Next, I reverse-coded appropriate items from each scale as necessary. Then, I calculated the scale scores by averaging the scores for each measure. Before conducting any analyses, I randomly sampled the data by creating a random number column in the data set. In the random number column, I generated random numbers for each participant using the RAND() function in Excel and applied this function to each row in the data. Once generated, I sorted the cells from smallest to largest based on the random number column and split the data into two smaller samples: one with a sample size of 200 for factor analytic work and a second with a sample size of 460 for cross-validation and hypothesis testing. I conducted a longstring analysis to identify and

remove participants with 14 or more invariant responses (Desimone et al., 2015; Huang et al., 2012). The longstring analysis identified 14 participants who had 14 or more invariant responses. These participants were removed from the sample before the start of analyses.

### **Demographics**

Participants ( $N = 186$ ) were recruited from Amazon's Mechanical Turk and received \$0.50 for participating in this study. The average age was 38.27 years ( $SD = 11.06$ ). The majority of participants were female (52.2%) and Caucasian (65%). The majority of the participants had served in their current position for 2-5 years (48%), worked outside of corporate headquarters (66%), and were individual contributors in their company (49%). The majority of participants worked in educational services (15.05%), retail trade (8.60%), health care and social assistance (7.53%), information (7.53%), professional, scientific, and technical services (6.99%), and accommodation and food services (6.45%).

### **Scale Construction**

I examined the means, *SDs*, dimensionality, and internal consistency of each measure. I used Cronbach's alpha to measure internal consistency. I provided scree plots for all measures to investigate the psychometric properties of each scale. I provided all tables and figures related to psychometric properties below.

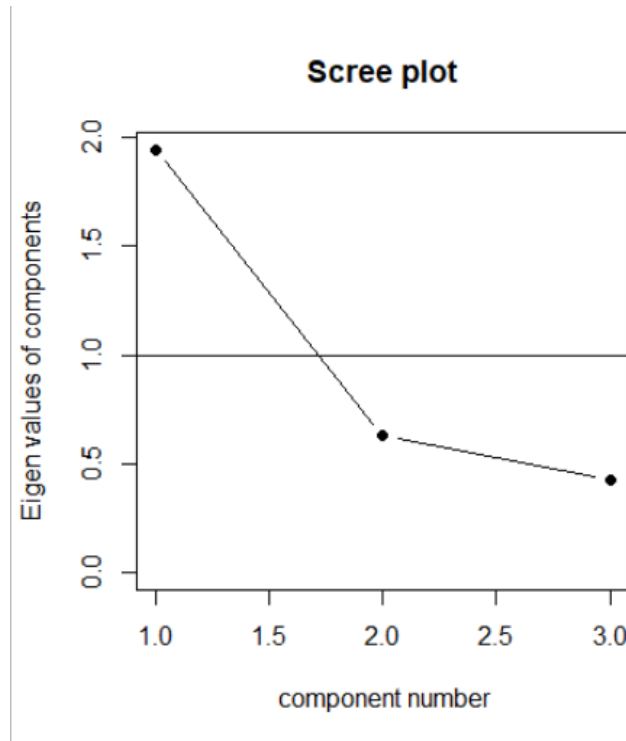
**Moral Awareness.** Results suggested that my sample demonstrated high levels of moral awareness ( $M = 5.88$ ,  $SD = 0.98$ ). Individuals scoring closer to seven demonstrated higher levels of moral awareness. I examined the scree plot for the 3 items of the measure, which provided evidence of one factor (see Figure A1). I completed an

exploratory factor analysis with one factor. Results from the exploratory factor analyses indicated that items loaded onto one factor. Factor loadings are displayed in Table A1. I used the original scale for analyses because the scale has been well-researched and frequently used (Reynolds, 2006). Results demonstrated acceptable alpha internal reliability ( $\alpha = .73$ ).



**Figure A1**

*Scree Plot of the Pilot Study Moral Awareness Measure*



**Table A1**

*Factor Analysis for Pilot Study Moral Awareness Measure.*

Items	Factor 1
MA – 1	0.805
MA – 2	0.703
MA – 3	0.559

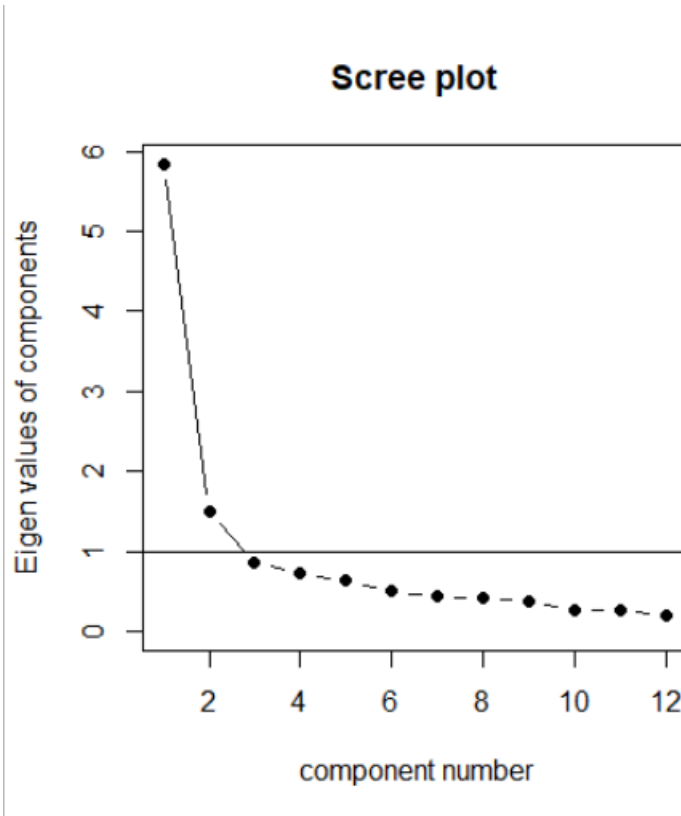
*Note.* MA = Moral Awareness

**Moral Attentiveness.** Results suggested that my sample demonstrated middle levels of moral attentiveness ( $M = 4.47$ ,  $SD = 1.08$ ). Participants demonstrated slightly lower perceptual moral attentiveness ( $M = 4.27$ ,  $SD = 1.23$ ) than reflective moral attentiveness ( $M = 4.75$ ,  $SD = 1.15$ ). Individuals scoring closer to seven demonstrated

higher levels of both perceptual and reflective moral attentiveness. I examined to scree plot of the entire measure which indicated there were two factors (see Figure A2). I completed an exploratory factor analysis of the entire measure with two factors and an oblique rotation. Results from the exploratory factor analysis indicated that items loaded onto two factors. Items from the perceptual facet loaded onto one factor whereas items from the reflective facet loaded onto the second factor (see Table A2). Additionally, I completed an exploratory factor analysis on each facet of the measure, each with one factor. Results from the exploratory analyses indicated that the items for each facet loaded onto one factor (see Table A3 and Table A4). Results demonstrated good alpha internal reliability for moral attentiveness ( $\alpha = .90$ ), the perceptual facet of moral attentiveness ( $\alpha = .88$ ), and the reflective facet of moral attentiveness ( $\alpha = .84$ ).

**Figure A2**

*Scree Plot of the Pilot Study Moral Attentiveness Measure.*



**Table A2**

*Factor Analysis for Pilot Study Moral Attentiveness Measure.*

Items	Factor 1	Factor 2
Matt - 1	.925	-.162
Matt - 2	.785	
Matt - 3	.945	-.136
Matt - 4	.613	
Matt - 5	.474	.292
Matt - 6	.138	.604
Matt - 7	-.165	.909
Matt - 8	.469	.239
Matt - 9	.579	.140
Matt - 10	.256	.543
Matt - 11		.870
Matt - 12	-.184	.695

*Note.* Matt = Moral Attentiveness

**Table A3***Factor Analysis of the Moral Attentiveness Measure Perceptual Facet.*

Items	Factor 1
Matt - 1	.812
Matt - 2	.732
Matt - 3	.855
Matt - 4	.658
Matt - 5	.668
Matt - 8	.622
Matt - 9	.671

*Note.* Matt = Moral Attentiveness**Table A4***Factor Analysis of the Moral Attentiveness Measure Reflective Facet.*

Items	Factor 1
Matt - 6	.660
Matt - 7	.788
Matt - 10	.713
Matt - 11	.824
Matt - 12	.592

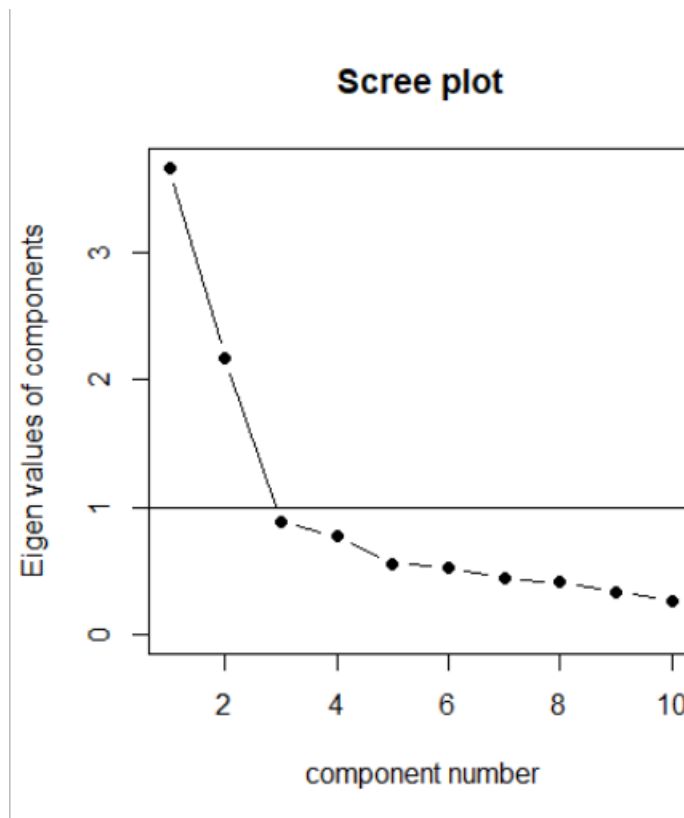
*Note.* Matt = Moral Attentiveness

**Moral Identity.** Results suggested that my sample demonstrated middle levels of moral identity ( $M = 3.92$ ,  $SD = 0.54$ ). Participants demonstrated higher internalization of moral identity ( $M = 4.49$ ,  $SD = 0.53$ ) than symbolization of moral identity ( $M = 3.35$ ,  $SD = 0.82$ ). Individuals scoring closer to five demonstrated higher levels of both internalization and symbolization of moral identity. I examined the scree plot of the entire measure which indicated two factors (see Figure A3). I completed an exploratory factor analysis of the entire measure with two factors and an oblique rotation. Results from the exploratory factor analysis indicted that items loaded onto two factors. Items from the internalization facet loaded onto one factor whereas items from the

symbolization facet loaded onto the second factor (see Table A5). Additionally, I completed an exploratory factor analysis on each facet of the measure, each with one factor. Results from the exploratory analyses indicated that the items for each facet loaded onto one factor (see Table A6 and Table A7). Results demonstrated acceptable alpha internal reliability for moral identity ( $\alpha = .79$ ) and the internalization facet of moral identity ( $\alpha = .77$ ). Results demonstrated good alpha internal reliability for the symbolization facet of moral identity ( $\alpha = .84$ ).

**Figure A3**

*Scree Plot of the Pilot Study Moral Identity Measure.*



**Table A5***Factor Analysis for the Pilot Study Moral Identity Measure*

Items	Factor 1	Factor 2
MI - 1	-.105	.716
MI - 2	.195	.648
MI - 3	-.214	.493
MI - 4		.647
MI - 5		.705
MI - 6	.730	
MI - 7	.783	
MI - 8	.715	
MI - 9	.687	
MI - 10	.624	

*Note.* MI = Moral identity**Table A6***Factor Analysis of the Moral Identity Measure Internalization Facet.*

Items	Factor 1
MI - 1	.674
MI - 2	.701
MI - 3	.412
MI - 4	.664
MI - 5	.737

*Note.* MI = Moral Identity**Table A7***Factor Analysis of the Moral Identity Measure Symbolization Facet.*

Items	Factor 1
MI - 6	.708
MI - 7	.812
MI - 8	.728
MI - 9	.668
MI - 10	.644

*Note.* MI = Moral Identity

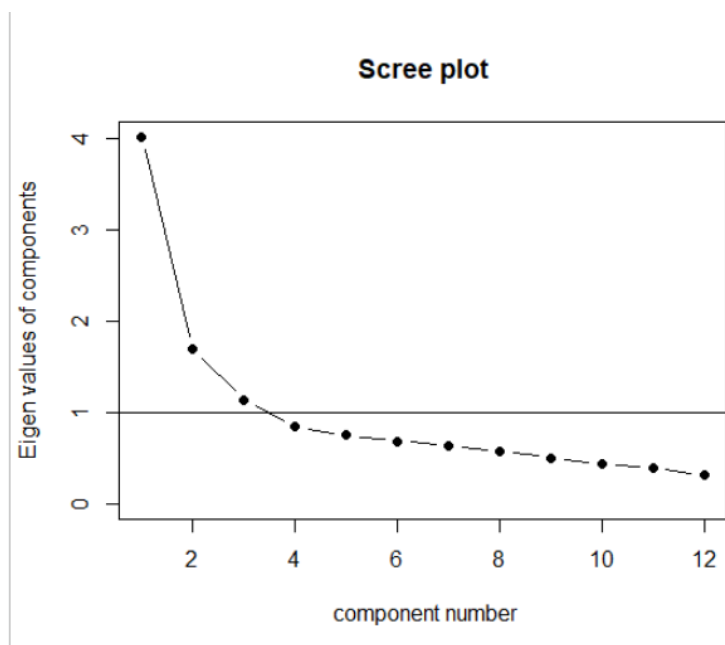
**Values.** Results suggested that my sample had differing levels of highest order values groupings. For example, my sample demonstrated middle levels of the higher order value of Self Enhancement ( $M = 3.14$ ,  $SD = 1.39$ ), middle levels of the higher order value of Openness to change ( $M = 4.13$ ,  $SD = 1.46$ ), middle levels of the higher order value of Conservation ( $M = 3.83$ ,  $SD = 1.36$ ), and high levels of the higher order value of Self-Transcendence ( $M = 4.65$ ,  $SD = 1.30$ ). Individuals scoring closer to seven demonstrated higher levels of Self Enhancement, Openness to Change, Conservation, and Self Transcendence. I examined the scree plot of each of the higher order value grouping. The scree plot of Self-Enhancement indicated a three-factor structure (see Figure A4). The scree plot of Openness to Change indicated a three-factor structure (see Figure A5). The scree plot of Conservation indicated a three or four- actor structure (see Figure A6). The scree plot of Self-Transcendence indicated a three or four factor structure (see Figure A7). Additionally, I completed an exploratory factor analysis for Self-Enhancement (see Table A8), Openness to Change (see Table A9), Conservation (see Table A10), and Self-Transcendence (see Table A11). Results demonstrated acceptable alpha internal reliability for Self-Transcendence ( $\alpha = .81$ ), Conservation ( $\alpha = .85$ ), Openness to Change ( $\alpha = .83$ ), and Self-Enhancement ( $\alpha = .81$ ).

Results suggested that my sample had differing levels of intermediate values groupings. For example, my sample demonstrated low levels of Power ( $M = 1.71$ ,  $SD = 1.75$ ), Stimulation ( $M = 2.55$ ,  $SD = 2.18$ ), and Tradition ( $M = 2.63$ ,  $SD = 1.68$ ). My sample demonstrated higher levels of Achievement ( $M = 4.27$ ,  $SD = 1.61$ ), Hedonism ( $M = 3.93$ ,  $SD = 2.10$ ), Self-Direction ( $M = 4.98$ ,  $SD = 1.42$ ), Conformity ( $M = 4.53$ ,  $SD = 1.78$ ), Security ( $M = 4.46$ ,  $SD = 1.37$ ), Universalism ( $M = 4.5$ ,  $SD = 1.58$ ), and

Benevolence ( $M = 4.80$ ,  $SD = 1.40$ ). I completed an exploratory factor analysis on Power (see Table A12), Achievement (see Table A13), Stimulation (see Table A14), Self-direction (see Table A15), Tradition (see Table A16), Conformity (see Table A17), Security (see Table A18), Universalism (see Table A19) and Benevolence (see Table A20). Results from the exploratory factor analysis provided some evidence that the items for each of the intermediate values loaded onto one factor. Results demonstrated acceptable internal reliability for Power ( $\alpha = .72$ ), Achievement ( $\alpha = .72$ ), Stimulation ( $\alpha = .80$ ), Self-Direction ( $\alpha = .70$ ), Conformity ( $\alpha = .74$ ), Universalism ( $\alpha = .81$ ), and Benevolence ( $\alpha = .77$ ). Results demonstrated poor alpha internal reliability for Hedonism ( $\alpha = .54$ ), Tradition ( $\alpha = .67$ ), and Security ( $\alpha = .64$ ).

**Figure A4**

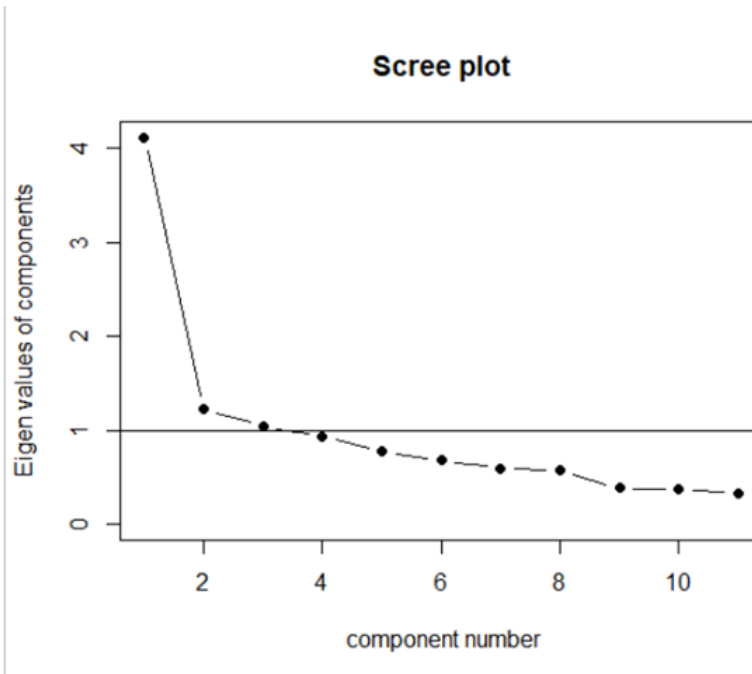
*Scree Plot of the Self-enhancement Facet of the Values Measure.*





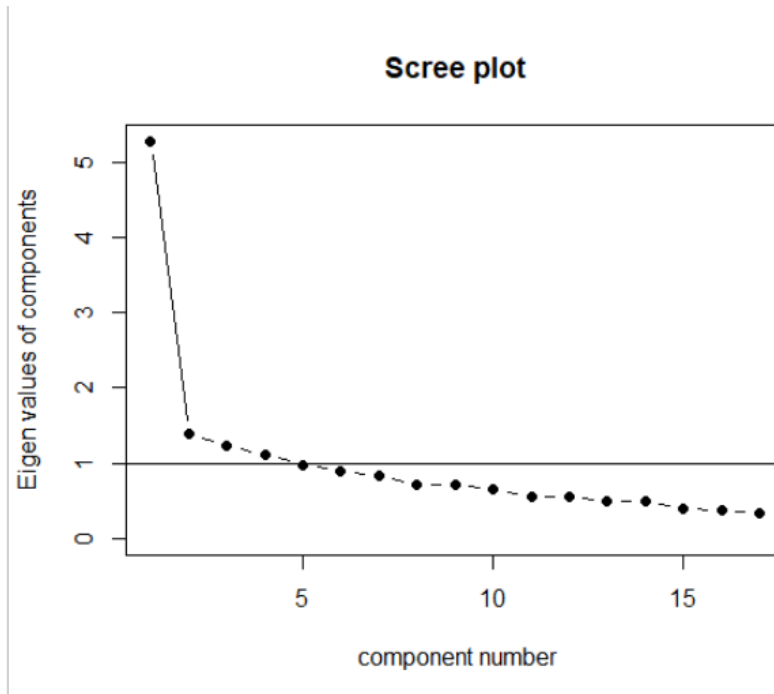
**Table A8***Factor Analysis of the Pilot Study Measure of Self-enhancement Values.*

Items	Factor 1	Factor 2	Factor 3
SE - 1	.293	-.194	.224
SE - 2	.348		.496
SE - 3	.938	-.190	
SE - 4	.335		.273
SE - 5	.404		.267
SE - 6	.103	.527	
SE - 7	-.281	.150	1.003
SE - 8	-.249	.769	
SE - 9	-.120	.669	
SE - 10	.198	.525	.115
SE - 11	.394	.250	-.157
SE - 12	.517	.166	-.182

*Note.* SE = Self-Enhancement.**Figure A5***Scree Plot of the Openness to Change Facet of the Values Measure*

**Table A9***Factor Analyses for Pilot Study Openness to Change Facet of the Values Measure*

Items	Factor 1	Factor 2	Factor 3
OTC - 1	.202		.839
OTC - 2	.904	-.160	.124
OTC - 3	.590	-.151	.300
OTC - 4	.492	.211	-.167
OTC - 5	.471	.100	
OTC - 6	-.306	.821	
OTC - 7		.524	
OTC - 8	.228	.302	
OTC - 9	.128	.693	
OTC - 10		.288	.386
OTC - 11		.227	.428

*Note.* OTC = Openness to Change**Figure A6***Scree Plot of the Conservation Facet of the Values Measure*

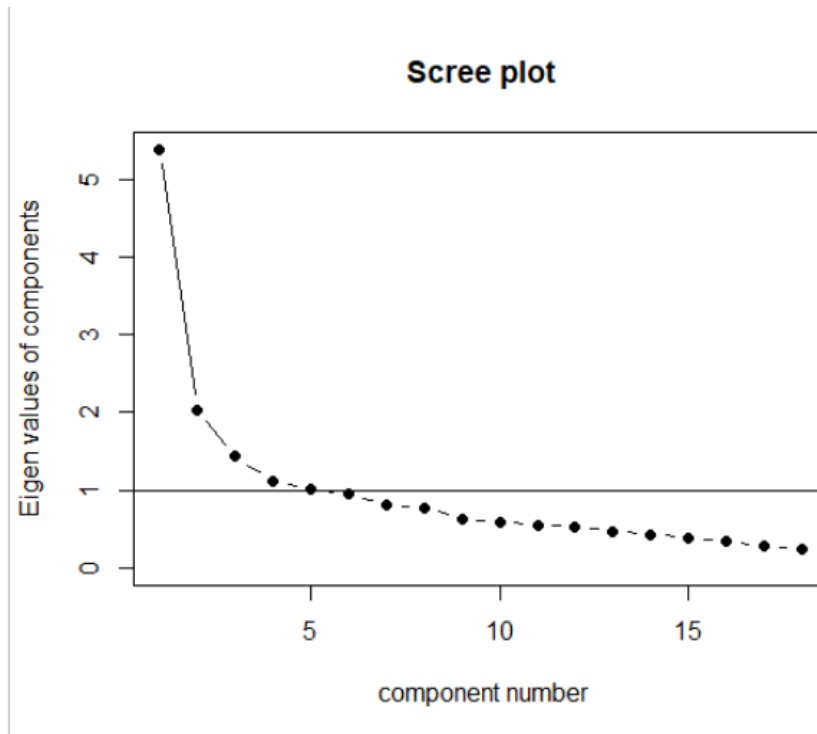
**Table A10***Factor Analysis of the Conservation Facet of the Values Measure*

Items	Factor 1	Factor 2	Factor 3
C - 1	.133	.326	.248
C - 2	.425		.240
C - 3		.662	
C - 4	.109	.727	
C - 5	-.274	.139	.561
C - 6	.155	-.159	.581
C - 7	.198	.455	.105
C - 8	.618	.313	-.106
C - 9	.586		
C - 10	.183	.326	.264
C - 11	.612		
C - 12	.512	.258	
C - 13		-.146	.499
C - 14	.177	.139	.109
C - 15	.499	.152	-.154
C - 16	.308		
C - 17	.504	-.154	

*Note.* C = Conservation

**Figure A7**

*Scree Plot of the Self-transcendence Facet of the Values Measure*



**Table A11***Factor Analysis of the Self-transcendence Facet of the Values Measure*

Items	Factor 1	Factor 2
ST - 1	-.124	.859
ST - 2		.692
ST - 3		.623
ST - 4	.114	.495
ST - 5	.145	.547
ST - 6	.462	.121
ST - 7		.433
ST - 8	.265	.459
ST - 9	.541	
ST - 10	.541	
ST - 11	.616	
ST - 12	.694	-.142
ST - 13	.536	
ST - 14	.660	
ST - 15	.531	-.160
ST - 16	.391	
ST - 17	.531	-.138
ST - 18	.464	

*Note.* ST = Self-transcendence**Table A12***Factor Analysis of the Power Facet of the Values Measure*

Items	Factor 1
POW - 1	.402
POW - 2	.698
POW - 3	.789
POW - 4	.576
POW - 5	.610

*Note.* POW = Power.

**Table A13***Factor Analysis of the Achievement Facet of the Values Measure*

Items	Factor 1
ACH - 1	.626
ACH - 2	.439
ACH - 3	.528
ACH - 4	.604
ACH - 5	.752

*Note.* ACH = Achievement**Table A14***Factor Analysis of the Stimulation Facet of the Values Measure*

Items	Factor 1
STIM - 1	.720
STIM - 2	.781
STIM - 3	.756

*Note.* STIM = Stimulation**Table A15***Factor Analysis of the Self-direction Facet of the Values Measure*

Items	Factor 1
SD - 1	.443
SD - 2	.407
SD - 3	.520
SD - 4	.595
SD - 5	.449
SD - 6	.770

*Note.* SD = Self-direction.

**Table A16***Factor Analysis of the Tradition Facet of the Values Measure*

Items	Factor 1
TRAD - 1	.642
TRAD - 2	.517
TRAD - 3	.534
TRAD - 4	.611
TRAD - 5	.329
TRAD - 6	.397

*Note.* TRAD = Tradition.**Table A17***Factor Analysis of the Conformity Facet of the Values Measure.*

Items	Factor 1
CONF - 1	.675
CONF - 2	.720
CONF - 3	.628
CONF - 4	.581

*Note.* CONF = Conformity**Table A18***Factor Analysis of the Security Facet of the Values Measure*

Items	Factor 1
SEC - 1	.569
SEC - 2	.676
SEC - 3	.280
SEC - 4	.422
SEC - 5	.469
SEC - 6	.309
SEC - 7	.507

*Note.* SEC = Security.

**Table A19***Factor Analysis of the Universalism Facet of the Values Measure*

Items	Factor 1
UNI - 1	.752
UNI - 2	.667
UNI - 3	.617
UNI - 4	.578
UNI - 5	.638
UNI - 6	.416
UNI - 7	.388
UNI - 8	.619
UNI - 9	.432

*Note.* UNI = Universalism.**Table A20***Factor Analysis of the Benevolence Facet of the Values Measure*

Items	Factor 1
BEN - 1	.642
BEN - 2	.617
BEN - 3	.619
BEN - 4	.554
BEN - 5	.680
BEN - 6	.401
BEN - 7	.418
BEN - 8	.403
BEN - 9	.421

*Note.* BEN = Benevolence

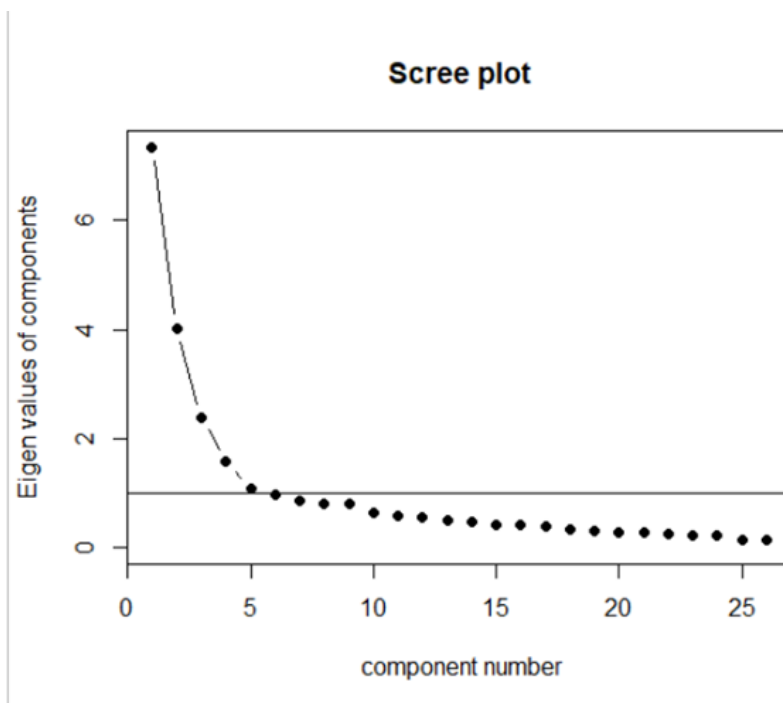
**Ethical Climate.** Results suggested that my sample demonstrated middles levels of the Caring climate ( $M = 3.48$ ,  $SD = 0.71$ ), Law and Code climate ( $M = 3.97$ ,  $SD = 0.79$ ), and Rules climate ( $M = 3.90$ ,  $SD = 0.79$ ). Results demonstrated lower levels of an Instrumental climate ( $M = 2.71$ ,  $SD = 0.80$ ) and an Independence climate ( $M = 2.73$ ,  $SD = 0.91$ ). Individuals scoring closer to five demonstrated higher levels of each climate type. I examined the scree plot of the entire measure (see Figure A8). I completed an



exploratory factor analysis on the entire measure with five factors and an oblique rotation. Results from the factor analysis indicated that items loaded onto five factors (see Table A21). Additionally, I completed a factor analysis on each of the climate types, Caring climate (see Table A22), Law and Code climate (see Table A23), Rules climate (see Table A24), Instrumental climate (see Table A25), and Independence climate (see Table A26) each with one factor. Results from these factor analyses indicated that items for each climate type loaded onto one factor. I used the original scale for analyses because the scale has been well-researched and frequently used (Martin & Cullen, 2006; Victor & Cullen, 1988). Results demonstrated good alpha internal reliability for Caring climate ( $\alpha = .82$ ), Law and Code climate ( $\alpha = .82$ ), Rules climate ( $\alpha = .84$ ), Instrumental climate ( $\alpha = .83$ ), and Independence climate ( $\alpha = .85$ ).

**Figure A8**

*Scree Plot of the Pilot Study Ethical Climate Questionnaire*



**Table A21***Factor analysis of the pilot study ethical climate questionnaire*

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
ECQ - 1		1.075			.159
ECQ - 2		.912			.126
ECQ - 3	-.105	.535			-.112
ECQ - 4		.590			-.173
ECQ - 5	.510				
ECQ - 6	.155	.246	.402		-.205
ECQ - 7	.377		.485	.113	-.134
ECQ - 8	.776	-.157	-.102		
ECQ - 9	.612	.278	-.160		.153
ECQ - 10	.951	-.133			
ECQ - 11	.558				
ECQ - 12	.821				
ECQ - 13	.882	-.153			
ECQ - 14	.460	.199		-.132	
ECQ - 15	.676	.142			
ECQ - 16	.180	.187	.301		1.001
ECQ - 17			.456		.685
ECQ - 18		-.144	.378		
ECQ - 19	-.179		.642		.157
ECQ - 20			.689		
ECQ - 21	-.258		.695	-.109	
ECQ - 22		-.129	.629		
ECQ - 23	.135			.735	
ECQ - 24				.775	
ECQ - 25	-.121			.739	
ECQ - 26				.850	.121

*Note.* Item 18 was removed because it was an attention check item. ECQ = Ethical Climate Questionnaire

**Table A22***Factor Analysis of the Caring Facet of the Ethical Climate Measure.*

Items	Factor 1
CAR - 1	.896
CAR - 2	.879
CAR - 3	.522
CAR - 4	.755
CAR - 5	.445
CAR - 6	.488
CAR - 7	.310

*Note.* CAR = Caring.**Table A23***Factor Analysis of the Law and Code Facet of the Ethical Climate Measure*

Items	Factor 1
LAC - 1	.742
LAC - 2	.704
LAC - 3	.862
LAC - 4	.615

*Note.* LAC = Law and Code**Table A24***Factor Analysis of the Rules Facet of the Climate Measure*

Items	Factor 1
RUL - 1	.820
RUL - 2	.750
RUL - 3	.678
RUL - 4	.791

*Note.* RUL = Rules climate

**Table A25***Factor Analysis of the Instrumental Facet of the Climate Measure.*

Items	Factor 1
INS - 1	.763
INS - 2	.826
INS - 3	.318
INS - 4	.713
INS - 5	.645
INS - 6	.662
INS - 7	.508

*Note.* INS = Instrumental climate**Table A26***Factor Analysis of the Independence Facet of the Climate Measure*

Items	Factor 1
IND - 1	.676
IND - 2	.793
IND - 3	.783
IND - 4	.805

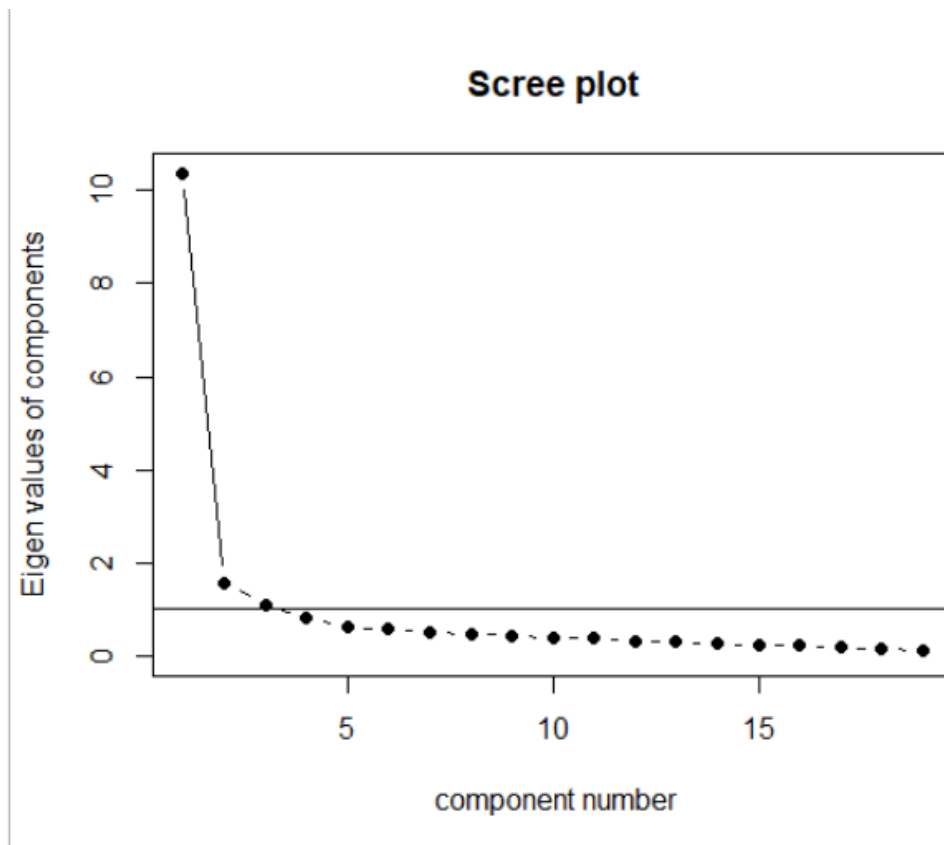
*Note.* IND = Independence climate

**Interpersonal and Organizational Deviance.** Results suggested that my sample demonstrated low interpersonal and organizational deviance behaviors ( $M = 1.82$ ,  $SD = 0.97$ ). Participants demonstrated slightly higher organizational deviance behavior ( $M = 1.85$ ,  $SD = 1.00$ ) than interpersonal deviance behaviors ( $M = 1.75$ ,  $SD = 1.07$ ). Individuals who scored closer to seven demonstrated more interpersonal and organizational deviance behaviors. I examined the scree plot of the entire measure which indicated a two-factor structure (see Figure A9). I completed an exploratory factor analysis of the entire measure with two factors and an oblique rotation. Results from the exploratory factor analysis indicated that items loaded onto two factors. Items from the interpersonal deviance facet loaded onto one factor and items from the organizational

deviance facet loaded onto a second factor (see Table A27). Additionally, I completed an exploratory factor analysis of the Interpersonal facet (see Table A28) and the Organizational facet (see Table A29), each with one factor. Results from the exploratory factor analyses indicated that the items for each facet loaded onto one factor. Results demonstrated good alpha internal reliability for interpersonal and organizational deviance behaviors ( $\alpha = .95$ ), the interpersonal deviance facet ( $\alpha = .92$ ) and the organizational deviance facet ( $\alpha = .93$ ).

**Figure A9**

*Scree Plot of the Pilot Study Counterproductive Work Behavior Measure.*



**Table A27***Factor Analysis of the Pilot Study Counterproductive Work Behavior Measure.*

Items	Factor 1	Factor 2
CWB - 1	.576	.131
CWB - 2	.642	
CWB - 3	.796	
CWB - 4	.692	
CWB - 5	.928	-.169
CWB - 6	.544	.227
CWB - 7	.844	
CWB - 8	.522	.272
CWB - 9	-.273	.898
CWB - 10	1.026	-.246
CWB - 11	-.174	.923
CWB - 12	.285	.369
CWB - 13	.879	
CWB - 14	.410	.311
CWB - 15		.866
CWB - 16	.607	.250
CWB - 17	.785	
CWB - 18	.107	.698
CWB - 19	.459	.330

*Note.* CWB = Counterproductive Work Behaviors

**Table A28***Factor Analysis of the Individual Facet of the Counterproductive Work Behaviors Measure.*

Items	Factor 1
CWB - 1	.733
CWB - 2	.795
CWB - 3	.709
CWB - 4	.803
CWB - 5	.816
CWB - 6	.799
CWB - 7	.843

*Note.* CWB = Counterproductive work behaviors

**Table A29**

*Factor Analysis of the Organizational Facet of the Counterproductive Work Behaviors Measure.*

Items	Factor 1
CWB - 8	.756
CWB - 9	.514
CWB - 10	.773
CWB - 11	.626
CWB - 12	.605
CWB - 13	.848
CWB - 14	.674
CWB - 15	.721
CWB - 16	.841
CWB - 17	.753
CWB - 18	.725
CWB - 19	.766

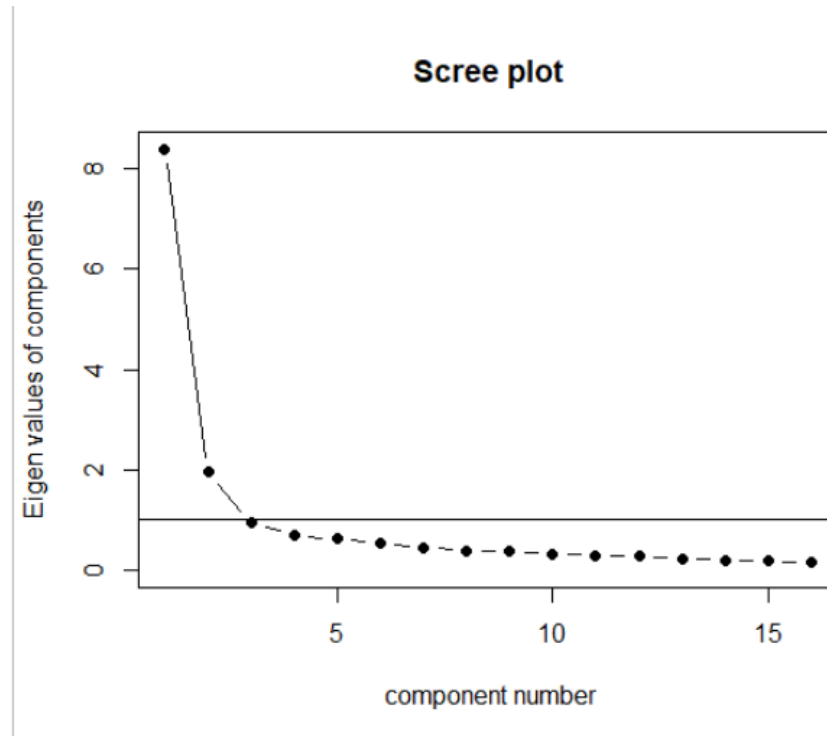
*Note.* CWB = Counterproductive Work Behaviors

**Organizational Citizenship Behaviors.** Results suggested that my sample demonstrated high levels of organizational citizenship behaviors ( $M = 4.92$ ,  $SD = 1.14$ ). Participants demonstrated slightly higher organizational citizenship behaviors directed toward individuals ( $M = 4.97$ ,  $SD = 1.22$ ) than the organization ( $M = 4.87$ ,  $SD = 1.29$ ). Individuals who scored closer to seven demonstrated more organizational citizenship behaviors. I examined the scree plot of the entire measure which provided evidence of two factors (see Figure A10). I completed an exploratory factor analysis on the entire measure with two factors and an oblique rotation. Results from the exploratory factor analysis indicated that the items loaded onto two factors (see Table A30). Items from the individual facet loaded onto one factor and items from the organizational facet loaded onto a second factor. Additionally, I completed an exploratory factor analysis of the Individual facet (see Table A31) and the Organizational facet (see Table A32), each with

one factor. Results from the exploratory factor analyses indicated that the items for each facet loaded onto one factor. Results demonstrated good alpha internal reliability for organizational citizenship behaviors ( $\alpha = .94$ ), the individual facet of organizational citizenship behaviors ( $\alpha = .92$ ) and the organizational facet of organizational citizenship behaviors ( $\alpha = .92$ ).

**Figure A10**

*Scree Plot of the Pilot Study Organizational Citizenship Behavior Measure.*





**Table A30***Factor Analysis of the Pilot Study Organizational Citizenship Behavior Measure.*

Items	Factor 1	Factor 2
OCB - 1	-.239	.986
OCB - 2	-.110	.947
OCB - 3	-.113	.877
OCB - 4		.683
OCB - 5	.235	.597
OCB - 6	.151	.624
OCB - 7		.761
OCB - 8	.169	.473
OCB - 9	.406	.209
OCB - 10	.572	.133
OCB - 11	.770	
OCB - 12	.780	
OCB - 13	.763	
OCB - 14	.966	-.167
OCB - 15	.915	
OCB - 16	.902	

*Note.* OCB = Organizational citizenship behaviors

**Table A31***Factor Analysis of the Individual Facet of the Organizational Citizenship Behavior Measure.*

Items	Factor 1
OCB - 1	.807
OCB - 2	.862
OCB - 3	.790
OCB - 4	.747
OCB - 5	.770
OCB - 6	.738
OCB - 7	.811
OCB - 8	.584

*Note.* OCB = Organizational citizenship behavior

**Table A32**

*Factor Analysis of the Organizational Facet of the Organizational Citizenship Behavior.*

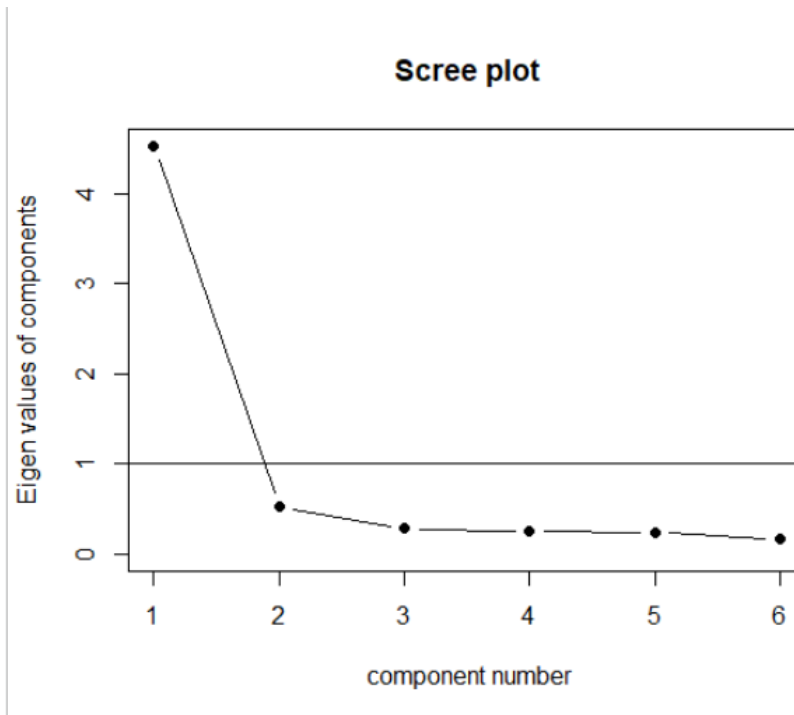
Items	Factor 1
OCB - 9	.544
OCB - 10	.658
OCB - 11	.795
OCB - 12	.765
OCB - 13	.767
OCB - 14	.860
OCB - 15	.858
OCB - 16	.849

*Note.* OCB = Organizational citizenship behavior.

**Voice.** Results suggested that my sample demonstrated high levels of voice behaviors ( $M = 4.96$ ,  $SD = 1.28$ ). Individuals scoring closer to seven demonstrated more voice behaviors. I examined the scree plot of the Voice measure which provided evidence of one factor (see Figure A11). I completed an exploratory factor analysis with one factor. Results from the exploratory factor analysis indicated that the items loaded onto one factor (see Table A33). Results demonstrated good alpha internal reliability ( $\alpha = .93$ ).

**Figure A11**

*Scree Plot of the Pilot Study Voice Measure.*



**Table A33**

*Factor Analysis of the Pilot Study Voice Measure.*

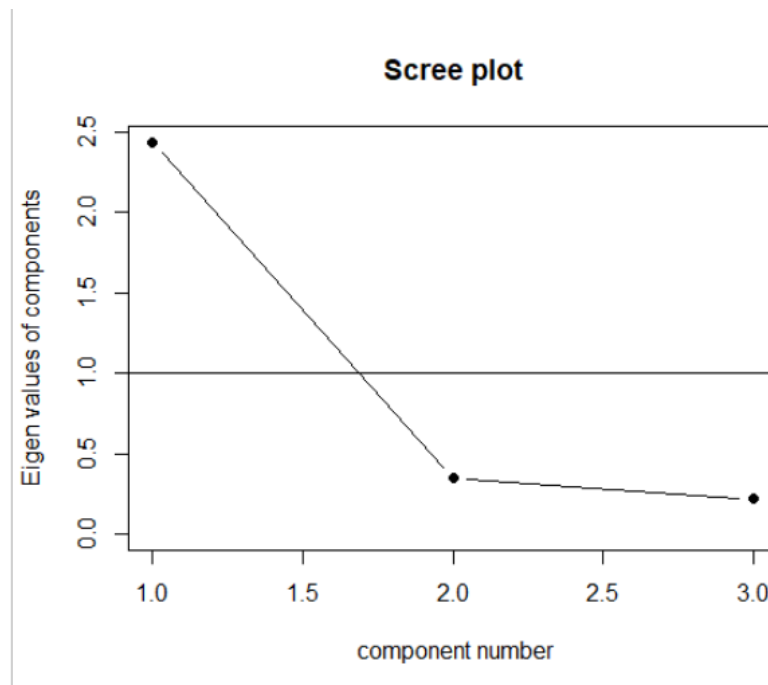
Items	Factor 1
VOICE - 1	.840
VOICE - 2	.871
VOICE - 3	.887
VOICE - 4	.848
VOICE - 5	.737
VOICE - 6	.854

**Job Satisfaction.** Results suggested that my sample demonstrated high levels of job satisfaction ( $M = 5.52$ ,  $SD = 1.32$ ). Individuals scoring closer to seven demonstrated higher job satisfaction. I examined the scree plot of the Job Satisfaction measure which indicated one factor (see Figure A12). I completed an exploratory factor analysis on the

entire measure with one factor. Results from the exploratory factor analysis indicated that the items loaded onto one factor (see Table A34). Results demonstrated good alpha internal reliability ( $\alpha = .88$ ).

**Figure A12**

*Scree Plot of the Pilot Study Job Satisfaction Measure.*



**Table A34**

*Factor Analysis of the Pilot Study Job Satisfaction Measure.*

Items	Factor 1
JS - 1	.876
JS - 2	.772
JS - 3	.895

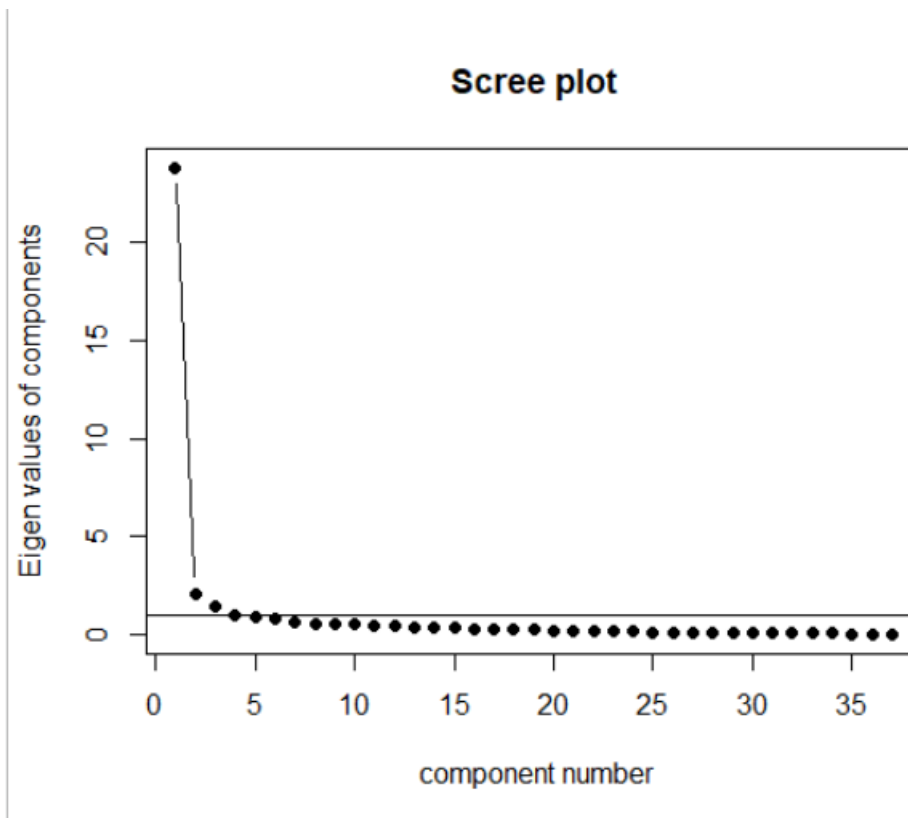
*Note.* JS = Job satisfaction.

**Unethical Behavior.** Results suggested that my sample demonstrated low levels of unethical behaviors ( $M = 1.31$ ,  $SD = 0.61$ ). Individuals scoring closer to five

demonstrated more unethical behaviors. I examined the scree plot of the Unethical Behavior measure which indicated one factor (see Figure A13). I completed an exploratory factor analysis on the entire measure with one factor. Results from the factor analysis indicated that the items loaded onto one factor (see Table A35). Results demonstrated good alpha internal reliability ( $\alpha = .98$ ).

**Figure A13**

*Scree Plot of the Pilot Study Unethical Behavior Measure.*



**Table A35***Factor Analysis of the Pilot Study Unethical Behavior Measure.*

Items	Factor 1
UB - 1	.708
UB - 2	.675
UB - 3	.715
UB - 4	.795
UB - 5	.804
UB - 6	.781
UB - 7	.791
UB - 8	.769
UB - 9	.565
UB - 10	.547
UB - 11	.760
UB - 12	.894
UB - 13	.852
UB - 14	.869
UB - 15	.825
UB - 16	.818
UB - 17	.759
UB - 18	.708
UB - 19	.763
UB - 20	.642
UB - 21	.750
UB - 22	.760
UB - 23	.781
UB - 24	.866
UB - 25	.784
UB - 26	.910
UB - 27	.902
UB - 28	.818
UB - 29	.899
UB - 30	.877
UB - 31	.719
UB - 32	.848
UB - 33	.739
UB - 34	.863
UB - 35	.895
UB - 36	.912

**Table A35**  
**(continued)**

Items	Factor 1
UB - 37	.825

*Note.* UB = Unethical behavior.

**Personality.** Results suggested that my sample demonstrated middle levels of conscientiousness ( $M = 4.78$ ,  $SD = 0.70$ ), extraversion ( $M = 4.88$ ,  $SD = 0.81$ ), and agreeableness ( $M = 4.98$ ,  $SD = 0.57$ ). Results suggested that my sample demonstrated lower levels of neuroticism ( $M = 3.89$ ,  $SD = 1.24$ ) and higher levels of openness ( $M = 5.31$ ,  $SD = 0.96$ ). Individuals scoring closer to nine demonstrated higher levels of each of the personality traits. I completed an exploratory factor analysis with one factor for each facet (see Tables 36-40). Results indicated that the items loaded onto one factor for each facet. Item 8 of the neuroticism scale did not load on to any factor above .3. Results demonstrated acceptable alpha internal reliability for extraversion ( $\alpha =$  neuroticism ( $\alpha = .79$ ), agreeableness ( $\alpha = .79$ ), and openness ( $\alpha = .78$ ). Results demonstrated good alpha internal reliability for conscientiousness ( $\alpha = .84$ ).

**Table A36**

*Factor Analysis of the Conscientiousness Facet of the Big Five Measure*

Items	Factor 1
CON - 3	.599
CON - 9	.838
CON - 10	-.708
CON - 17	.659
CON - 22	-.717
CON - 24	-.402
CON - 29	.707
CON - 31	-.316

*Note.* CON = Conscientiousness.

**Table A37***Factor Analysis of the Agreeableness Facet of the Big Five Measure*

Items	Factor 1
AGR – 4	-.668
AGR – 6	.425
AGR - 15	-.669
AGR - 20	.632
AGR - 27	-.369
AGR - 30	.573
AGR - 38	-.533
AGR - 39	-.676

*Note.* AGR = Agreeableness**Table A38***Factor Analysis of the Openness Measure of the Big Five Measure*

Items	Factor 1
OPN – 5	.379
OPN – 7	.696
OPN – 8	.639
OPN - 16	.765
OPN - 18	.581
OPN - 23	.487
OPN - 35	-.457
OPN - 37	-.403

*Note.* OPN = Openness



**Table A39***Factor Analysis of the Neuroticism Facet of the Big Five Measure.*

Items	Factor 1
NEU - 12	.580
NEU - 14	.682
NEU - 19	.679
NEU - 21	.731
NEU - 26	-.318
NEU - 33	.772
NEU - 34	.770
NEU - 36	

*Note.* NEU = Neuroticism.**Table A40***Factory Analysis of the Extraversion Facet of the Big Five Measure.*

Items	Factor 1
EXT - 1	.409
EXT - 2	-.377
EXT - 11	-.416
EXT - 13	-.593
EXT - 25	.712
EXT - 28	.737
EXT - 32	-.657
EXT - 40	.449

*Note.* EXT = Extraversion.**Descriptive Statistics**

I calculated the internal consistency reliability estimates in for each of my measures. I reported measure means, standard deviations, alpha coefficients, and intercorrelations for all moral-related variables, values, and the ethical climate subscales (Table A41).

**Table A41***Means, Standard Deviations, and Correlations Between Pilot Study Variables*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Moral Awareness	5.87	0.96	.73								
2. Perceptual Matt	4.27	1.23	.13	.88							
3. Reflective Matt	4.75	1.15	.10	.61**	.84						
4. MI - Internalization	4.49	0.53	.24**	.08	.23**	.77					
5. MI - Symbolization	3.35	0.82	.03	.24**	.31**	.24**	.84				
6. Power	1.71	1.75	-.04	.02	.10	-.14	.24**	.72			
7. Achievement	4.27	1.61	.06	.11	.07	.22**	.35**	.47**	.72		
8. Hedonism	3.93	2.10	.12	-.05	-.04	.00	-.01	.41**	.35**	.54	
9. Stimulation	2.55	2.18	-.03	.01	.09	-.04	.18*	.48**	.47**	.49**	.80
10. Self-Direction	4.98	1.42	.12	.03	.03	.14	.14	.39**	.62**	.46**	.59**
11. Tradition	2.63	1.68	.11	.13	.19*	.27**	.43**	.27**	.43**	.14	.24**
12. Conformity	4.53	1.78	.15*	.06	.11	.28**	.30**	.26**	.52**	.17*	.17*
13. Security	4.46	1.37	.10	-.03	.01	.24**	.27**	.39**	.54**	.33**	.32**
14. Universalism	4.50	1.58	.20*	.10	.14	.20*	.23**	.25**	.46**	.28**	.43**
15. Benevolence	4.80	1.40	.08	.11	.16*	.37**	.49**	.20*	.49**	.14	.21**
16. Self-Enhancement	3.15	1.39	.04	.05	.08	.03	.29**	.85**	.82**	.64**	.60**
17. Openness to Change	4.13	1.46	.09	.01	.04	.06	.15*	.51**	.61**	.70**	.85**
18. Conservation	3.83	1.36	.14	.06	.12	.31**	.39**	.36**	.58**	.25**	.29**
19. Self-Transcendence	4.65	1.30	.17*	.12	.17*	.32**	.41**	.26**	.54**	.25**	.38**
20. Caring Climate	3.48	0.71	-.01	-.01	.04	.06	.29**	.27**	.23**	.21**	.22**
21. Law and Code Climate	3.97	0.79	.08	-.01	-.04	.21**	.11	-.03	.06	.05	.06
22. Rules Climate	3.90	0.79	.11	-.01	.04	.24**	.20*	.07	.19*	.20*	.18*
23. Instrumental Climate	2.71	0.80	-.04	.13	.07	-.19*	.00	.23**	.03	.05	.05
24. Independence Climate	2.73	0.91	-.05	.19*	.21**	-.16*	.21**	.15*	.12	.06	.05

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table A41 (continued)***Means, Standard Deviations, and Correlations Between Pilot Study Variables*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
25. CWB	1.82	0.97	-.18*	.02	-.07	-.48**	-.07	.17*	-.10	-.07	.01
26. CWB-Interpersonal	1.75	1.07	-.11*	.03	.00	-.44**	-.04	.21**	-.05	-.09	.05
27. CWB-Organizational	1.85	1.00	-.16*	.01	-.10	-.46**	-.08	.13	-.13	-.05	-.02
28. OCB	4.92	1.14	.07	.17*	.14	.20*	.32**	.11	.25**	.06	.13
29. OCB-Individual	4.97	1.22	.06	.16*	.09	.20*	.22**	.08	.17*	.03	.10
30. OCB-Organizational	4.87	1.29	.07	.15*	.17*	.17*	.36**	.13	.29**	.08	.13
31. Voice	4.96	1.28	.11	.24**	.17*	.16*	.29**	-.06	.17*	-.06	.04
32. Job Satisfaction	5.52	1.32	.05	.06	.08	.15*	.26**	.13	.18*	.11	.09
33. Unethical Behaviors	1.31	0.61	-.13	.12	.05	-.46**	.09	.17*	-.05	-.10	.05
34. Conscientiousness	4.78	0.70	-.08	.09	.15*	-.22**	.01	.09	.00	-.09	.08
35. Extraversion	4.88	0.81	-.04	.18*	.29**	-.17*	.14	.25**	.13	-.01	.15*
36. Neuroticism	3.89	1.24	-.06	.09	.16*	-.28**	.02	.13	-.05	-.10	.02
37. Agreeableness	4.98	0.57	-.17*	.12	.18*	-.04	.03	-.08	-.03	-.13	-.01
38. Openness	5.31	0.96	.01	.15*	.19*	.02	.12	.02	.24**	.00	.17*

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table A41 (continued)***Means, Standard Deviations, and Correlations Between Pilot Study**Variables*

	10	11	12	13	14	15	16	17	18	19	20	21	22
1. Moral Awareness													
2. Perceptual Matt													
3. Reflective Matt													
4. MI – Internalization													
5. MI - Symbolization													
6. Power													
7. Achievement													
8. Hedonism													
9. Stimulation													
10. Self-Direction	.70												
11. Tradition	.38**	.67											
12. Conformity	.41**	.70**	.74										
13. Security	.55**	.55**	.61**	.64									
14. Universalism	.66**	.45**	.48**	.56**	.81								
15. Benevolence	.43**	.69**	.66**	.59**	.52**	.77							
16. Self-Enhancement	.62**	.38**	.43**	.55**	.43**	0.38**	.81						
17. Openness to Change	.89**	.34**	.33**	.51**	.60**	0.35**	.74**	.83					
18. Conservation	.52**	.88**	.87**	.84**	.57**	0.75**	.53**	.46**	.85				
19. Self-Transcendence	.64**	.64**	.65**	.66**	.89**	0.85**	.46**	.55**	.75**	.81			
20. Caring Climate	.24**	.25**	.18*	.27**	.24**	0.17*	.30**	.27**	.28**	.24**	.82		
21. Law and Code Climate	.14	.11	.06	.09	.15*	.06	.03	.12	.11	.12	.57**	.82	
22. Rules Climate	.24**	.18*	.13	.16*	.25**	0.2*	.18*	.25**	.18*	.26**	.61**	.71**	.84
23. Instrumental Climate	-.04	.11	.06	.01	-.02	-.03	.15*	.01	.07	-.03	-.15*	-.28**	-.26**

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table A41 (continued)***Means, Standard Deviations, and Correlations Between Pilot Study Variables*

	10	11	12	13	14	15	16	17	18	19	20	21	22
24. Independence Climate	.01	.12	.08	.03	.04	.09	.15*	.04	.09	.08	.16*	-.09	-.09
25. CWB	-.20*	-.10	-.18*	-.20*	-.29**	-.27**	.02	-.12	-.18*	-.32**	-.14	-.18*	-.20*
26. CWB-Interpersonal	-.16*	-.05	-.11	-.12	-.23**	-.23**	.07	-.09	-.11	-.27**	-.16*	-.23**	-.26**
27. CWB-Organizational	-.20*	-.12	-.21**	-.24**	-.30**	-.28**	-.01	-.13	-.21**	-.33**	-.12	-.13	-.15*
28. OCB	.13	.12	.17**	.18*	.23**	.17*	.20*	.14	.18*	.23**	.17*	.18*	.20*
29. OCB-Individual	.05	.03	.07	.11	.19*	.11	.13	.08	.08	.17*	.05	.08	.08
30. OCB-Organizational	.18*	.18*	.24**	.21**	.23**	.20*	.23**	.17*	.24**	.24**	.25**	.24**	.27**
31. Voice	.11	.17*	.20*	.10	.17*	.17*	.04	.05	.18*	.20*	.17*	.23**	.17*
32. Job Satisfaction	.13	.18*	.18*	.18*	.14	.17*	.18*	.13	.21**	.18*	.51**	.35**	.44**
33. Unethical Behaviors	-.04	-.02	-.10	-.06	-.09	-0.09	.04	-.03	-.06	-.10	-.22**	-.28**	-.31**
34. Conscientiousness	.02	-.06	-.08	-.06	.04	-.16*	.02	.02	-.08	-.06	-.07	.02	.00
35. Extraversion	.08	.05	-.04	.00	.14	-.02	.19*	.10	.01	.07	.04	-.02	.02
36. Neuroticism	-.04	-.04	-.16*	-.12	-.04	-.16*	.02	-.04	-.12	-.11	-.14	-.26**	-.10
37. Agreeableness	-.08	-.01	-.08	.01	.00	-.04	-.09	-.08	-.02	-.02	-.07	-.08	-.10
38. Openness	.31**	.06	.04	.12	.27**	.15	.12	.23**	.09	.24**	.05	.07	.13

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table A41 (continued)***Means, Standard Deviations, and Correlations Between Pilot Study Variables*

	23	24	25	26	27	28	29	30	31	32	33
23. Instrumental Climate	.83										
24. Independence Climate	.24**	.85									
25. CWB	.27**	.21**	.95								
26. CWB-Interpersonal	.25**	.19*	.91**	.92							
27. CWB-Organizational	.26**	.20*	.97**	.78**	.93						
28. OCB	-.24**	.10	-.11	-.08	-.11	.94					
29. OCB-Individual	-.16*	.08	-.06	-.06	-.06	.90**	.92				
30. OCB-Organizational	-.27**	.10	-.13	-.09	-.15	.91**	.64**	.92			
31. Voice	-.17*	.05	-.15	-.10	-.17*	.63**	.49**	.65**	.93		
32. Job Satisfaction	-.38**	.07	-.09	-.10	-.07	.33**	.19*	.41**	.32**	.88	
33. Unethical Behaviors	.33**	.18*	.62**	.61**	.57**	.02	.03	.01	-.02	-.24**	.98
34. Conscientiousness	-.05	.00	.23**	.27**	.19*	.11	.07	.12	.10	.04	.34**
35. Extraversion	.13	.10	.19*	.23**	.14	.11	.13	.06	.08	.10	.26**
36. Neuroticism	.16	.00	.34**	.37**	.29**	-.13	-.12	-.12	-.11	-.06	.36**
37. Agreeableness	-.02	-.01	.15*	.20*	.10	.07	.10	.03	.11	-.02	.26**
38. Openness	-.12	.01	-.05	-.03	-.06	.13	.03	.20*	.23**	.10	.12

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

**Table A41 (continued)***Means, Standard Deviations, and Correlations Between Pilot Study Variables*

	34	35	36	37	38
34. Conscientiousness	.84				
35. Extraversion	.57**	.79			
36. Neuroticism	.48**	.47**	.79		
37. Agreeableness	.43**	.34**	.37**	.79	
38. Openness	.49**	.49**	.29**	.33**	.78

*Note.* \*  $p < .05$ , \*\*  $p < .01$ . Measures' Cronbach Alpha internal reliability included at the end of each row. Matt = Moral Attentiveness. MI = Moral Identity. OCB = Organizational Citizenship Behaviors. CWB = Counterproductive work behaviors.

## **Discussion**

The purpose of this pilot study was to determine whether measures I used demonstrated appropriate alpha reliability, whether measures I used demonstrated appropriate factor loadings of items, and to ensure that the structure of the values measure is appropriate for analyses. Results indicated adequate psychometric properties for my measures.



## Appendix B

### Ethics Program components

**INSTRUCTIONS:** Please answer the following questions to the best of your knowledge.

Ethics Code: a formal document describing appropriate conduct in the workplace with respect to clients, coworkers, and shareholders

1. Based on the above definition, does your organization have an ethics code?

a. YES                      b. NO                      c. I DON'T KNOW

2. If your organization has an ethics code, how familiar are you with the content of that ethics code? Please rate using the following scale

---

1	2	3	4	5
Not at all familiar		Neutral		Very familiar

3. My organization has formal ethics training.

a. YES                      b. NO                      c. I DON'T KNOW.

4. If your organization has formal ethics training, how many hours of ethics training have you had in the past 12 months? \_\_\_\_\_

5. If you have had formal ethics training, please rate the effectiveness of the ethics training you have received

---

1	2	3	4	5
Not at all effective		Neutral		Very effective

6. My organization has an ethics hotline.

a. YES                      b. NO                      c. I DON'T KNOW

7. If your organization has an ethics hotline, have you used it to report (un)ethical behavior?

a. YES                      b. NO                      c. I DON'T KNOW

8. Please rate the effectiveness of your organization's ethics hotline

1	2	3	4	5
Not at all effective		Neutral		Very effective

9. Does your organization reward individuals who act ethically?

- a. YES      b. NO      c. I DON'T KNOW

10. Does your organization punish individual who act unethically?

- a. YES      b. NO      c. I DON'T KNOW  
b.

11. If you answered yes to either question above, please rate the effectiveness of your organization's system of rewards and punishments for (un)ethical behavior.

1	2	3	4	5
Not at all effective		Neutral		Very effective

12. My organization has an ethics office(r).

- a. YES      b. NO      c. I DON'T KNOW

13. Have you ever contacted your organization's ethics officer for any reason?

- a. YES      b. NO

14. If you answered yes to the above questions, please rate the effectiveness of your organization's ethics office(r).

1	2	3	4	5
Not at all effective		Neutral		Very effective

## Appendix C

### Moral Awareness

**INSTRUCTIONS:** Consider the following scenario. Then, answer the questions based on the scale available.

#### Issue Characteristics: Harm and Violation of a Behavior

“A manager in your area, Terry, drives a company car. Company policy states that corporate cars are to be inspected every 3,000 miles without exception. Terry last had her car inspected about 5,000 miles ago—she says that she ‘just doesn’t want to be bothered that often’. Today, Pat, a coworker of Terry’s, asked Terry for the keys to the car so she could deliver some artwork to a few customers. While driving on the highway, the car’s brakes malfunctioned. The car spun out of control and came to rest in a ditch on the side of the road. Pat’s forehead struck the steering wheel, and she had to go to the hospital to get 18 stitches.”

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

1. There were very important ethical aspects to this situation.
2. This matter clearly does not involve ethics or moral issues.
3. If it were me, I would report this to a supervisor.

Reynolds, S. J. (2006). Moral awareness and ethical predispositions: Investigating the role of individual differences in the recognition of moral issues. *Journal of Applied Psychology*, 91(1), 233-243.

## Appendix D

### Moral Attentiveness

INSTRUCTIONS: Please answer the following questions using the scale below.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

1. In a typical day, I face several ethical dilemmas. (P)
2. I often have to choose between doing what's right and doing something that's wrong. (P)
3. I regularly face decisions that have significant ethical implications. (P)
4. My life has been filled with one moral predicament after another. (P)
5. Many of the decision that I make have ethical dimensions to them. (P)
6. I regularly think about the ethical implications of my decisions. (R)
7. I think about the morality of my actions almost every day. (R)
8. I rarely face ethical dilemmas (reverse scored). (P)
9. I frequently encounter ethical situations. (P)
10. I often find myself pondering about ethical issues. (R)
11. I often reflect on the moral aspects of my decisions. (R)
12. I like to think about ethics. (R)

Reynolds, S. J. (2008). Moral attentiveness: Who pays attention to the moral aspects of life? *Journal of Applied Psychology*, 93(5), 1027-1041.

## Appendix E

### Moral identity

**INSTRUCTIONS:** Listed below are some characteristics that may describe a person [list of nine traits]. The person with any combination of these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has one, a few, or all of these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions.

Caring, Compassionate, Fair, Friendly, Generous, Helpful, Hardworking, Honest, Kind

1	2	3	4	5
Strongly disagree		Neutral		Strongly Agree
1. It would make me feel good to be a person who has these characteristics				
2. Being someone who has these characteristics is an important part of who I am.				
3. I would be ashamed to be a person who has these characteristics. (reverse scored)				
4. Having these characteristics is not really important to me. (reverse scored)				
5. I strongly desire to have these characteristics.				
6. I often wear clothes that identify me as having these characteristics.				
7. The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.				
8. The kinds of books and magazines that I read identify me as having these characteristics.				
9. The fact that I have these characteristics is communicated to others by my membership in certain organizations.				
10. I am actively involved in activities that communicate to others that I have these characteristics.				

Adapted from Aquino, K. & Reed, A. (2002). The self-importance of moral identity.

*Journal of Personality and Social Psychology*, 83(6), 1423-1440.

## Appendix F

### Schwartz' Value Survey

**INSTRUCTIONS:** Rate each of the following values "AS A GUIDING PRINCIPLE IN MY LIFE", using the scale below:

-1	0	1	2	3	4	5	6	7
Opposed to my values	Not important			Important				Very Important

1. ☐ Equality (equal opportunity for all)
2. ☐ Inner Harmony (at peace with myself)
3. ☐ Social Power (control over others, dominance)
4. ☐ Pleasure (gratification of desires)
5. ☐ Freedom (freedom of action and thought)
6. ☐ A spiritual life (emphasis on spiritual not material matters)
7. ☐ Sense of belonging (feeling that others care about me)
8. ☐ Social order (stability of society)
9. ☐ An exciting life (stimulating experiences)
10. ☐ Meaning in life (a purpose in life)
11. ☐ Politeness (courtesy, good manners)
12. ☐ Wealth (material possessions, money)
13. ☐ National Security (protection of my nation from enemies)
14. ☐ Self-respect (belief in one's own worth)
15. ☐ Reciprocation of favors (avoidance of indebtedness)
16. ☐ Creativity (uniqueness, imagination)
17. ☐ A world at peace (free of war and conflict)
18. ☐ Respect for tradition (preservation of time-honored customs)
19. ☐ Mature love (deep emotional and spiritual intimacy)
20. ☐ Self-discipline (self-restraint, resistance to temptation)
21. ☐ Detachment (from worldly concerns)
22. ☐ Family security (safety for loved ones)
23. ☐ Social recognition (respect, approval by others)
24. ☐ Unity with nature (fitting into nature)
25. ☐ A varied life (filled with challenge, novelty, and change)
26. ☐ Wisdom (a mature understanding of life)
27. ☐ Authority (the right to lead or command)
28. ☐ True friendship (close, supportive friends)
29. ☐ A world of beauty (beauty of nature and the arts)
30. ☐ Social justice (correcting injustice, care for the weak)

31. \_\_\_ Independent (self-reliant, self-sufficient)
32. \_\_\_ Moderate (avoiding extremes of feeling and action)
33. \_\_\_ Loyal (faithful to my friends, group)
34. \_\_\_ Ambitious (hardworking, aspiring)
35. \_\_\_ Broad-minded (tolerant of different ideas and beliefs)
36. \_\_\_ Humble (modest, self-effacing)
37. \_\_\_ Daring (seeking adventure, risk)
38. \_\_\_ Protecting the environment (preserving nature)
39. \_\_\_ Influential (having an impact on people and events)
40. \_\_\_ Honoring parents and elders (showing respect)
41. \_\_\_ Choosing own goals (selecting own purposes)
42. \_\_\_ Healthy (not being sick physically or mentally)
43. \_\_\_ Capable (competent, effective, efficient)
44. \_\_\_ Accepting my portion in life (submitting to life's circumstances)
45. \_\_\_ Honest (genuine, sincere)
46. \_\_\_ Preserving my public image (protecting my "face")
47. \_\_\_ Obedient (dutiful, meeting obligations)
48. \_\_\_ Intelligent (logical, thinking)
49. \_\_\_ Helpful (working for the welfare of others)
50. \_\_\_ Enjoying life (enjoying food, sex, leisure, etc.)
51. \_\_\_ Devout (holding to religious faith and belief)
52. \_\_\_ Responsible (dependable, reliable)
53. \_\_\_ Curious (interested in everything, exploring)
54. \_\_\_ Forgiving (willing to pardon others)
55. \_\_\_ Successful (achieving goals)
56. \_\_\_ Clean (neat, tidy)

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries, *Advances in Experimental Social Psychology*, 25, 1-65.

## Appendix G

### Ethical Climate Questionnaire (Work sample)

**INSTRUCTIONS:** We would like to ask you some questions about the general climate in your company. Please answer the following in terms of how it really is in your company, not how you would prefer it to be. Please be as candid as possible, remember, all your responses will remain *strictly* anonymous.

1	2	3	4	5
Completely False		Somewhat True		Completely True

1. What is best for everyone in the company is the major consideration here.
2. The most important concern is the good of all the people in the company as a whole.
3. Our major concern is always what is best for the other person.
4. In this company, people look out for each other's good.
5. In this company, it is expected that you will always do what is right for the customers and public.
6. The most efficient way is always the right way in this company.
7. In this company, each person is expected above all to work efficiently.
8. People are expected to comply with the law and professional standards over and above other considerations.
9. In this company, the law or ethical code of their profession is the major consideration.
10. In this company, people are expected to strictly follow legal or professional standards.
11. In this company, the first consideration is whether a decision violates any law.
12. It is very important to follow the company's rules and procedures here.
13. Everyone is expected to stick by company rules and procedures.
14. Successful people in this company go by the book.
15. People in this company strictly obey the company policies.
16. In this company, people protect their own interests above all else. (Instrumental)
17. In this company, people are mostly out for themselves. (Instrumental)
18. There is no room for one's own personal morals or ethics in this company. (Instrumental)
19. People are expected to do anything to further the company's interests, regardless of the consequences. (Instrumental)
20. People here are concerned with the company's interests to the exclusion of all else. (Instrumental)



21. Work is considered substandard only when it hurts the company's interests.  
(Instrumental)
22. The major responsibility of people in this company is to control costs.  
(Instrumental)
23. In this company, people are expected to follow their own personal and moral beliefs.
24. Each person in this company decides for themselves what is right and wrong
25. The most important concern in this company is each person's own sense of right and wrong
26. In this company, people are guided by their own personal ethics.

Victor, B., & Cullen, J. B. (1988). The organizational bases of ethical work climates. *Administrative Science Quarterly*, 33(1), 101-125.

## Appendix H

### Demographics (Pilot Study and Study 1)

1. Age \_\_\_\_ years
2. Gender (please circle one)
  - a. Male
  - b. Female
3. Ethnicity (please circle one)
  - a. African American
  - b. Asian
  - c. Hispanic
  - d. Native American
  - e. Pacific Islander
  - f. White/Caucasian
  - g. Other
4. How long have you held your current position?
  - a. 0-1 year
  - b. 2-5 years
  - c. 5-10 years
  - d. Longer than 10 years
5. Where is your office located?
  - a. Corporate headquarters
  - b. Other
6. What is your hierarchical position?
  - a. Individual contributor (not supervising)
  - b. Supervisory
  - c. Local Management
  - d. Middle Management
  - e. Executive/Senior Leader
7. What type of industry do you work in? (O\*NET Online)
  - a. Accommodation and Food Services
  - b. Administrative and Support Services
  - c. Agriculture, Forestry, Fishing, and Hunting
  - d. Arts, Entertainment, and Recreation
  - e. Construction
  - f. Educational Services
  - g. Finance and Insurance
  - h. Government
  - i. Health Care and Social Assistance
  - j. Information
  - k. Management of Companies and Enterprises
  - l. Manufacturing
  - m. Mining, Quarrying, and Oil and Gas Extraction
  - n. Other Services (Except Public Administration)
  - o. Professional, Scientific, and Technical Services
  - p. Real Estate and Rental and Leasing

- q. Retail Trade
  - r. Transportation and Warehousing
  - s. Utilities
  - t. Wholesale Trade
  - u. Other
  - i. Please indicate your industry type here:  
\_\_\_\_\_
8. Please indicate your occupation in the space below.
  - a. \_\_\_\_\_
9. Please indicate your job title in the space below
  - a. \_\_\_\_\_
10. Has there been any history of ethical issues in our organization? If so, please describe the nature of the issue(s)
  - a. \_\_\_\_\_
11. In the United States, what number do you call for emergency services? (Screening for bots).
  - a. \_\_\_\_\_

## Appendix I

### Interpersonal and Organizational Deviance

**INSTRUCTIONS:** Based on the scale below, please indicate the frequency in which you engage in the behaviors below.

1	2	3	4	5	6	7
Never			Several times a year			Daily

#### Interpersonal Deviance

1. Made fun of someone at work
2. Said something hurtful to someone at work
3. Made an ethnic, religious, or racial remark at work
4. Cursed at someone at work
5. Played a mean prank on someone at work
6. Acted rudely toward someone at work
7. Publicly embarrassed someone at work

#### Organizational Deviance

1. Taken property from work without permission
2. Spent too much time fantasizing or daydreaming instead of working
3. Falsified a receipt to get reimbursed for more money than you spent on business expenses
4. Taken an additional or longer break than is acceptable at your workplace
5. Come in late to work without permission
6. Littered your work environment
7. Neglected to follow your boss's instructions
8. Intentionally worked slower than you could have worked
9. Discussed confidential company information with an unauthorized person
10. Used an illegal drug or consumed alcohol on the job
11. Put little effort into your work
12. Dragged out work in order to get overtime

Bennett, R. J. & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349-360.

## Appendix J

### Organizational Citizenship Behavior

INSTRUCTIONS: How often do you engage in the behaviors below?

1	2	3	4	5	6	7
Never			Sometimes			Always

#### OCBI

1. Help others who have been absent.
2. Willingly give your time to help others who have work-related problems.
3. Adjust your work schedule to accommodate other employees' requests for time off.
4. Go out of your way to make newer employees feel welcome in the work group.
5. Show genuine concern and courtesy toward coworkers, even under the most trying business or personal situations.
6. Give up time to help others who have work or nonwork problems.
7. Assist others with their duties.
8. Share personal property with others to help their work.

#### OCBO

1. Attend functions that are not required but that help the organizational image.
2. Keep up with developments in the organization.
3. Defend the organization when other employees criticize it.
4. Show pride when representing the organization in public.
5. Offer ideas to improve the functioning of the organization.
6. Express loyalty toward the organization.
7. Take action to protect the organization from potential problems.
8. Demonstrate concern about the image of the organization.

Lee, K. & Allen, N. J. (2002). Organizational citizenship behavior and workplace

deviance: The role of affect and cognitions. *Journal of Applied Psychology*, 87(1), 131-142.

## Appendix K

### Voice

INSTRUCTIONS: Please answer the items below to the best of your knowledge.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

1. I develop and make recommendations concerning issues that affect my work group.
2. I speak up and encourage others in my work group to get involved in issues that affect the group.
3. I communicate my opinion about work issues to others in my work group even if his/her opinion is different and others in the group disagree with me.
4. I keep well informed about issues where my opinion might be useful to my work group
5. I get involved in issues that affect the quality of work life in my work group.
6. I speak up in my work group with ideas for new projects or changes in procedures.

Van Dyne, L. & Lepine, J. A., (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *The Academy of Management Journal*, 41(1), 108-119.

## Appendix L

### Job Satisfaction

INSTRUCTIONS: Please answer the following questions using the scale below.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

1. All in all I am satisfied with my job.
2. In general, I don't like my job (reverse scored).
3. In general, I like working here.

Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan

Organizational Assessment Questionnaire. Unpublished manuscript, University of Michigan, Ann Arbor.

## Appendix M

### Unethical Behavior

INSTRUCTIONS: Please answer the following items using the scale below.

1	2	3	4	5
Never		Sometimes		(Almost) Always

“In the past 12 months, I have personally seen or have first-hand knowledge of employees or managers”:

1. Falsifying or manipulating financial reporting information.
2. Falsifying time and expense reports.
3. Stealing or misappropriating assets (e.g., money, equipment, materials).
4. Breaching computer, network, or database controls.
5. Abusing or misusing confidential or proprietary information or the organization.
6. Violating document retention rules.
7. Providing inappropriate information to analysts and investors.
8. Trading securities based on inside information.
9. Engaging in activities that pose a conflict of interest (e.g., conflicting sideline activities, favoritism of family and friends, use of working hours for private purposes, executing conflicting tasks).
10. Wasting, mismanaging, or abusing organizational resources.
11. Engaging in false or deceptive sales and marketing practices (e.g., creating unrealistic expectations).
12. Submitting false or misleading invoices to customers.
13. Engaging in anticompetitive practices (e.g., market rigging, quid pro quo deals, offering bribes or other improper gifts, favors, and entertainment to influence customers).
14. Improperly gather competitors' confidential information.
15. Fabricating or manipulating product quality of safety test results.
16. Breaching customer or consumer privacy.
17. Entering into customer contracts relationships without the proper terms, conditions, or approvals.
18. Violating contract terms with customers.
19. Discriminating against employees (on the basis of age, race, gender, religious belief, sexual orientation, etc.).
20. Engaging in (sexual) harassment or creating a hostile work environment (e.g., intimidation, racism, pestering, verbal abuse, and physical violence).
21. Violating workplace health and safety rules or principles.
22. Violating employee wage, overtime, or benefits rules.
23. Breaching employee privacy.
24. Violating or circumventing supplier selection rules.



25. Accepting inappropriate gifts, favors, entertainment, or kickbacks from suppliers.
26. Paying suppliers without accurate invoices or records.
27. Entering into supplier contracts that lack proper terms, conditions, or approvals.
28. Violating the intellectual property rights or confidential information of suppliers.
29. Violating contract or payment terms with suppliers.
30. Doing business with disreputable suppliers.
31. Violating environmental standards or regulations.
32. Exposing the public to safety risk.
33. Making false or misleading claims to the public or media.
34. Providing regulators with false or misleading information.
35. Making improper political or financial contributions to domestic or foreign officials.
36. Doing business with third parties that may be involved in money laundering or are prohibited under international trade restrictions and embargos.
37. Violating international labor or human rights.

Kaptein, M. (2008). Developing a measure of unethical behavior in the workplace: A stakeholder perspective. *Journal of Management*, 34(5), 978-1008.

## Appendix N

### Mini-markers of the Big Five Personality traits

**INSTRUCTIONS:** Please use the list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age.

Please select the response indicating how accurately that trait describes you, using the following rating scale:

1	2	3	4	5	6	7	8	9
Extremely Inaccurate				Neutral				Extremely Accurate
1. Bashful								21. Moody
2. Bold								22. Organized
3. Careless								23. Philosophical
4. Cold								24. Practical
5. Complex								25. Quiet
6. Cooperative								26. Relaxed
7. Creative								27. Rude
8. Deep								28. Shy
9. Disorganized								29. Sloppy
10. Efficient								30. Sympathetic
11. Energetic								31. Systematic
12. Envious								32. Talkative
13. Extraverted								33. Temperamental
14. Fretful								34. Touchy
15. Harsh								35. Uncreative
16. Imaginative								36. Unenvious
17. Inefficient								37. Unintellectual
18. Intellectual								38. Unsympathetic
19. Jealous								39. Warm
20. Kind								40. Withdrawn

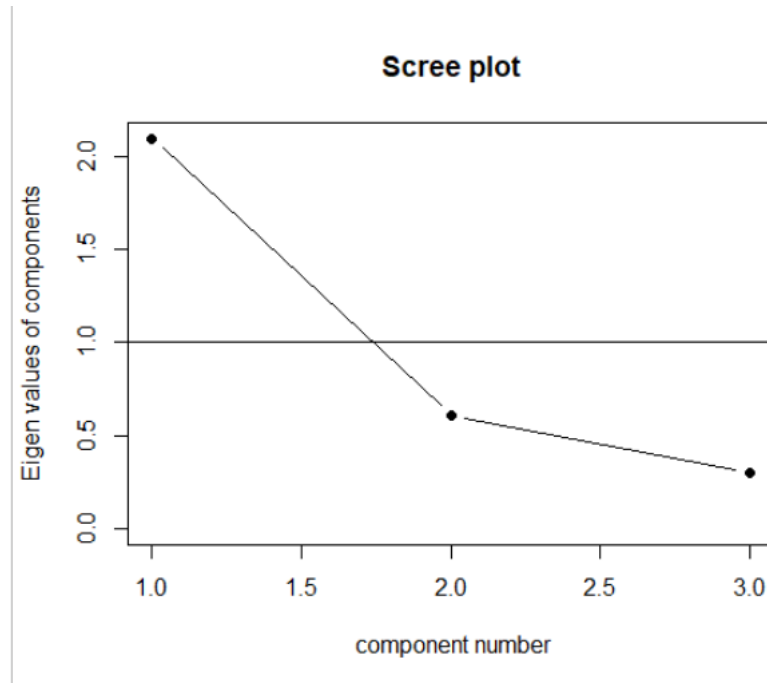
Saucier, G. (1994). Mini-markers: A brief version of Goldberg's unipolar big-five markers, *Journal of Personality Assessment*, 63(3), 506-51

## Appendix O

Tables and figures related to psychometric properties of measures used in Study 1.

**Figure O1**

*Scree Plot of the Study 1 Moral Awareness Measure*



**Table O1**

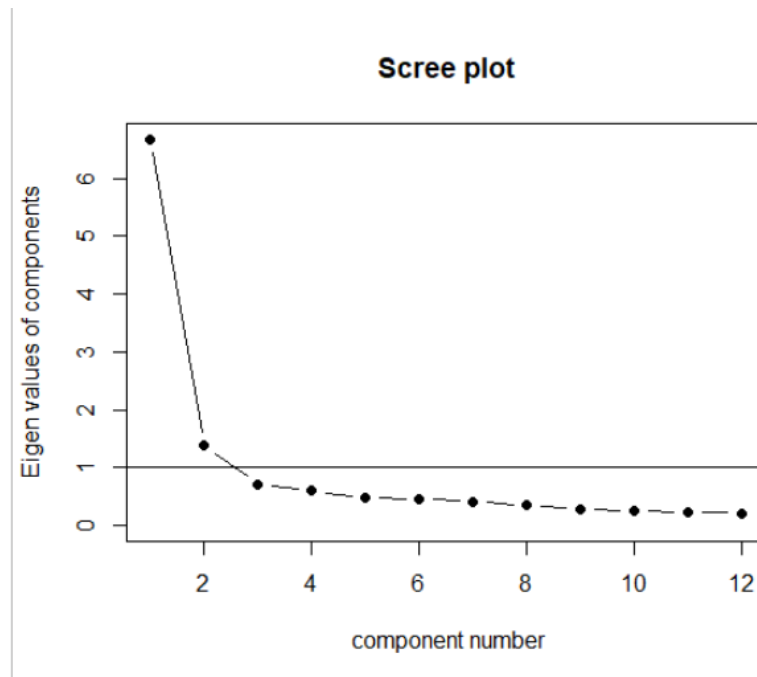
*Factor Analysis of the Study 1 Moral Awareness Measure*

Items	Factor 1
MA - 1	.945
MA - 2	.720
MA - 3	.569

*Note.* MA = Moral Awareness

**Figure O2**

*Scree Plot of the Study 1 Moral Attentiveness Measure.*



**Table O2**

*Factor Analysis of the Study 1 Moral Attentiveness Measure*

Items	Factor 1	Factor 2
Matt - 1	.868	
Matt - 2	.797	
Matt - 3	.897	
Matt - 4	.792	
Matt - 5	.548	.294
Matt - 6		.823
Matt - 7		.820
Matt - 8	-.500	-.162
Matt - 9	.618	.269
Matt - 10	.164	.629
Matt - 11		.813
Matt - 12	-.159	.696

*Note.* Matt = Moral Attentiveness

**Table O3***Factor Analysis of Study 1 Moral Attentiveness Measure Perceptual Facet.*

Items	Factor 1
Matt - 1	.817
Matt - 2	.786
Matt - 3	.874
Matt - 4	.734
Matt - 5	.764
Matt - 8	-.621
Matt - 9	.813

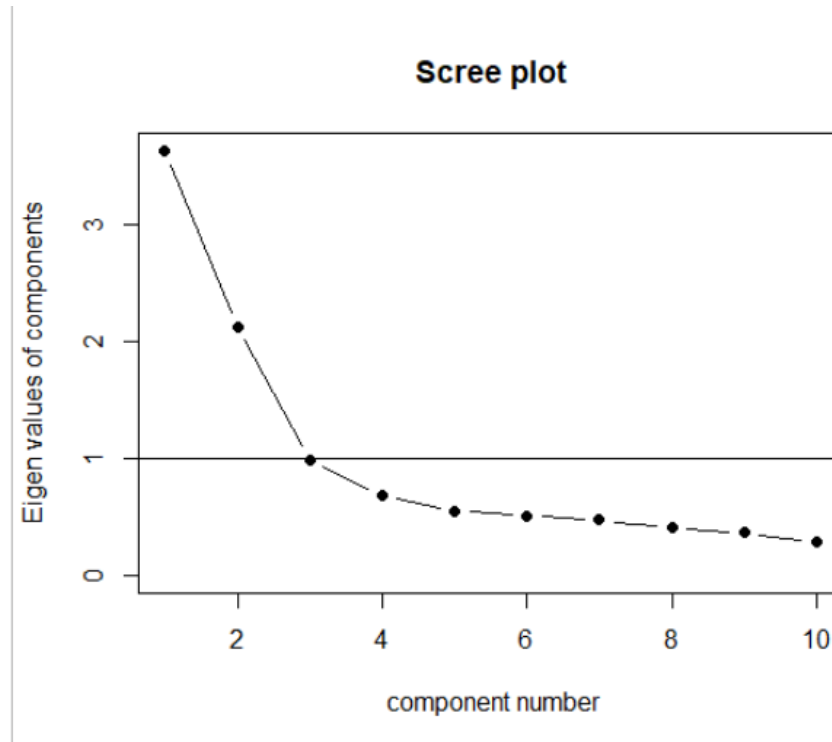
*Note.* Matt = Moral Attentiveness**Table O4***Factor Analysis of the Study 1 Moral Attentiveness Measure Reflective Facet.*

Items	Factor 2
Matt - 6	.799
Matt - 7	.819
Matt - 10	.740
Matt - 11	.858
Matt - 12	.590

*Note.* Matt = Moral Attentiveness

**Figure O3**

*Scree Plot of Study 1 Moral Identity Measure.*



**Table O5**

*Factor Analysis of Study 1 Moral Identity Measure.*

Items	Factor 1	Factor 2
MI - 1		.701
MI - 2	.243	.678
MI - 3	.296	-.492
MI - 4	.114	-.574
MI - 5	.151	.546
MI - 6	.705	
MI - 7	.720	
MI - 8	.642	
MI - 9	.738	
MI - 10	.773	

*Note.* MI = Moral Identity

**Table O6**

*Factor Analysis of Study 1 Moral Identity Measure Internalization Facet.*

Items	Factor 1
MI - 1	.735
MI - 2	.729
MI - 3	-.356
MI - 4	-.492
MI - 5	.616

*Note.* MI = Moral Identity

**Table O7**

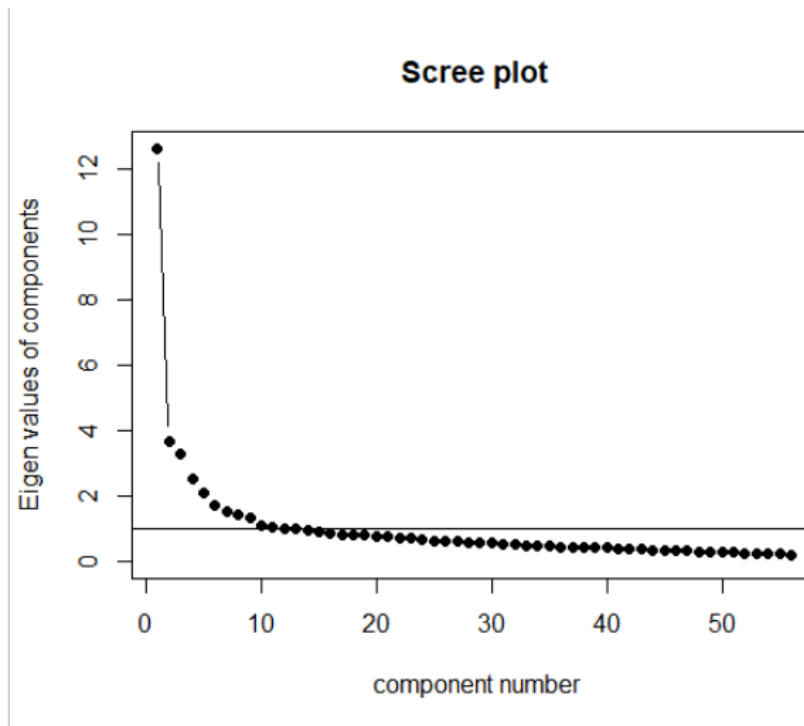
*Factor Analysis of Study 1 Moral Identity Measure Symbolization Facet.*

Items	Factor 1
MI - 6	.687
MI - 7	.743
MI - 8	.656
MI - 9	.741
MI - 10	.798

*Note.* MI = Moral  
Identity

**Figure O4**

*Scree Plot of Study 1 Values Measure.*





**Table O8***Factor Analysis of Study 1 Values Measure.*

Items	Factor 1	Factor 2	Factor 3	Factor 4
V - 1		.459		-.198
V - 2	.381		.149	-.111
V - 3	-.168			.634
V - 4	.264		-.215	.377
V - 5	.481			
V - 6	-.208	.158	.644	
V - 7	.117	.149	.188	
V - 8	.127		.266	.153
V - 9	.325	.135	-.257	.326
V - 10		.139	.361	
V - 11	.221		.437	
V - 12	.209	-.235		.606
V - 13	.164	-.157	.536	.195
V - 14	.500	-.111	.227	
V - 15	.250			.254
V - 16		.508	-.157	.190
V - 17		.542	.185	-.153
V - 18	-.111		.652	.252
V - 19	.221	.145	.236	
V - 20	.277	-.137	.423	.107
V - 21	-.146	.195	.187	.281
V - 22	.425	-.167	.238	
V - 23		.107	.153	.561
V - 24	-.271	.796		.116
V - 25	.187	.357	-.155	.291
V - 26	.310	.240		.103
V - 27			.248	.624
V - 28	.109	.224	.229	
V - 29		.726		.165
V - 30	-.113	.668	.103	
V - 31	.742	-.147		
V - 32		.152		.265
V - 33	.392		.302	
V - 34	.529	-.154	.202	.145
V - 35	.341	.469	-.276	-.145
V - 36	.222	.130	.413	-.166
V - 37		.312	-.133	.296

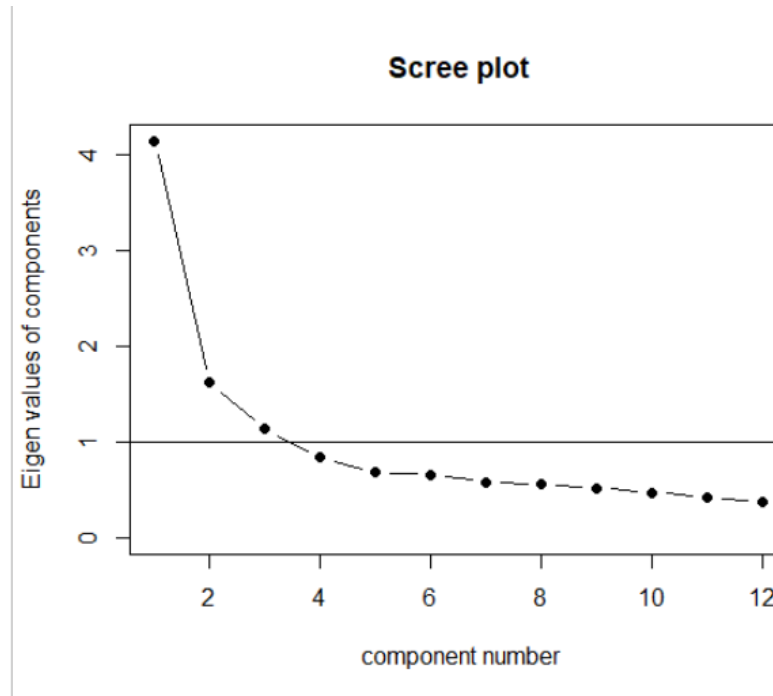
**Table O8**  
**(continued)**

Items	Factor 1	Factor 2	Factor 3	Factor 4
V - 38	-.128	.788		
V - 39		.140	.139	.565
V - 40	.101		.609	
V - 41	.626			
V - 42	.572			
V - 43	.756			
V - 44	-.121	.266	.359	.173
V - 45	.400	.185	.243	-.348
V - 46			.275	.504
V - 47			.559	.178
V - 48	.497	.116	-.113	.110
V - 49		.468	.330	-.223
V - 50	.506		-.186	.165
V - 51	-.189		.780	.136
V - 52	.725		.133	-.162
V - 53	.310	.459	-.331	.112
V - 54		.466	.277	-.142
V - 55	.433	-.106	.105	.441
V - 56	.227		.259	.255

*Note.* V = Values

**Figure O5**

*Scree Plot of Study 1 Values Measure Self-Enhancement Facet*



**Table O9**

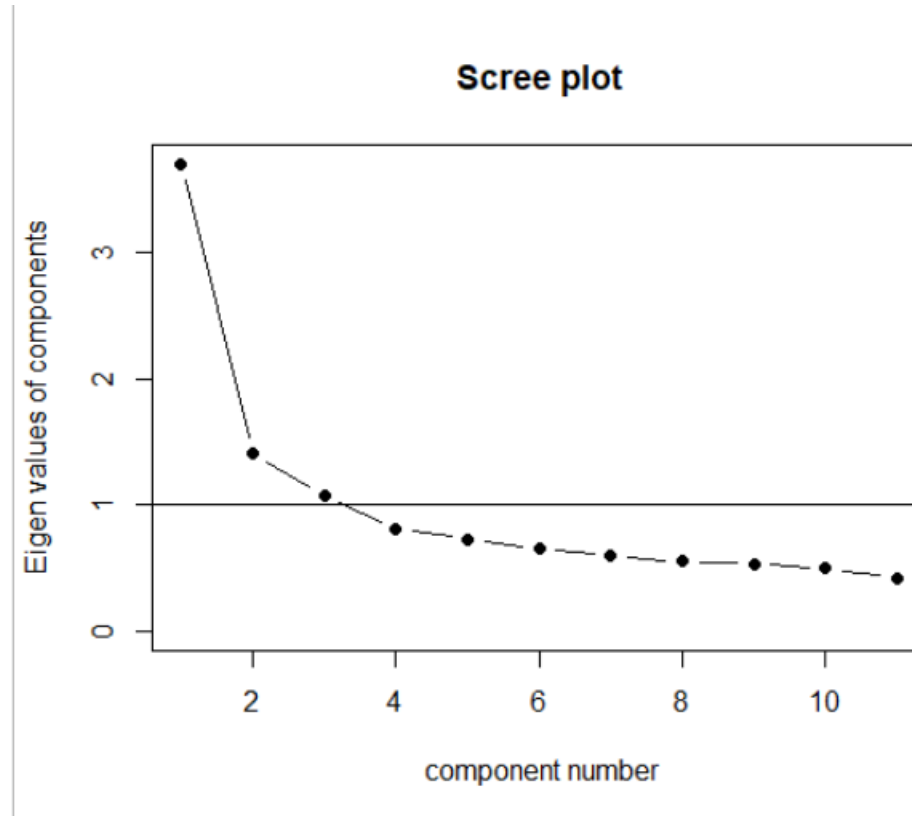
*Factor Analysis of Study 1 Self-Enhancement facet of Values Measure.*

Items	Factor 1	Factor 1	Factor 2	Factor 3
V - 3	.423	.685	-.288	.159
V - 27	.608	.768	.120	-.201
V - 12	.559	.380		.302
V - 46	.554	.455	.122	
V - 23	.572	.616		
V - 34	.535		.677	
V - 39	.627	.581	.250	-.128
V - 43	.468		.632	
V - 48	.440		.593	
V - 55	.721	.142	.682	
V - 50	.439	-.125	.367	.394
V - 4	.405			.814

*Note.* V = Values

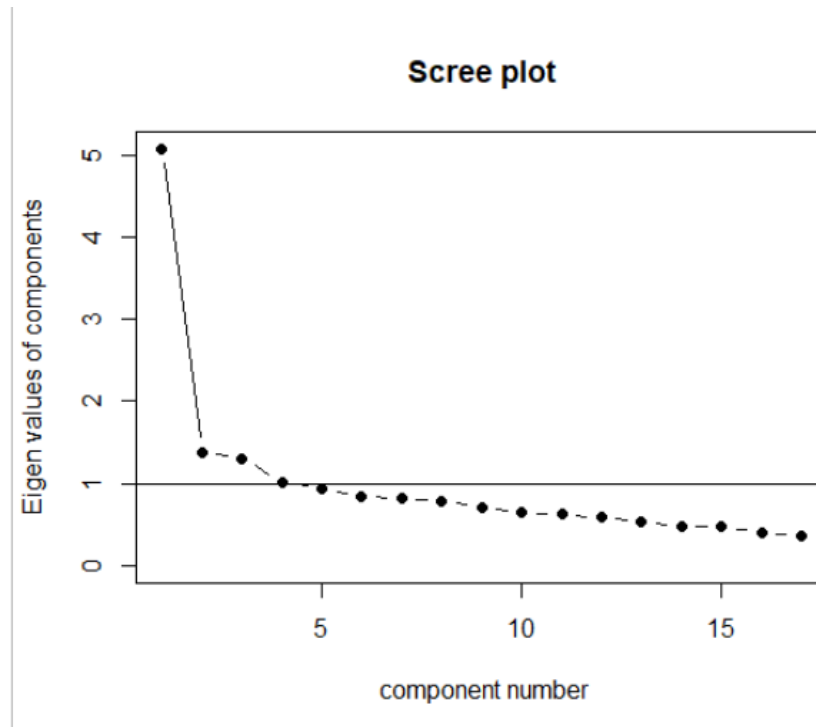
**Figure O6**

*Scree Plot of Study 1 Values Measure Openness to Change Facet*



**Table O10***Factor Analysis of Study 1 Values Measure Openness to Change Facet*

Items	Factor 1	Factor 1	Factor 2	Factor 3
V - 9	.632	-.106	.754	.116
V - 25	.598		.179	.520
V - 37	.538	-.103	.328	.413
V - 53	.519	.111	-.176	.747
V - 16	.448		.102	.402
V - 5	.414	.574		
V - 41	.550	.610		.148
V - 14	.426	.564	.121	-.130
V - 31	.475	.685	-.159	.124
V - 50	.607	.226	.429	
V - 4	.479		.696	-.163

*Note.* V = Values**Figure O7***Scree Plot of Study 1 Values Measure Conservation Facet.*

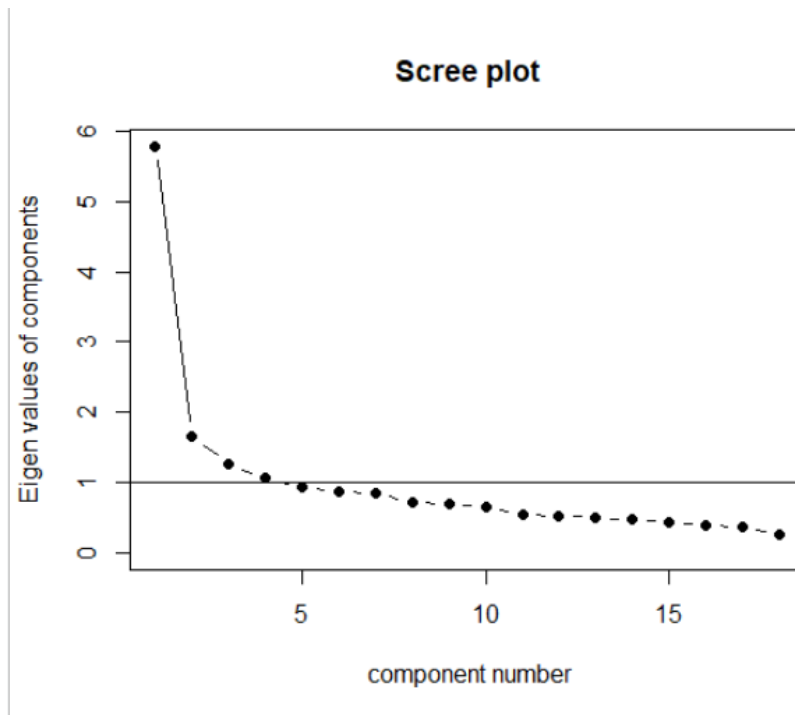
**Table O11***Factor Analysis of Study 1 Values Measure Conservation Facet*

Items	Factor 1	Factor 1	Factor 2	Factor 3
V - 44	.480	.430	-.150	.292
V - 36	.532	.562		
V - 51	.545	.587		
V - 18	.618	.429	.161	.112
V - 21	.281			.481
V - 32	.291	-.120	-.132	.739
V - 40	.649	.819	.156	-.318
V - 11	.563	.458	.250	-.109
V - 20	.568	.165	.299	.219
V - 56	.546	.340	.159	.129
V - 13	.630	.258	.539	
V - 15	.295	-.270	.305	.421
V - 8	.497		.492	.139
V - 22	.399		.686	-.175
V - 7	.310		.375	
V - 42	.481		.474	

*Note.* V = Values.

**Figure O8**

*Scree Plot of Study 1 Values Measure Self-Transcendence Facet.*



**Table O12***Factor Analysis of Study 1 Values Measure Self-Transcendence Facet.*

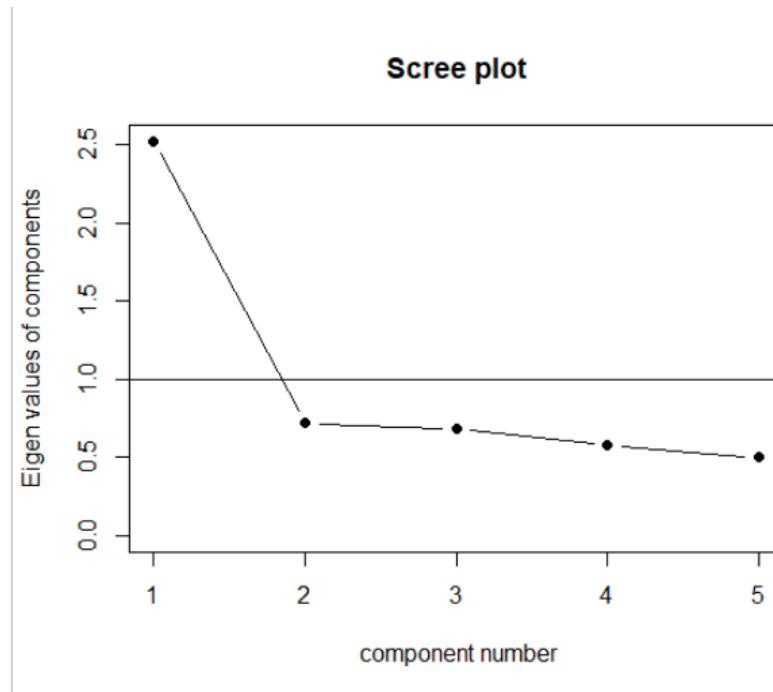
Items	Factor 1	Factor 1	Factor 2
V - 38	.610	-.215	.955
V - 24	.595	-.160	.873
V - 29	.637	.125	.583
V - 35	.483	.300	.219
V - 30	.634	.194	.486
V - 26	.497	.445	
V - 1	.472	.217	.283
V - 17	.634	.215	.471
V - 2	.434	.476	
V - 49	.627	.517	.149
V - 45	.570	.753	-.132
V - 54	.594	.586	
V - 33	.384	.585	-.172
V - 52	.495	.735	-.196
V - 6	.412	.428	
V - 28	.459	.497	
V - 19	.458	.612	-.129
V - 10	.447	.433	

*Note.* V = Values



**Figure O9**

*Scree Plot of Study 1 Values Measure Power Facet.*



**Table O13**

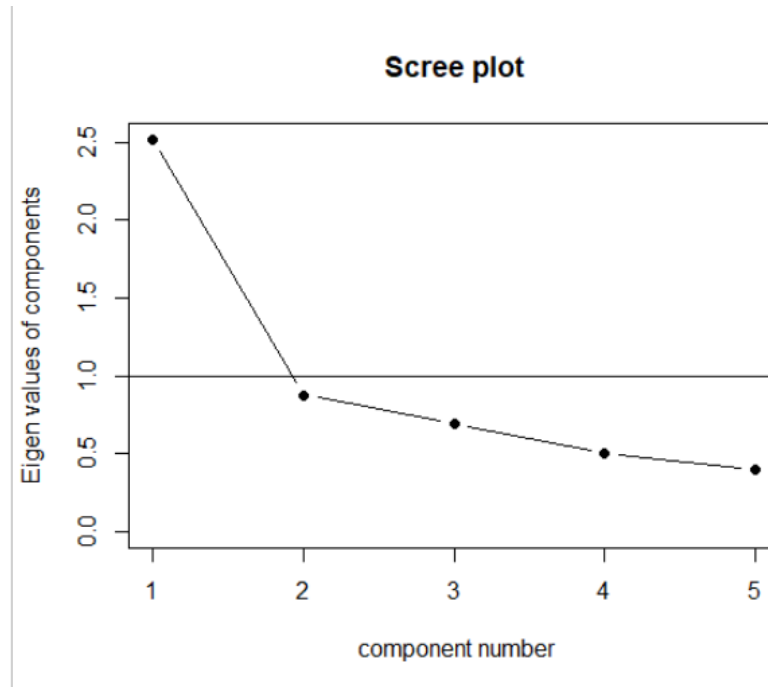
*Factor Analysis of Study 1 Values Measure Power Facet.*

Items	Factor 1
V - 3	.610
V - 27	.677
V - 12	.570
V - 46	.566
V - 23	.658

*Note.* V = Values

**Figure O10**

*Scree Plot of Study 1 Values Measure Achievement Facet.*



**Table O14**

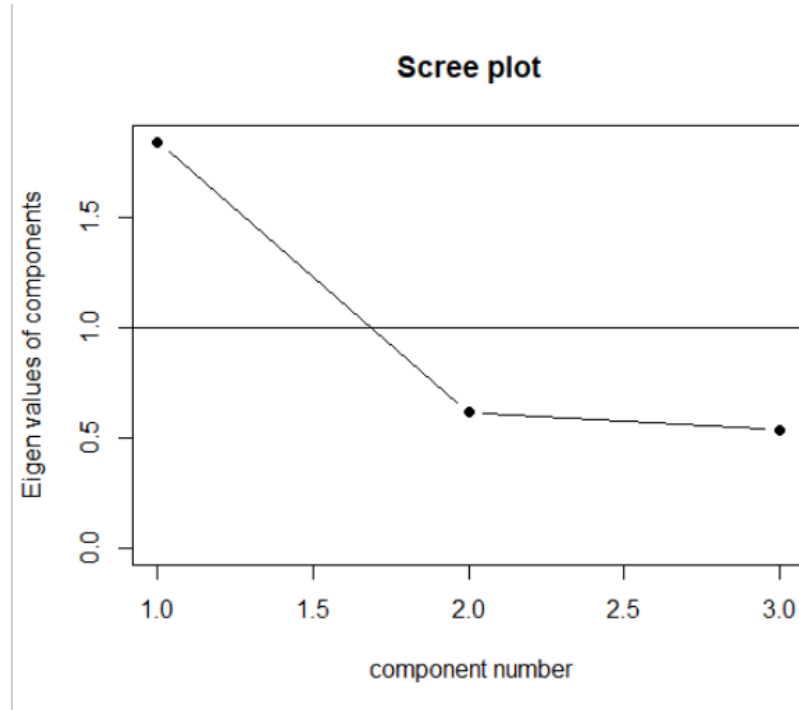
*Factor Analysis of Study 1 Values Measure Achievement Facet*

Items	Factor 1
V - 34	.656
V - 39	.490
V - 43	.566
V - 48	.542
V - 55	.814

*Note.* V = Values

**Figure O11**

*Scree Plot of Study 1 Values Measure Stimulation Facet*



**Table O15**

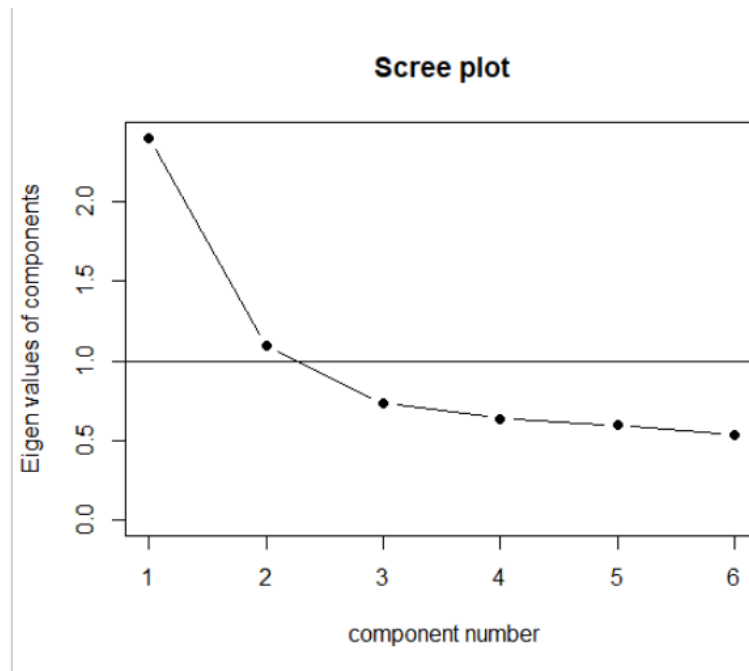
*Factor Analysis of Study 1 Values Measure Stimulation Facet*

Items	Factor 1
V - 9	.708
V - 25	.597
V - 37	.647

*Note.* V = Values

**Figure O12**

*Scree Plot of Study 1 Values Measure Self-Direction Facet*



**Table O16**

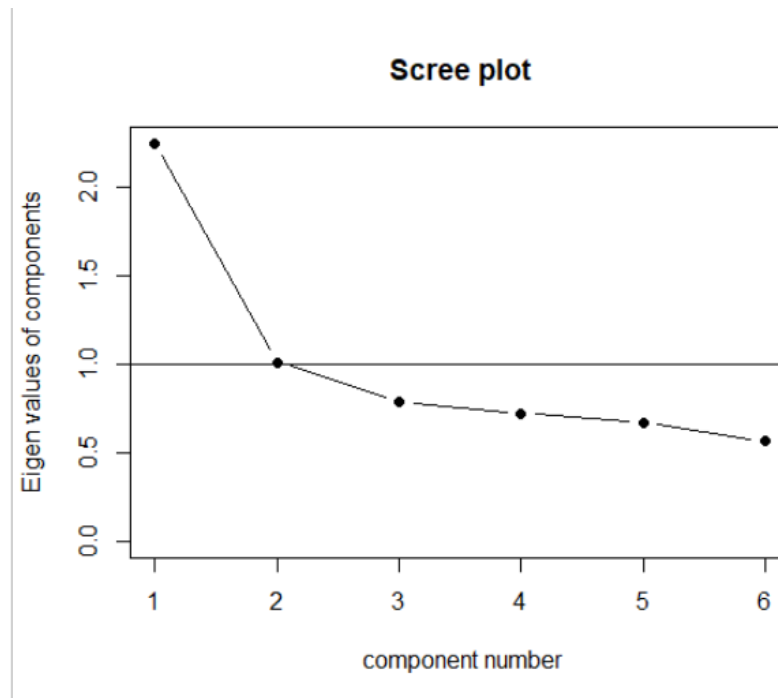
*Factor Analysis of Study 1 Values Measure Self-Direction Facet*

Items	Factor 1
V - 53	.413
V - 16	.327
V - 5	.542
V - 41	.657
V - 14	.536
V - 31	.665

*Note.* V = Values

**Figure O13**

*Scree Plot of Study 1 Values Measure Tradition Facet*



**Table O17**

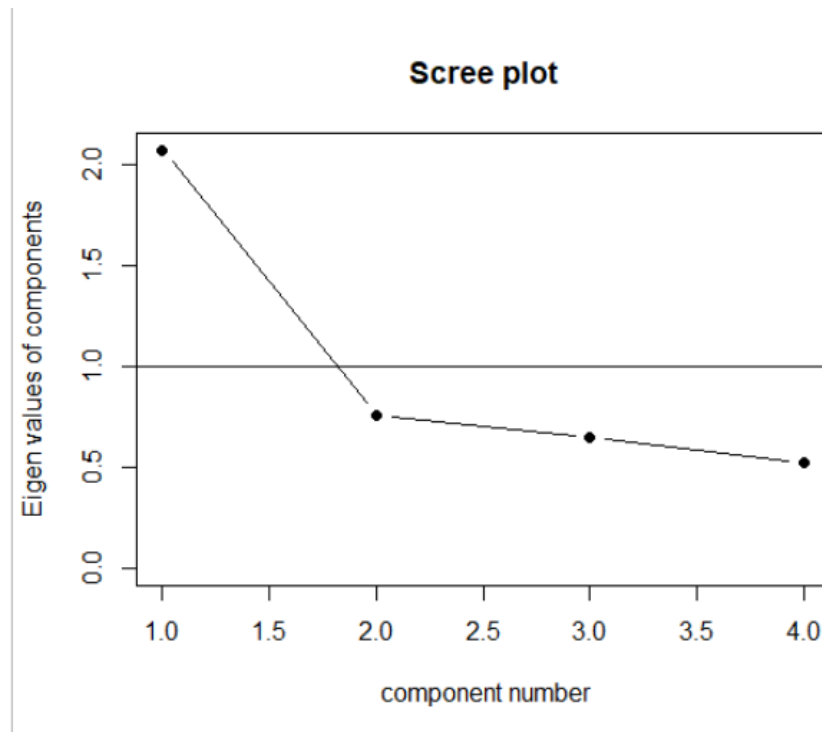
*Factor Analysis of Study 1 Values Measure Tradition Facet*

Items	Factor 1
V - 44	.551
V - 36	.509
V - 51	.572
V - 18	.582
V - 21	.386
V - 32	.372

*Note.* V = Values

**Figure O14**

*Scree Plot of Study 1 Values Measure Conformity Facet*



**Table O18**

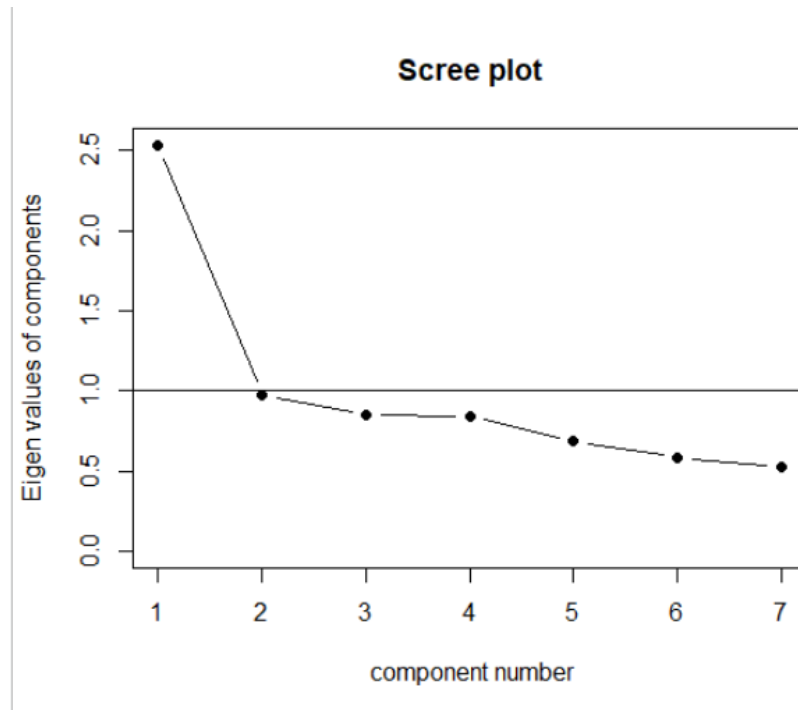
*Factor Analysis of Study 1 Values Measure Conformity Facet*

Items	Factor 1
V - 47	.623
V - 40	.670
V - 11	.617
V - 20	.474

*Note.* V = Values

**Figure O15**

*Scree Plot of Study 1 Values Measure Security Facet*



**Table O19**

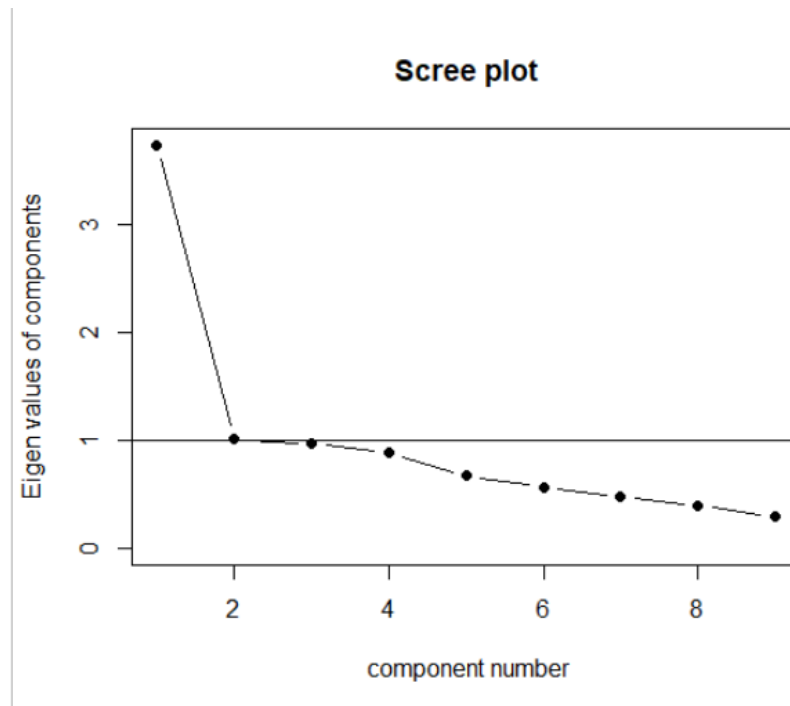
*Factor Analysis of Study 1 Values Measure Security Facet*

Items	Factor 1
V - 56	.487
V - 13	.646
V - 15	.343
V - 8	.575
V - 22	.515
V - 7	.373
V - 42	.568

*Note.* V = Values

**Figure O16**

*Scree Plot of Study 1 Values Measure Universalism Facet*



**Table O20**

*Factor Analysis of Study 1 Values Measure Universalism Facet*

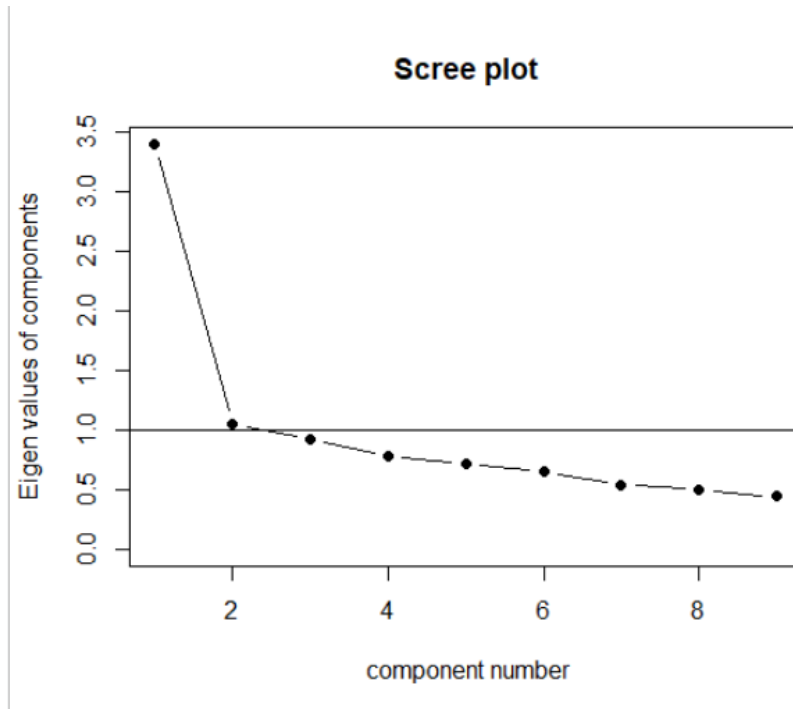
Items	Factor 1
V - 38	.762
V - 24	.720
V - 29	.681
V - 35	.463
V - 30	.649
V - 26	.417
V - 1	.475
V - 17	.638
V - 2	.333

*Note.* V = Values



**Figure O17**

*Scree Plot of Study 1 Values Measure Benevolence Facet*



**Table O21**

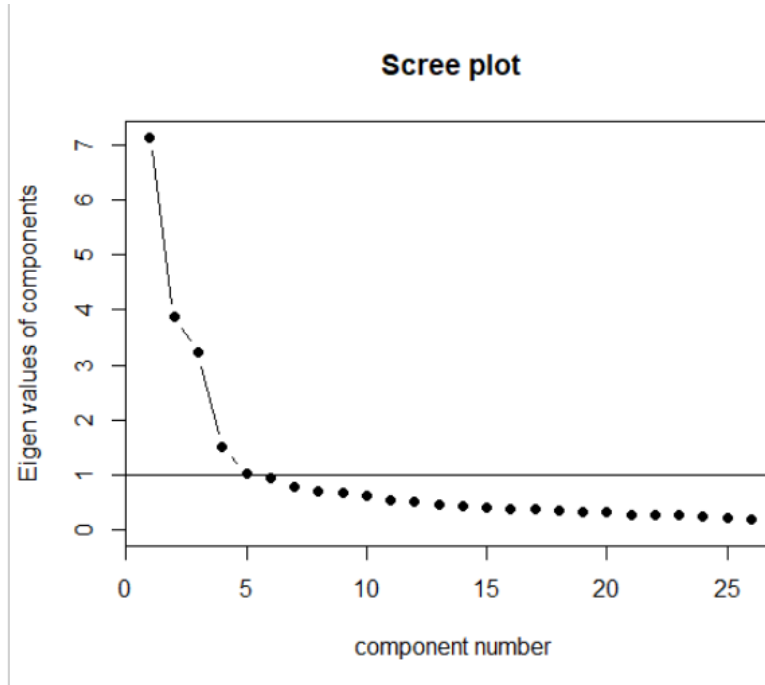
*Factor Analysis of Study 1 Values Measure Benevolence Facet*

Items	Factor 1
V - 49	.615
V - 45	.689
V - 54	.613
V - 33	.478
V - 52	.596
V - 6	.458
V - 28	.481
V - 19	.525
V - 10	.434

*Note.* V = Values

**Figure O18**

*Scree Plot of Study 1 Ethical Climate Questionnaire*



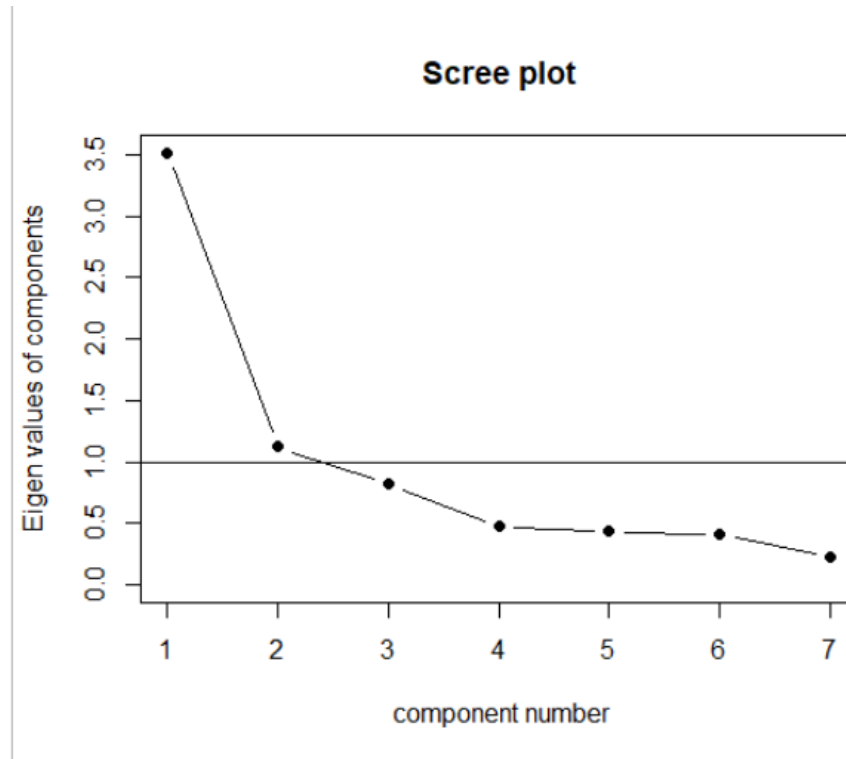
**Table O22***Factor Analysis of Study 1 Ethical Climate Questionnaire*

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
ECQ - 1		.921			
ECQ - 2	-.184	1.000			
ECQ - 3		.666		.146	
ECQ - 4		.559		.102	-.143
ECQ - 5	.370	.262	-.138		
ECQ - 6	.132	.476	.323		
ECQ - 7	.311	.289	.167		.195
ECQ - 8	.740		-.161		
ECQ - 9	.682	.146	-.150		
ECQ - 10	.849	-.119	-.116		
ECQ - 11	.668				
ECQ - 12	.881	-.185			
ECQ - 13	.874	-.174			
ECQ - 14	.545	.145	.123		-.156
ECQ - 15	.576	.106	.106		-.182
ECQ - 16			.129		.817
ECQ - 17			.115		.825
ECQ - 19			.527	-.164	.123
ECQ - 20	-.130		.803		
ECQ - 21	-.107		.849		
ECQ - 22		-.212	.645		
ECQ - 23		-.185	.542	.124	
ECQ - 24				.775	
ECQ - 25				.803	
ECQ - 26		.134	.132	.719	
ECQ - 27		-.129		.864	

*Note.* ECQ = Ethical climate questionnaire. Question 18 was omitted because it was used as an attention check

**Figure O19**

*Scree Plot of Study 1 Ethical Climate Questionnaire Caring Climate*



**Table O23**

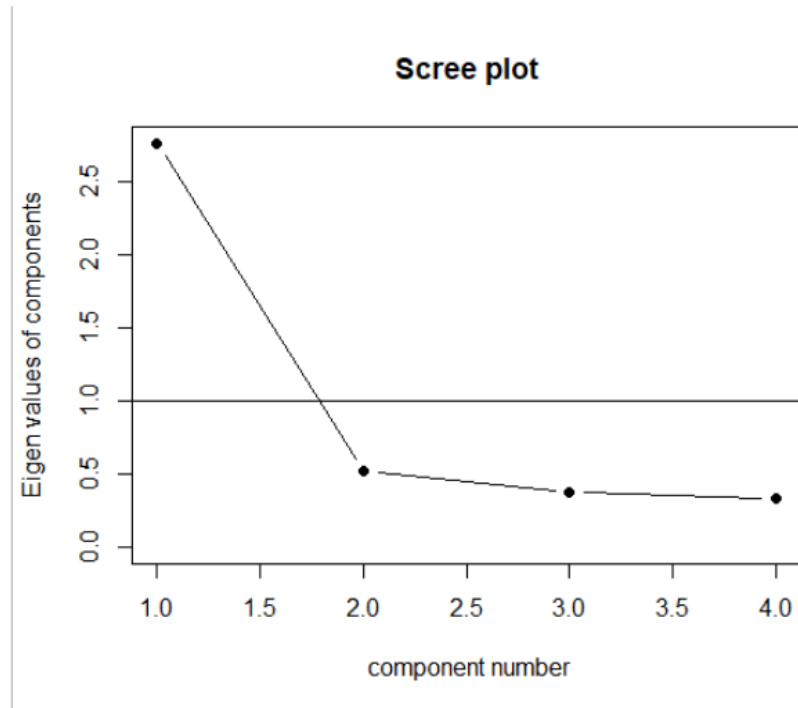
*Factor Analysis of Study 1 Ethical Climate Questionnaire Caring Climate*

Items	Factor 1
ECQ - 1	.868
ECQ - 2	.850
ECQ - 3	.671
ECQ - 4	.703
ECQ - 5	.480
ECQ - 6	.488
ECQ - 7	.335

*Note.* ECQ = Ethical Climate Questionnaire

**Figure O20**

*Scree Plot of Study 1 Ethical Climate Questionnaire Law and Code Climate*



**Table O24**

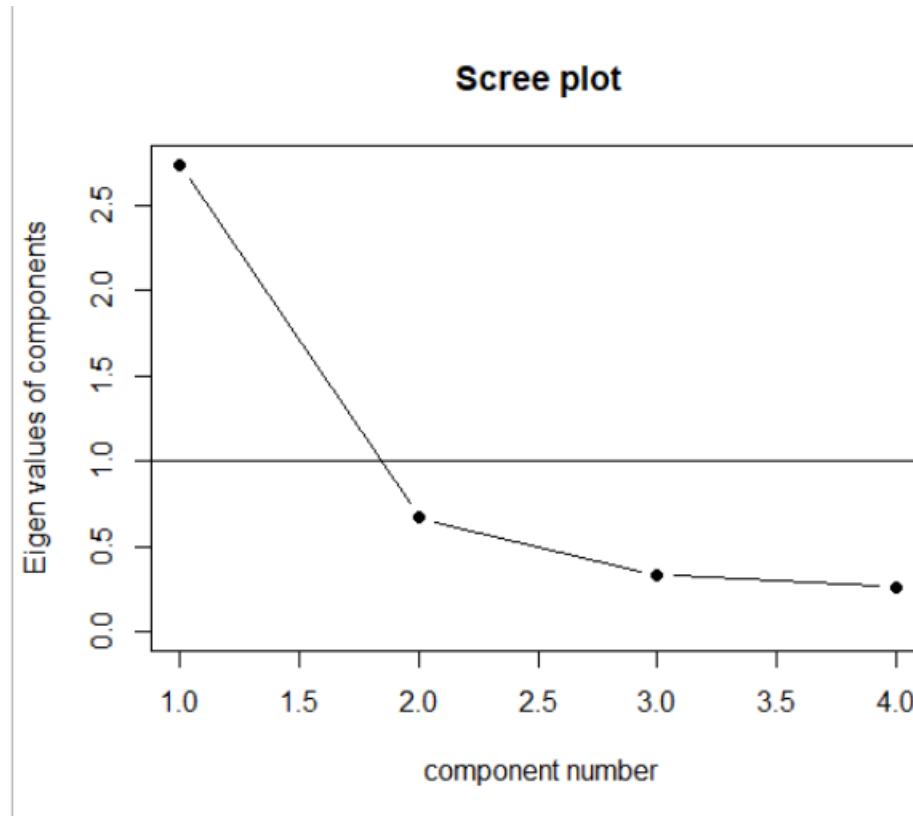
*Factor Analysis of Study 1 Ethical Climate Questionnaire Law and Code Climate*

Items	Factor 1
ECQ - 8	.735
ECQ - 9	.801
ECQ - 10	.835
ECQ - 11	.701

*Note.* ECQ = Ethical Climate Questionnaire

**Figure O21**

*Scree Plot of Study 1 Ethical Climate Questionnaire Rules Climate*



**Table O25**

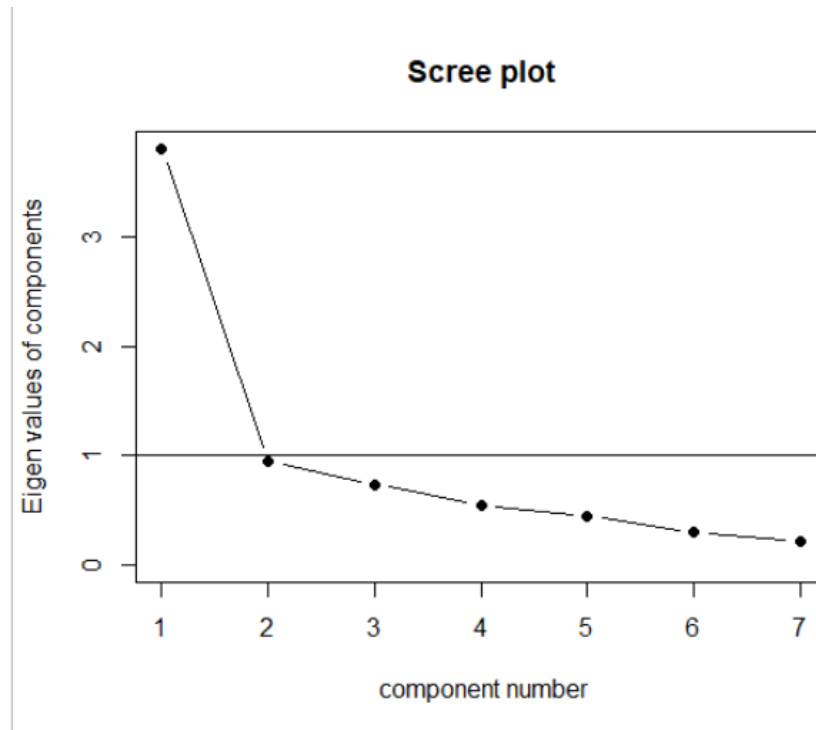
*Factor Analysis of Study 1 Ethical Climate Questionnaire Rules Climate*

Items	Factor 1
ECQ - 12	.805
ECQ - 13	.848
ECQ - 14	.669
ECQ - 15	.705

*Note.* ECQ = Ethical Climate Questionnaire

**Figure O22**

*Scree Plot of Study 1 Ethical Climate Questionnaire Instrumental Climate*



**Table O26**

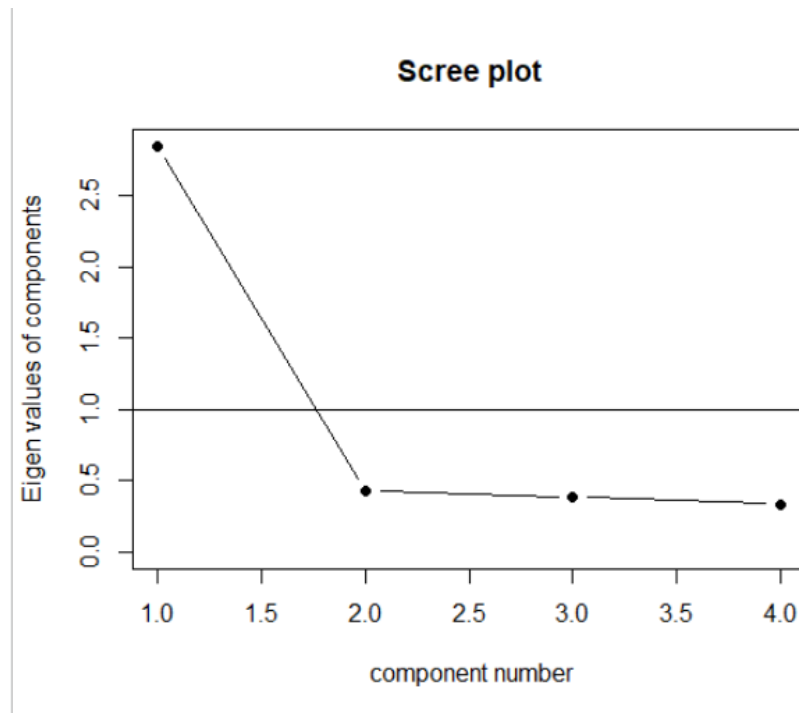
*Factor Analysis of Study 1 Ethical Climate Questionnaire Instrumental Climate*

Items	Factor 1
ECQ - 16	.685
ECQ - 17	.681
ECQ - 19	.603
ECQ - 20	.801
ECQ - 21	.729
ECQ - 22	.653
ECQ - 23	.626

*Note.* ECQ = Ethical Climate Questionnaire. Question 18 was removed because it was used as an attention check item.

**Figure O23**

*Scree Plot of Study 1 Ethical Climate Questionnaire Independence Climate*



**Table O27**

*Factor Analysis of Study 1 Ethical Climate Questionnaire Independence Climate*

Items	Factor 1
ECQ - 24	.749
ECQ - 25	.800
ECQ - 26	.766
ECQ - 27	.825

*Note.* ECQ = Ethical Climate Questionnaire



**Table O28***Factor Analysis of Study 1 Counterproductive Work Behavior Scale*

Items	Factor 1	Factor 2
CWB - 1	.629	
CWB - 2	.795	
CWB - 3	.896	
CWB - 4	.747	
CWB - 5	.884	-.154
CWB - 6	.596	.196
CWB - 7	.947	
CWB - 8	.404	.386
CWB - 9	-.197	.865
CWB - 10	.764	
CWB - 11		.720
CWB - 12		.638
CWB - 13	.610	.170
CWB - 14	.218	.524
CWB - 15	-.136	.893
CWB - 16	.443	.330
CWB - 17	.777	
CWB - 18		.856
CWB - 19	.524	.280

*Note.* CWB = Counterproductive Work Behaviors**Table O29***Factor Analysis of Study 1 Counterproductive Work Behavior Scale Interpersonal Facet*

Items	Factor 1
CWB - 1	.732
CWB - 2	.857
CWB - 3	.808
CWB - 4	.739
CWB - 5	.768
CWB - 6	.771
CWB - 7	.855

*Note.* CWB = Counterproductive Work Behavior

**Table O30**

*Factor Analysis of Study 1 Counterproductive Work Behavior Scale Organizational Facet*

Items	Factor 1
CWB - 8	.759
CWB - 9	.596
CWB - 10	.757
CWB - 11	.685
CWB - 12	.642
CWB - 13	.734
CWB - 14	.693
CWB - 15	.705
CWB - 16	.716
CWB - 17	.631
CWB - 18	.717
CWB - 19	.755

*Note.* CWB = Counterproductive Work Behaviors

**Table O31**

*Factor Analysis of Study 1 Organizational Citizenship Behavior Scale*

Items	Factor 1	Factor 2
OCB - 1	.780	-.140
OCB - 2	.899	-.104
OCB - 3	.680	
OCB - 4	.768	
OCB - 5	.725	
OCB - 6	.815	
OCB - 7	.804	
OCB - 8	.525	.128
OCB - 9	.125	.542
OCB - 10	.207	.585
OCB - 11		.822
OCB - 12		.803
OCB - 13	.170	.566
OCB - 14	-.123	.948
OCB - 15		.761
OCB - 16	-.110	.864

*Note.* OCB = Organizational Citizenship Behaviors

**Table O32***Factor Analysis of Study 1 Organizational Citizenship Behavior Scale Individual Facet*

Items	Factor 1
OCB - 1	.684
OCB - 2	.827
OCB - 3	.691
OCB - 4	.805
OCB - 5	.762
OCB - 6	.811
OCB - 7	.782
OCB - 8	.607

*Note.* OCB = Organizational Citizenship Behaviors**Table O33***Factor Analysis of Study 1 Organizational Citizenship Behavior Scale Organizational Facet*

Items	Factor 1
OCB - 9	.625
OCB - 10	.723
OCB - 11	.809
OCB - 12	.791
OCB - 13	.683
OCB - 14	.862
OCB - 15	.796
OCB - 16	.791

*Note.* OCB = Organizational Citizenship Behaviors**Table O34***Factor Analysis of Study 1 Voice Measure*

Items	Factor 1
VOICE - 1	.824
VOICE - 2	.843
VOICE - 3	.826
VOICE - 4	.764
VOICE - 5	.815
VOICE - 6	.860

**Table O35**

*Factor Analysis of Study 1 Job Satisfaction Measure*

Items	Factor 1
JS - 1	.939
JS - 2	-.838
JS - 3	.872

*Note.* JS = Job Satisfaction

**Table O36***Factor Analysis of Study 1 Unethical Behavior Measure*

Items	Factor 1
UB - 1	.720
UB - 2	.699
UB - 3	.749
UB - 4	.749
UB - 5	.733
UB - 6	.754
UB - 7	.794
UB - 8	.816
UB - 9	.577
UB - 10	.600
UB - 11	.744
UB - 12	.868
UB - 13	.835
UB - 14	.814
UB - 15	.853
UB - 16	.882
UB - 17	.791
UB - 18	.790
UB - 19	.721
UB - 20	.725
UB - 21	.652
UB - 22	.768
UB - 23	.783
UB - 24	.876
UB - 25	.763
UB - 26	.805
UB - 27	.864
UB - 28	.807
UB - 29	.802
UB - 30	.842
UB - 31	.819
UB - 32	.789
UB - 33	.805
UB - 34	.885
UB - 35	.869
UB - 36	.896

**Table O36**  
**(Continued)**

Items	Factor 1
UB - 37	.817

*Note.* UB = Unethical Behavior

**Table O37**

*Factor Analysis of Study 1 Conscientiousness Personality Measure*

Items	Factor 1
CON - 3	.764
CON - 9	.774
CON - 10	-.616
CON - 17	.794
CON - 22	-.638
CON - 24	-.411
CON - 29	.783
CON - 31	-.267

*Note.* CON = Conscientiousness

**Table O38**

*Factor Analysis of Study 1 Agreeableness Personality Measure*

Items	Factor 1
AGR - 4	.725
AGR - 6	-.521
AGR - 15	.665
AGR - 20	-.635
AGR - 27	.725
AGR - 30	-.552
AGR - 38	.679
AGR - 39	-.579

*Note.* AGR = Agreeableness

**Table O39***Factor Analysis of Study 1 Openness Personality Measure*

Items	Factor 1
OPN - 5	.205
OPN - 7	.769
OPN - 8	.474
OPN - 16	.692
OPN - 18	.449
OPN - 23	.422
OPN - 35	.633
OPN - 37	.425

*Note.* OPN = Openness**Table O40***Factor Analysis of Study 1 Neuroticism Personality Measure*

Items	Factor 1
NEU - 12	.721
NEU - 14	.746
NEU - 19	.691
NEU - 21	.809
NEU - 26	-.423
NEU - 33	.759
NEU - 34	.696
NEU - 36	-.102

*Note.* NEU = Neuroticism

**Table O41***Factor Analysis of Study 1 Extraversion Personality Measure*

Items	Factor 1
EXT - 1	.506
EXT - 2	-.456
EXT - 11	-.555
EXT - 13	-.683
EXT - 25	.652
EXT - 28	.716
EXT - 32	-.609
EXT - 40	.512

*Note.* EXT = Extraversion



## Appendix P

### ANOVAs for ethics program components.

In addition to calculating t-tests between the yes-no groups for each of the ethics program components and ethical climate dimensions, I conducted two sets of analyses in which I ran an ANOVA for each ethical climate dimension using the set of ethics program components. These ANOVAs were conducted such that all effects were analyzed simultaneously. For the first set of ANOVAs, I excluded all participants that answered, “don’t know” to any of the ethics program components and only included those participants who answered “yes” or “no”. This resulted in the exclusion of 244 participants. The results for the first set of ANOVAs are displayed in Tables P1 and P2. For the second set of ANOVAs, I converted all “don’t know” responses to “no” responses. The results for the second set of ANOVAs are displayed in Table P3 and P4 and reported starting on p. 207). Though I have included tables detailing the main effects of ethics program components on each ethical climate dimension (Tables P1 and P3), I am only reporting results from which interaction effects were included (Tables P2 and P4) because significant interaction effects were observed.

**Caring climate.** There were no significant main effects of ethics program components on caring climate scores (see Table P2). There was a significant interaction effect between the presence (absence) of ethics codes and the presence (absence) of an ethics hotline (see Figure P1).

**Table P1**

*Main effects of Ethics Program Components on Each Ethical Climate Dimension,  
Excluding “Don’t Know” Responses.*

Ethics Program Components	<u>Caring</u>		<u>Law and Code</u>		<u>Rules</u>		<u>Instrumental</u>	
	<i>F</i>	<i>P</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
Codes								
<b>Training</b>	<b>7.04</b>	<b>.008</b>	<b>16.27</b>	<b>.000</b>	<b>10.38</b>	<b>.002</b>		
Hotline								
<b>Rewards</b>								
Punish								
<b>Officer</b>							<b>4.39</b>	<b>0.03</b>

*Note.* *df* = 171.

Ethics Program Components	Climate Dimensions							
	Caring		Law and Code		Rules		Instrument	
	<i>F</i>	<i>P</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	
Codes	--	--	--	--	--	-	--	
Training	--	--	--	--	--	--	--	
Hotline	--	--	--	--	--	--	--	
<b>Rewards</b>	--	--	--	--	--	--	--	
<b>Punish</b>	--	--	--	--	<b>2.19</b>	<b>.041</b>	--	
Officer	--	--	--	--	--	--	--	
Codes x Training	--	--	--	--	--	--	--	
<b>Codes x Hotline</b>	<b>5.11</b>	<b>.030</b>	<b>4.08</b>	<b>.045</b>	--	--	--	
<b>Codes x Rewards</b>	--	--	<b>6.73</b>	<b>.010</b>	<b>2.05</b>	<b>.047</b>	--	
<b>Codes x Punish</b>	--	--	<b>8.75</b>	<b>.003</b>	<b>3.02</b>	<b>.017</b>	--	
Codes x Officer	--	--	--	--	--	--	--	
Training x Hotline	--	--	--	--	--	--	--	
Training x Rewards	--	--	--	--	--	--	--	
Training x Punish	--	--	--	--	--	--	--	
Training x Officer	--	--	--	--	--	--	--	
Hotline x Rewards	--	--	--	--	--	--	--	
Hotline x Punish	--	--	--	--	--	--	--	
Hotline x Officer	--	--	--	--	--	--	--	
<b>Rewards x Punish</b>	--	--	--	--	<b>2.31</b>	<b>.036</b>	--	
Rewards x Officer	--	--	--	--	--	--	--	
Punish x Officer	--	--	--	--	--	--	--	

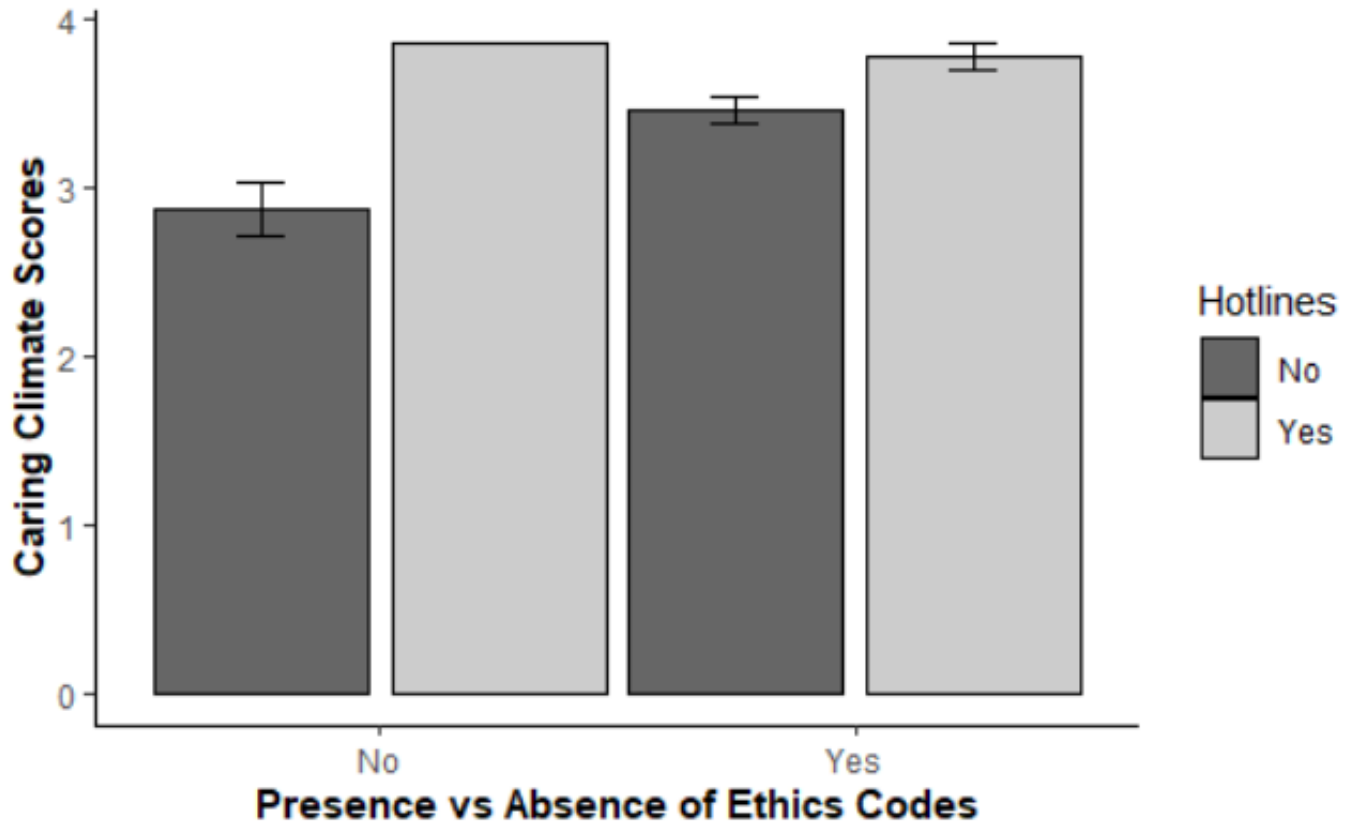
**Table P2**

*Main and Interactive Effects of Ethics Program Components on Ethical Climate Dimensions, Excluding Don't Know Responses.*

*Note.* Degrees of Freedom for all analyses = 156. All “Don’t know” responses were excluded from this set of analyses. All “—” indicate a non-significant result.

**Figure P1**

*Plot of Means for the Presence (Absence) of an Ethics Hotline and Their Effect on Average Caring Climate Scores as a Function of Presence (Absence) of Ethics Codes.*

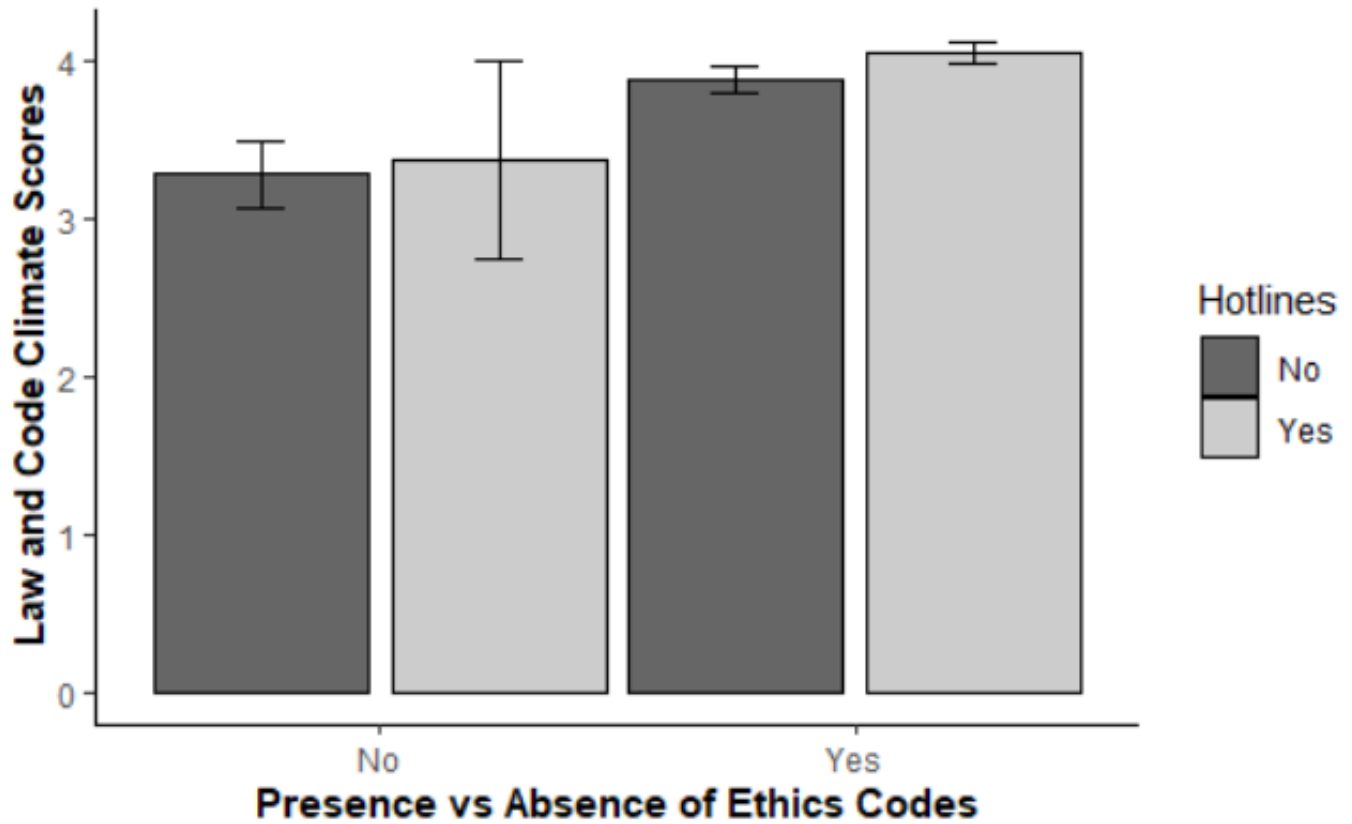


*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (22, 2.87, 0.76); No-Yes (2, 3.85, 0.00); Yes-No (74, 3.45, 0.67); Yes-Yes (80, 3.78, 0.68).

**Law and code climate.** There were no significant main effects of ethics program components on law and code climate scores (see Table P2). There were significant interaction effects between the presence (absence) of ethics codes and the presence (absence) of an ethics hotline (see Figure P2), the presence (absence) of ethics codes and the presence (absence) of rewards for ethical behavior (see Figure P3), and the presence (absence) of ethics codes and the presence (absence) of punishment for unethical behavior on law and code climate scores (see Figure P4).

**Figure P2**

*Plot of Means for the Presence (Absence) of an Ethics Hotline and Their Effect on Average Law and Code Climate Scores as a Function of the Presence (Absence) of Ethics*

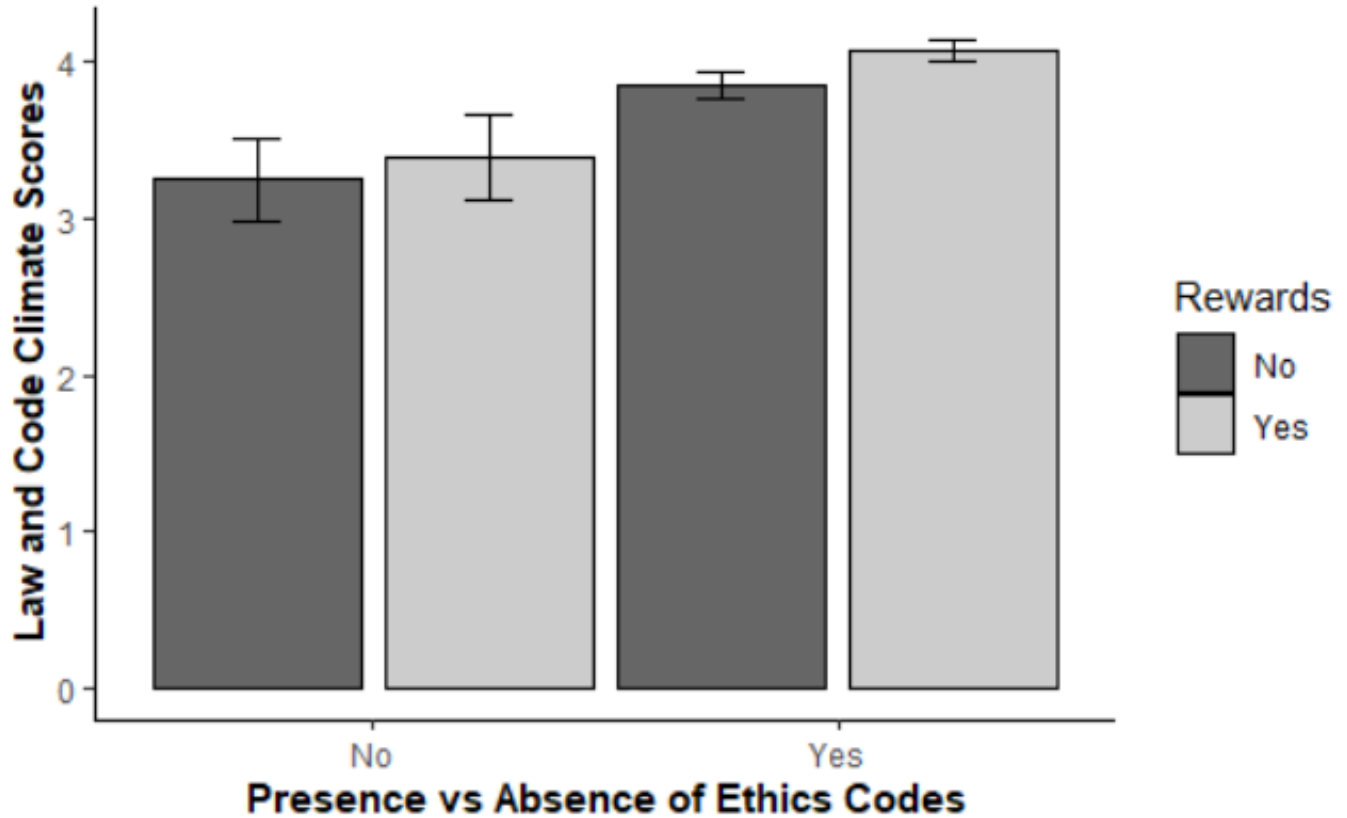


*Codes.*

*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (22, 3.28, 1.00); No-Yes (2, 3.37, 0.88); Yes-No (74, 3.88, 0.73); Yes-Yes (80, 4.05, 0.63).

**Figure P3**

*Plot of Means for the Presence (Absence) of Rewards for Ethical Behavior and Their Effect on Average Law and Code Climate Scores as a Function of the Presence (Absence)*

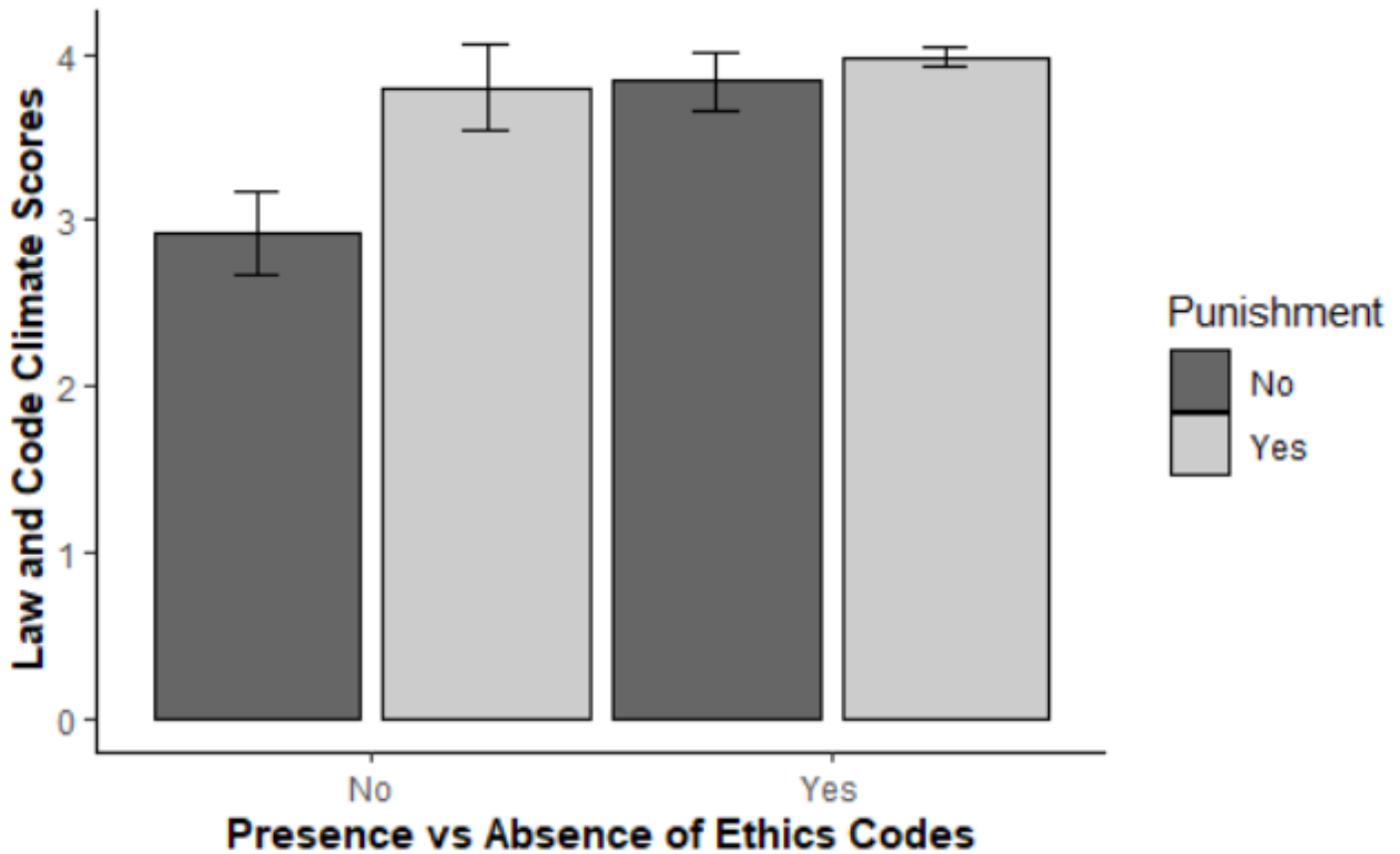


*of Ethics Codes.*

*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (17, 3.25, 1.08); No-Yes (7, 3.39, 0.73); Yes-No (72, 3.85, 0.72); Yes-Yes (82, 4.07, 0.63).

**Figure P4**

*Plot of Means for the Presence (Absence) of Punishment for Unethical Behavior and Their Effect on Average Law and Code Climate Scores as a Function of the Presence (Absence) of Ethics Codes.*



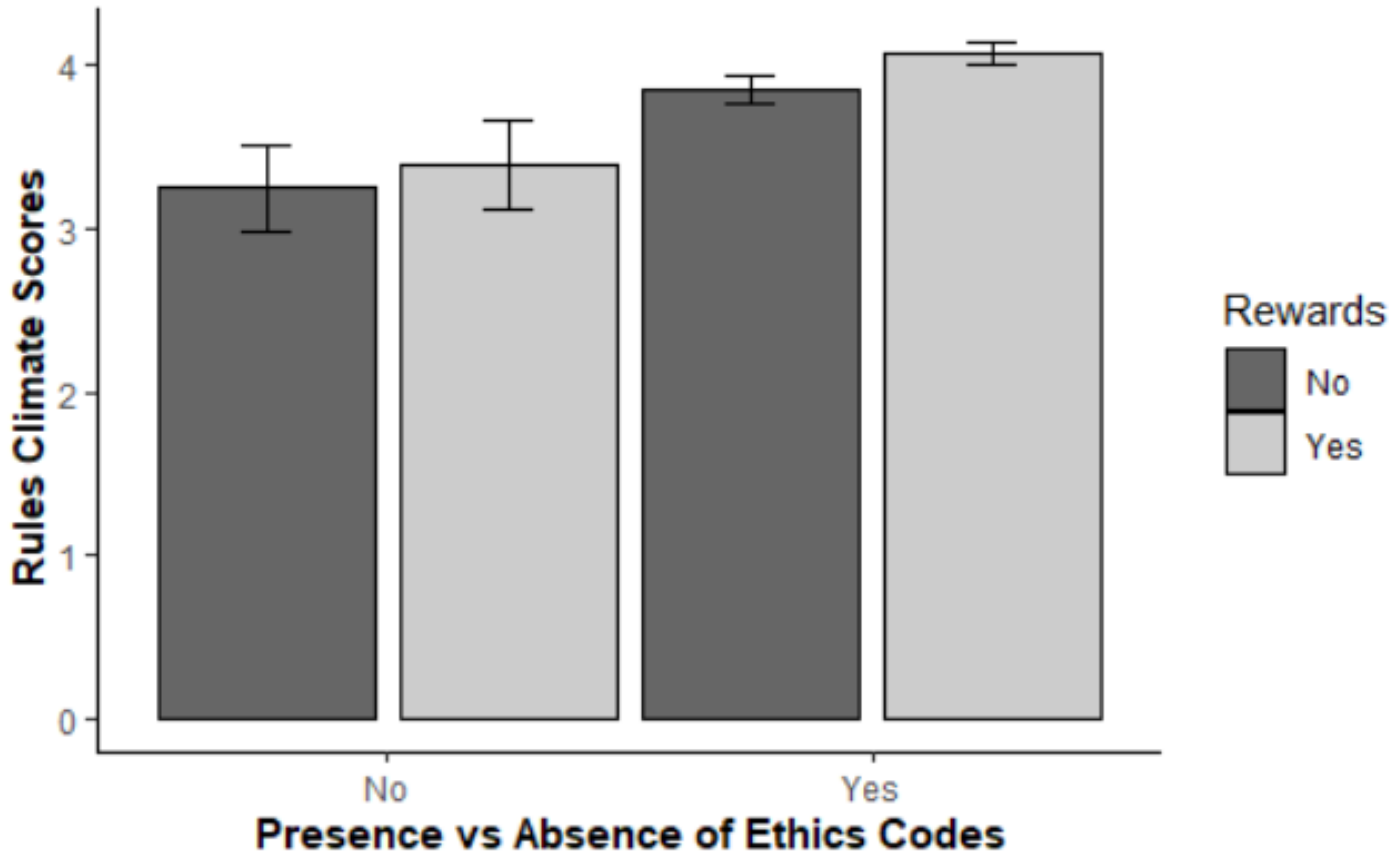
*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (14, 2.92, 0.93); No-Yes (10, 3.80, 0.83); Yes-No (14, 3.84, 0.66); Yes-Yes (140, 3.98, 0.69).

**Rules climate.** There was a significant main effect of the presence (absence) of punishment of unethical behavior such that rules climate scores were significantly higher for those whose organizations sanction individuals who engage in unethical behavior (see Table P2). There were significant interactive effects of the presence (absence) of ethics codes and the presence (absence) of rewards for ethical behavior (see Figure P5), the presence (absence) of ethics codes and the presence (absence) of punishment for unethical behavior (see Figure P6), and the presence (absence) of rewards for ethical behavior and the presence (absence) of punishment for unethical behavior on rules climate scores (see Figure P7).



**Figure P5**

*Plot of Means for the Presence (Absence) of Rewards for Ethical Behavior and Their Effect on Average Rules Climate Scores as a Function of the Presence (Absence) of*

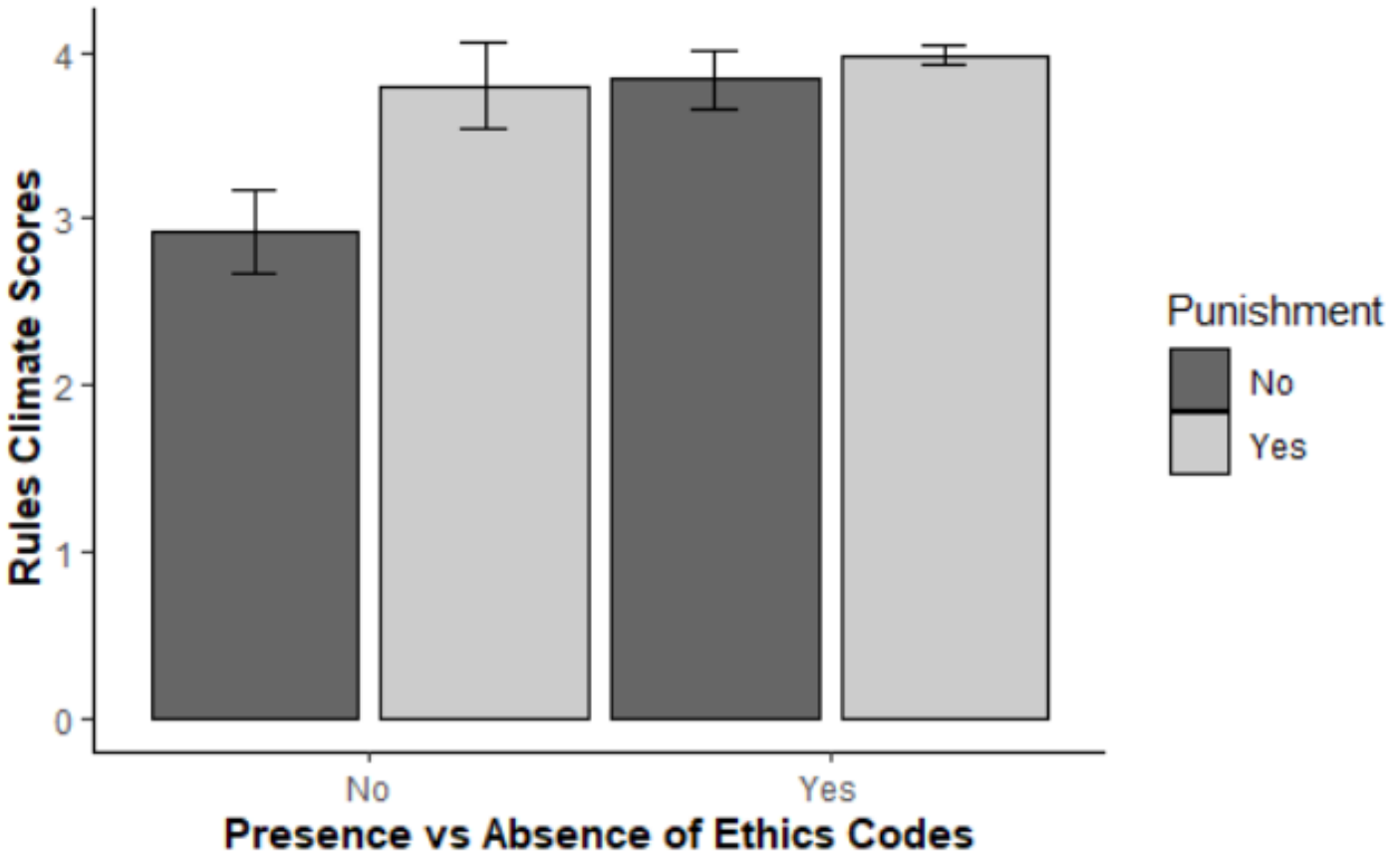


*Ethics Codes.*

*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (17, 3.25, 1.08); No-Yes (7, 3.39, 0.73); Yes-No (72, 3.85, 0.72); Yes-Yes (82, 4.07, 0.64).

**Figure P6**

*Plot of Means for the Presence (Absence) of Punishment for Unethical Behavior and Their Effect on Average Rules Climate Scores as a Function of the Presence (Absence) of*

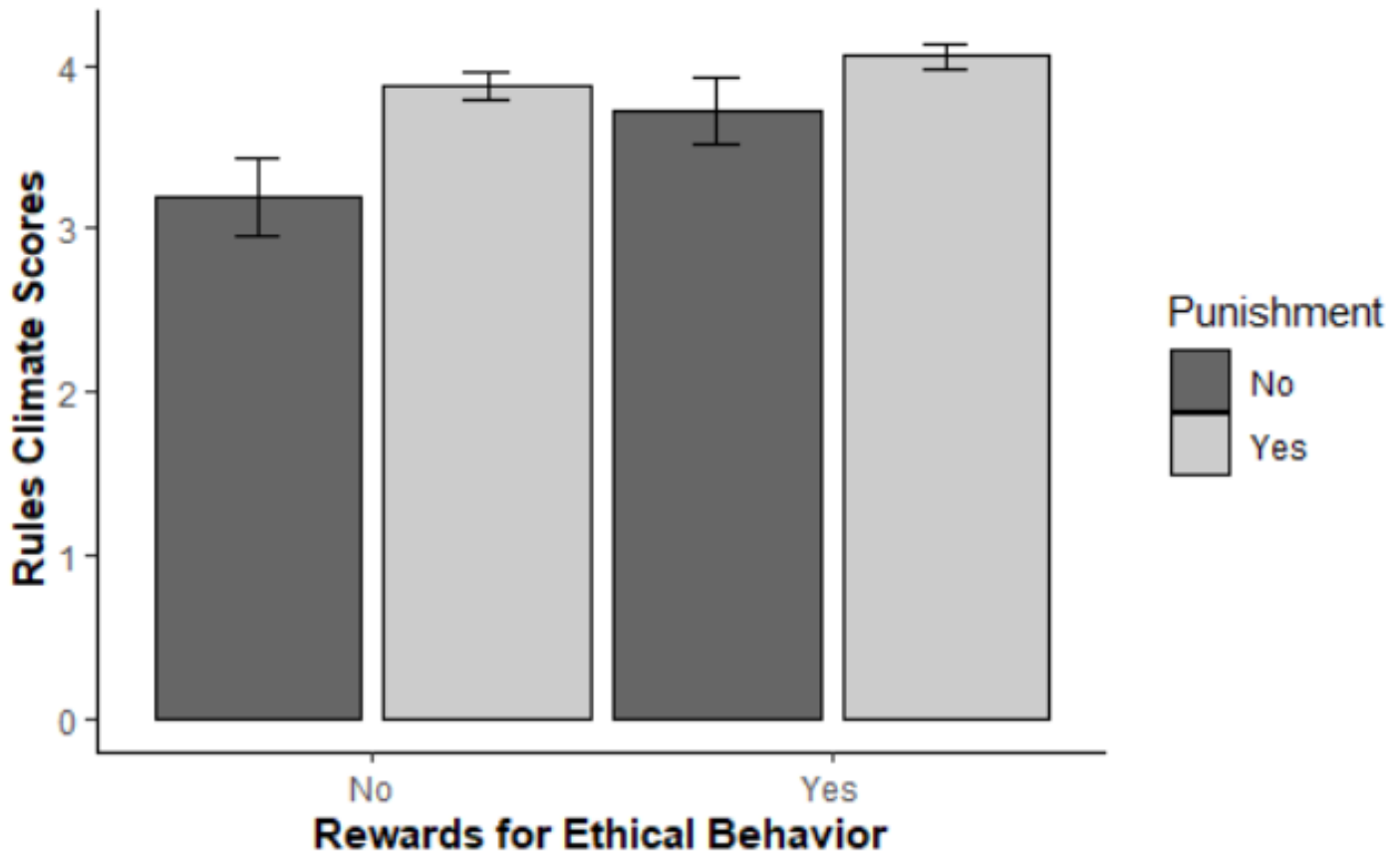


*Ethics Codes.*

*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (14, 2.92, 0.91); No-Yes (10, 3.80, 0.83); Yes-No (14, 3.84, 0.86); Yes-Yes (140, 3.98, 0.69).

**Figure P7**

*Plot of Means for the Presence (Absence) of Rewards for Ethical Behavior and Their Effect on Average Rules Climate Scores as a Function of the Presence (Absence) of Punishment for Unethical Behavior.*



*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (18, 3.19, 1.01); No-Yes (71, 3.87, 0.72); Yes-No (10, 3.73, 0.66); Yes-Yes (79, 4.06, 0.66).

**Instrumental climate.** There were no significant main or interactive effects of ethics program components on instrumental climate scores (see Table P2).

**Independence climate.** There was a significant main effect of the presence (absence) of ethics program components on independence climate scores such that independence climate scores were significantly higher for individuals whose organization reward ethical behavior (see Table P2). There were no significant interaction effects.

**Summary of ethics program components.** In general, higher scores on all climate dimensions were observed in the presence of ethics program components, regardless of the ethics program component. There were significant main effects of rewards for ethical behavior on the Independence climate dimensions and punishment for unethical behavior on rules climate scores. There were a number of significant interactions across various ethical climate dimensions, most of which involved the interaction of ethics codes and another ethics program component. Finally, there was a significant interaction between rewards for ethical behavior and punishment of unethical behavior on rules climate scores such that higher rules climate scores were observed regardless of whether rewards for ethical behavior were present.

The second set of ANOVAs in which all the “I don’t know” responses were converted to “No” are described below.

**Caring climate.** There were significant main effects for the presence (absence) of ethics training, presence (absence) of punishment for unethical behavior on caring scores, and the presence (absence) of an ethics office(r) on caring climate scores such that the presence of these components resulted in significantly higher caring climate scores (See Table P4).

There were significant interaction effects between presence (absence) of ethics codes and presence (absence) of ethics training on caring scores (see Figure P8) and presence (absence) of punishment for unethical behavior and presence (absence) of an ethics officer (see Figure P9) on caring climate scores.

**Table P3**

*Summary of Main Effects of Ethics Program Components on Each Ethical Climate Dimensions, Including “Don’t Know” Responses.*

Ethics Program Components	<u>Caring</u>		<u>Law and Code</u>		<u>Rules</u>		<u>Instrumental</u>		<u>Independence</u>	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
Codes	<b>5.99</b>	<b>.015</b>	<b>12.38</b>	<b>.000</b>	<b>4.56</b>	<b>.033</b>				
Training	<b>8.33</b>	<b>.004</b>	<b>15.15</b>	<b>.000</b>	<b>9.68</b>	<b>.002</b>				
Hotline							<b>6.21</b>	<b>0.013</b>		
Rewards	<b>8.7</b>	<b>.003</b>							<b>10.96</b>	<b>.001</b>
Punish	<b>7.98</b>	<b>.005</b>	<b>6.89</b>	<b>.009</b>	<b>7.23</b>	<b>.007</b>	<b>6.86</b>	<b>0.009</b>		
Officer							<b>5.45</b>	<b>0.020</b>		

*Note.* *df* = 415. All “don’t know” responses were coded as “no” responses.

**Table P4**

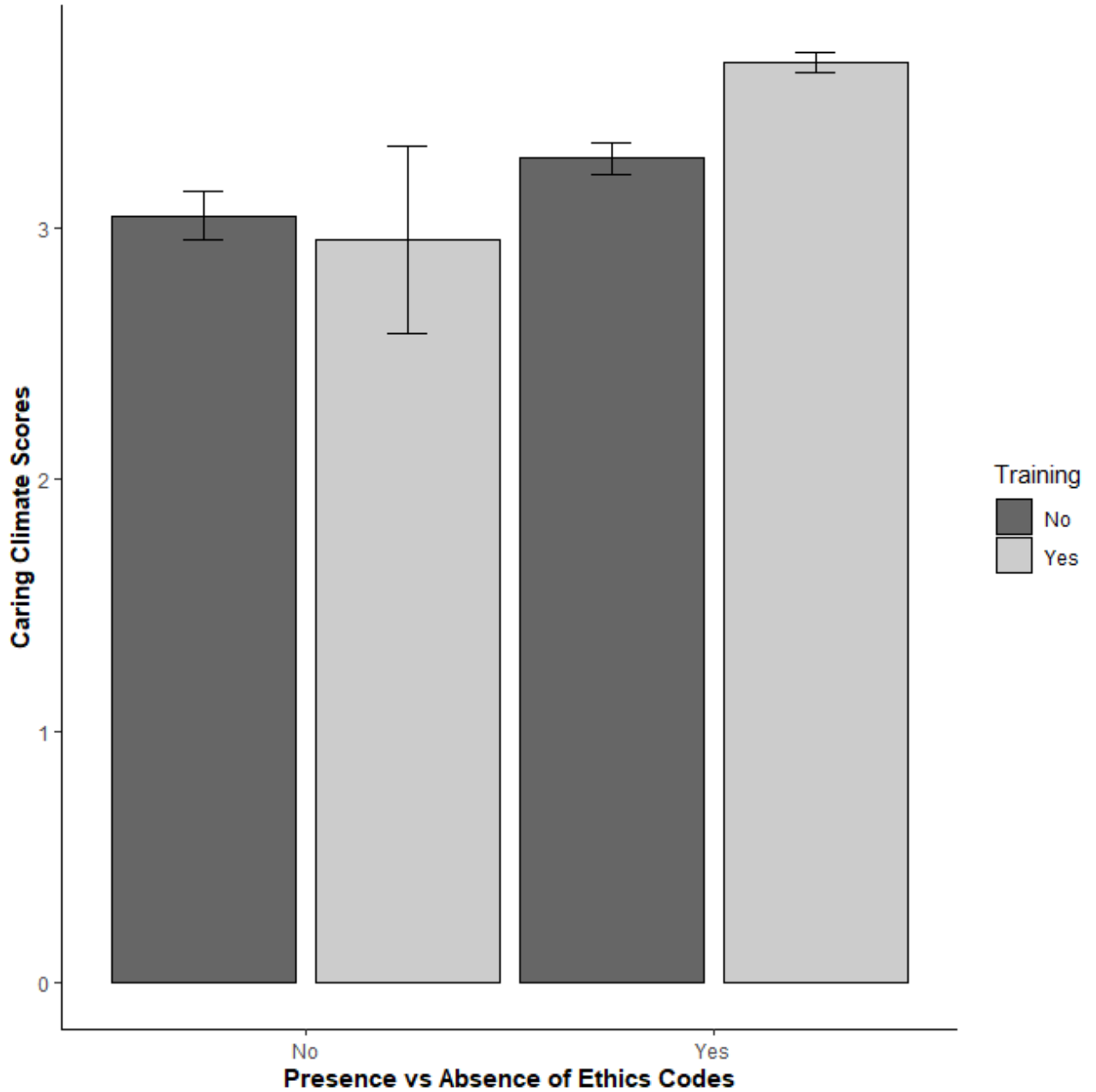
*Summary of Main and Interactive Effects of Ethics Program Components on Ethical Climate Dimensions.*

Ethics Program Components	<u>Climate Dimensions</u>									
	<u>Caring</u>		<u>Law and Code</u>		<u>Rules</u>		<u>Instrumental</u>		<u>Independence</u>	
	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
Codes	--	--	--	--	--	--	--	--	--	--
<b>Training</b>	<b>3.42</b>	<b>.004</b>	<b>7.44</b>	<b>.000</b>	<b>2.17</b>	<b>.044</b>	--	--	--	--
Hotline	--	--	--	--	--	--	--	--	--	--
<b>Rewards</b>	--	--	--	--	--	--	<b>4.13</b>	<b>.013</b>	<b>7.81</b>	<b>.002</b>
<b>Punish</b>	<b>2.15</b>	<b>.022</b>	--	--	<b>5.44</b>	<b>.002</b>	--	--	<b>3.34</b>	<b>.038</b>
<b>Officer</b>	<b>2.17</b>	<b>.021</b>	--	--	--	--	--	--	--	--
<b>Codes x Training</b>	<b>2.33</b>	<b>.017</b>	--	--	--	--	--	--	--	--
Codes x Hotline	--	--	--	--	--	--	--	--	--	--
Codes x Rewards	--	--	--	--	--	--	--	--	--	--
<b>Codes x Punish</b>	--	--	<b>5.85</b>	<b>.001</b>	--	--	--	--	--	--
Codes x Officer	--	--	--	--	--	--	--	--	--	--
<b>Training x Hotline</b>	--	--	<b>2.15</b>	<b>.044</b>	--	--	--	--	--	--
Training x Rewards	--	--	--	--	--	--	--	--	--	--
Training x Punish	--	--	--	--	--	--	--	--	--	--
Training x Officer	--	--	--	--	--	--	--	--	--	--
<b>Hotline x Rewards</b>	--	--	<b>2.18</b>	<b>.043</b>	--	--	--	--	--	--
<b>Hotline x Punish</b>	--	--	<b>3.08</b>	<b>.016</b>	<b>0.36</b>	<b>.411</b>	--	--	--	--
Hotline x Officer	--	--	--	--	--	--	--	--	--	--
<b>Rewards x Punish</b>	--	--	<b>3.21</b>	<b>.014</b>	--	--	--	--	--	--
Rewards x Officer	--	--	--	--	--	--	--	--	--	--
<b>Punish x Officer</b>	<b>2.13</b>	<b>.022</b>	--	--	--	--	--	--	--	--

*Note.* Degrees of freedom = 400. All “Don’t know” responses were converted to “No”. All “—” indicate non-significant results.

**Figure 8**

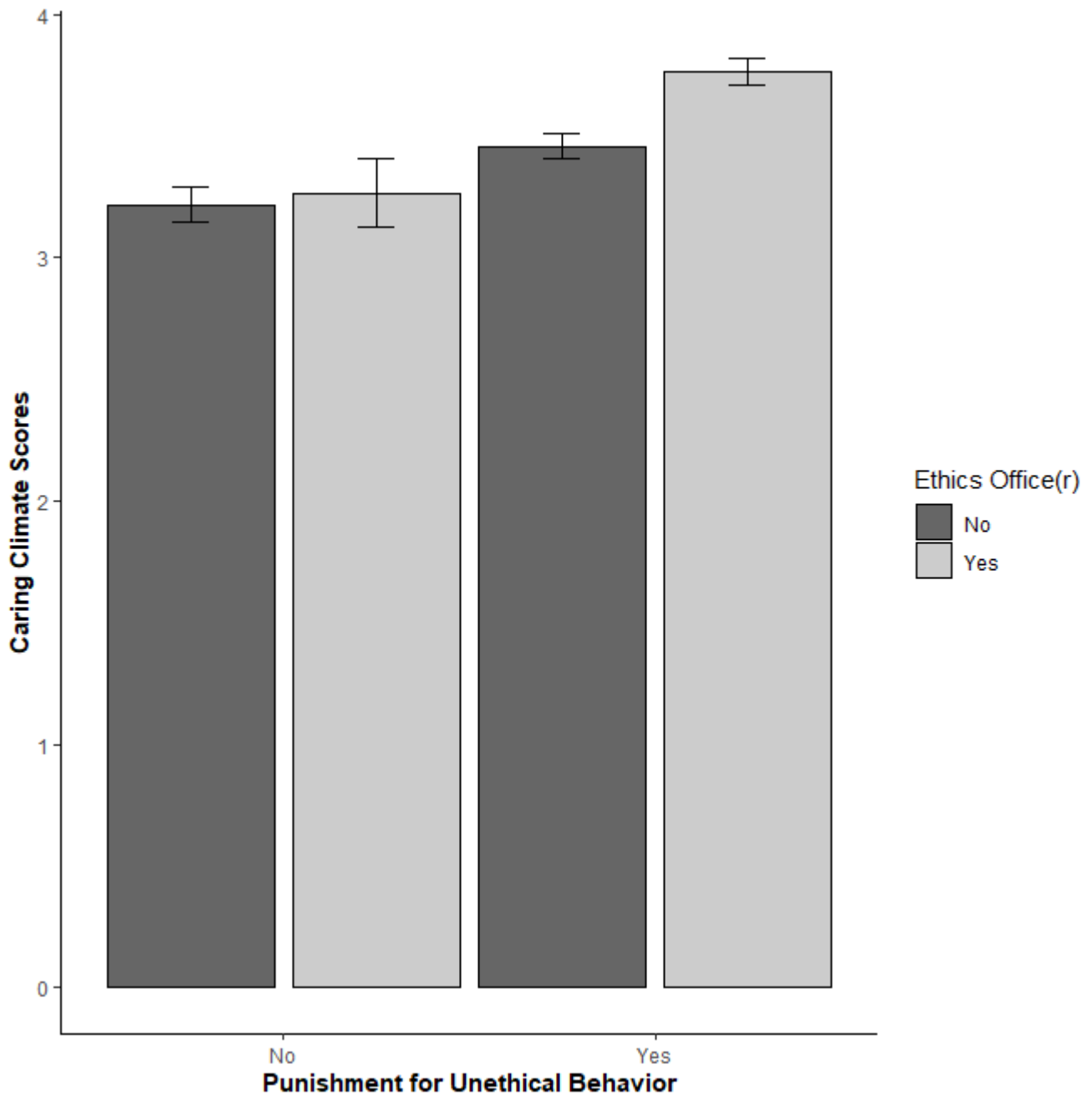
*Plot of Means for the Presence (Absence) of Ethics Training and its Effect on Average Caring Climate Scores as a Function of Presence (Absence) of Ethics Codes.*



*Note.* Errors bars represent confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (51, 3.05, 0.71); No-Yes (6, 2.95, 0.92); Yes-No (112, 3.28, 0.68); Yes-Yes (253, 3.67, 0.64).

**Figure 9**

*Plot of Means for the Presence (Absence) of an Ethics Office(r) on Average Caring Climate Scores as a Function of Presence (Absence) of Punishment for Unethical Behavior.*



*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (101, 3.22, 0.75); No-Yes (28, 3.27, 0.75); Yes-No (171, 3.46, 0.64); Yes-Yes (122, 3.75, 0.63).

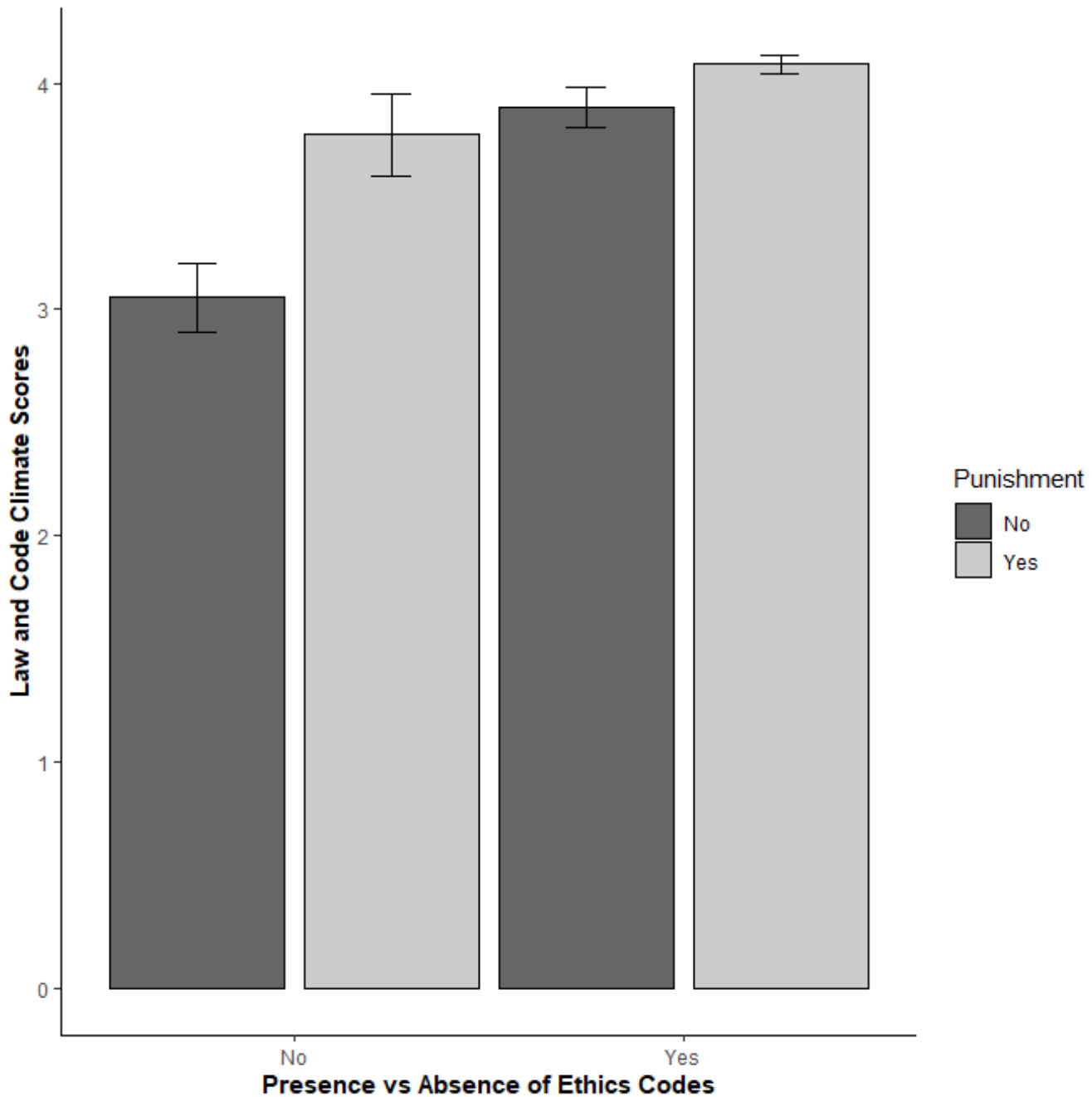


**Law and code climate.** Similar to the procedure described above, I ran an ANOVA for law and code climate scores including all the ethics program components as predictors. There was a significant main effect of the presence (absence) of ethics training such that the presence of ethics training results in significantly higher law and code climate scores (See Table P4).

There were significant interaction effects between presence (absence) of ethics codes and presence (absence) of punishment for unethical behavior (see Figure P10), presence (absence) of ethics training and the presence (absence) of an ethics hotline (see Figure P11), presence (absence) of an ethics hotline and the presence (absence) of punishment for unethical behavior (see Figure P12), presence (absence) of an ethics hotline and the presence (absence) of rewards for ethical behavior (see Figure P13), and the presence (absence) of rewards for ethical behavior and the presence (absence) of punishment for unethical behavior (see Figure P14).

**Figure P10**

*Plot of Means for the Presence (Absence) of Punishment for Unethical Behavior on Average Law and Code Climate Scores as a Function of the Presence (Absence) of Ethics*

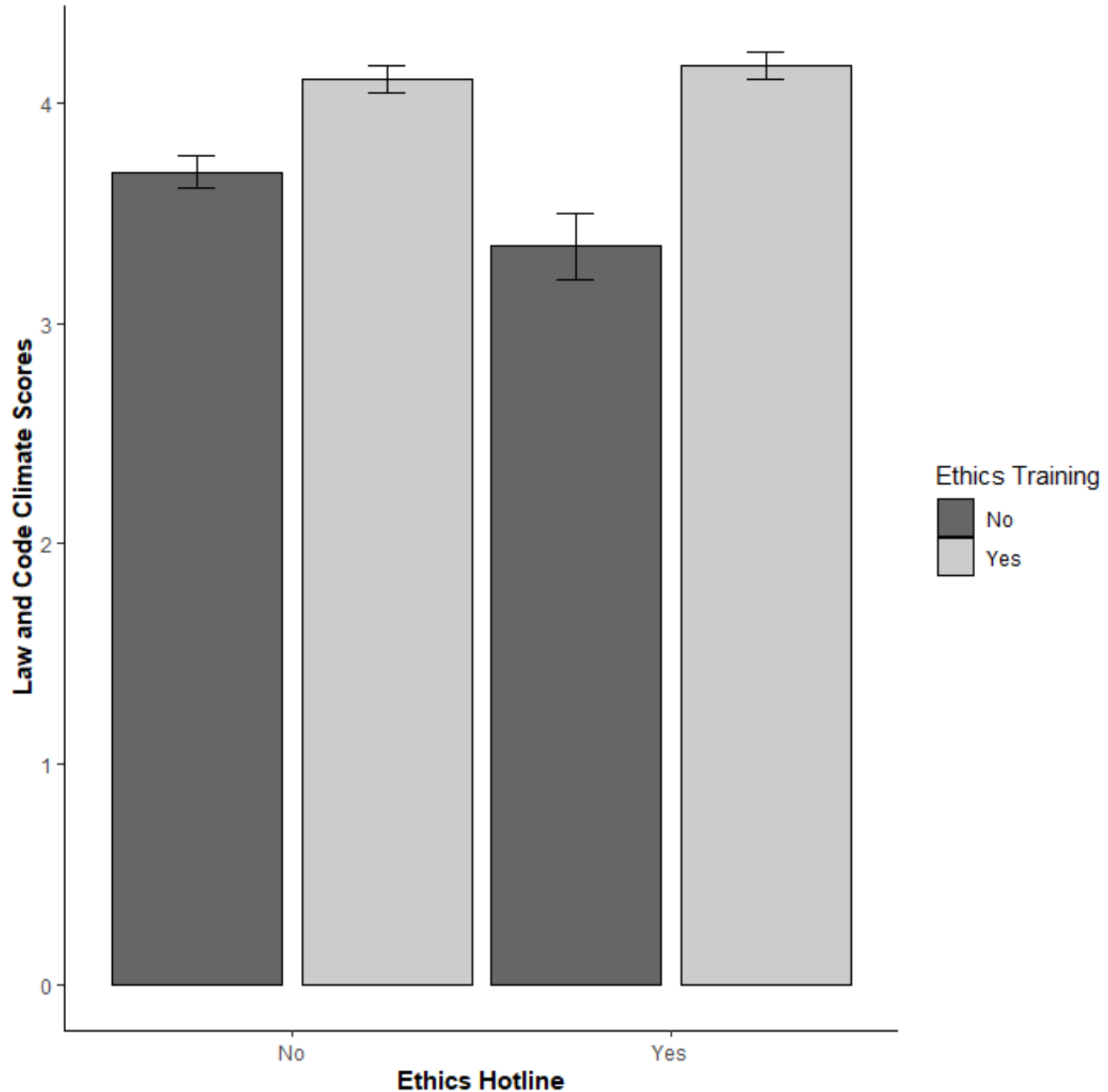


*Codes*

*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (33, 3.05, 0.87); No-Yes (24, 3.77, 0.90); Yes-No (96, 3.89, 0.85); Yes-Yes (269, 4.08, 0.70).

**Figure P11**

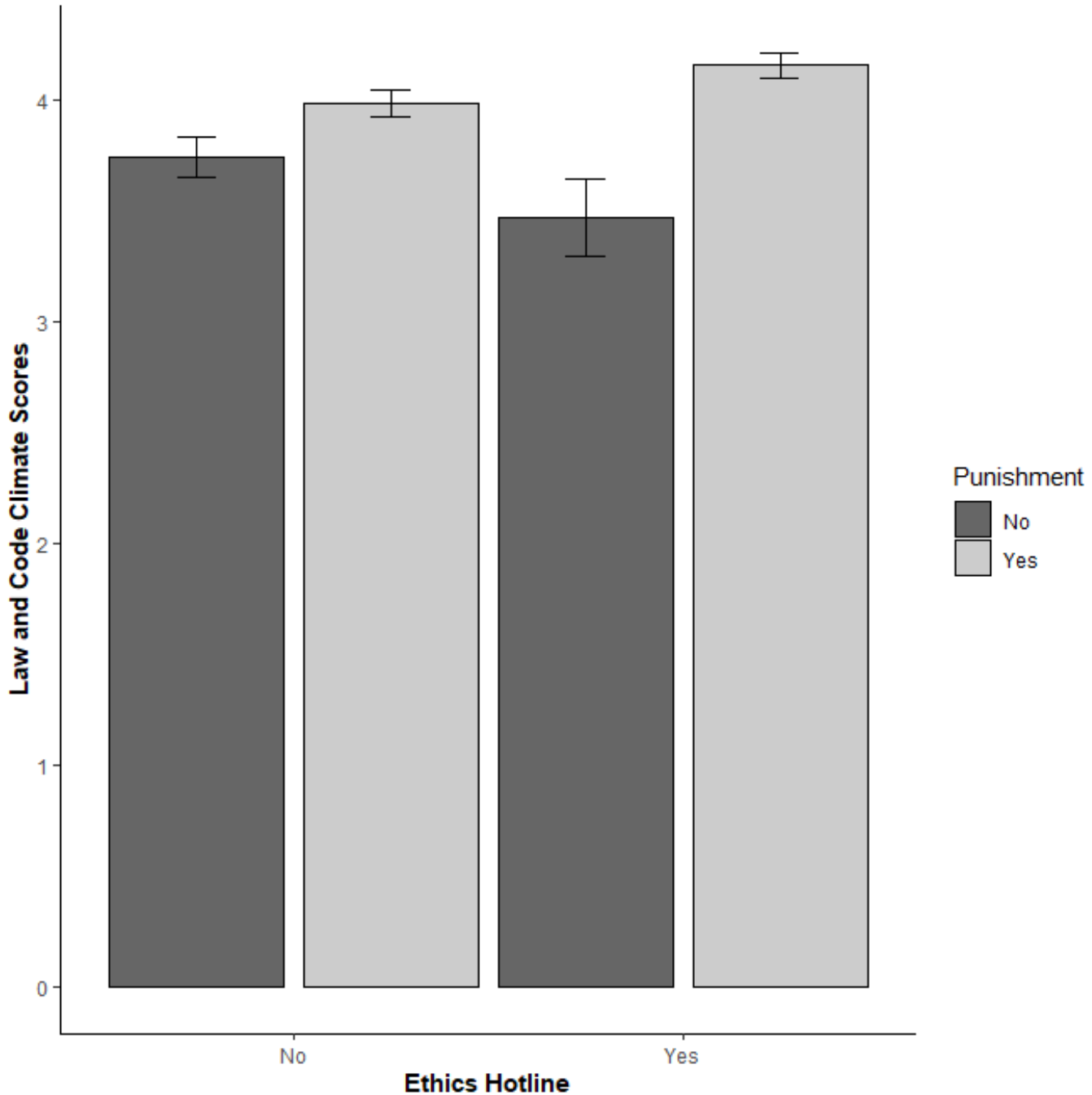
*Plot of Means for the Presence (Absence) of an Ethics Training on Average Law and Code Climate Scores as a Function of the Presence (Absence) of an Ethics Hotline.*



*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (135, 3.69, 0.88); No-Yes (129, 4.11, 0.71); Yes-No (28, 3.35, 0.79); Yes-Yes (130, 4.17, 0.69).

**Figure P12**

*Plot of Means for the Presence (Absence) of Punishment for Unethical Behavior on Average Law and Code Climate Scores as a Function of the Presence (Absence) of an*

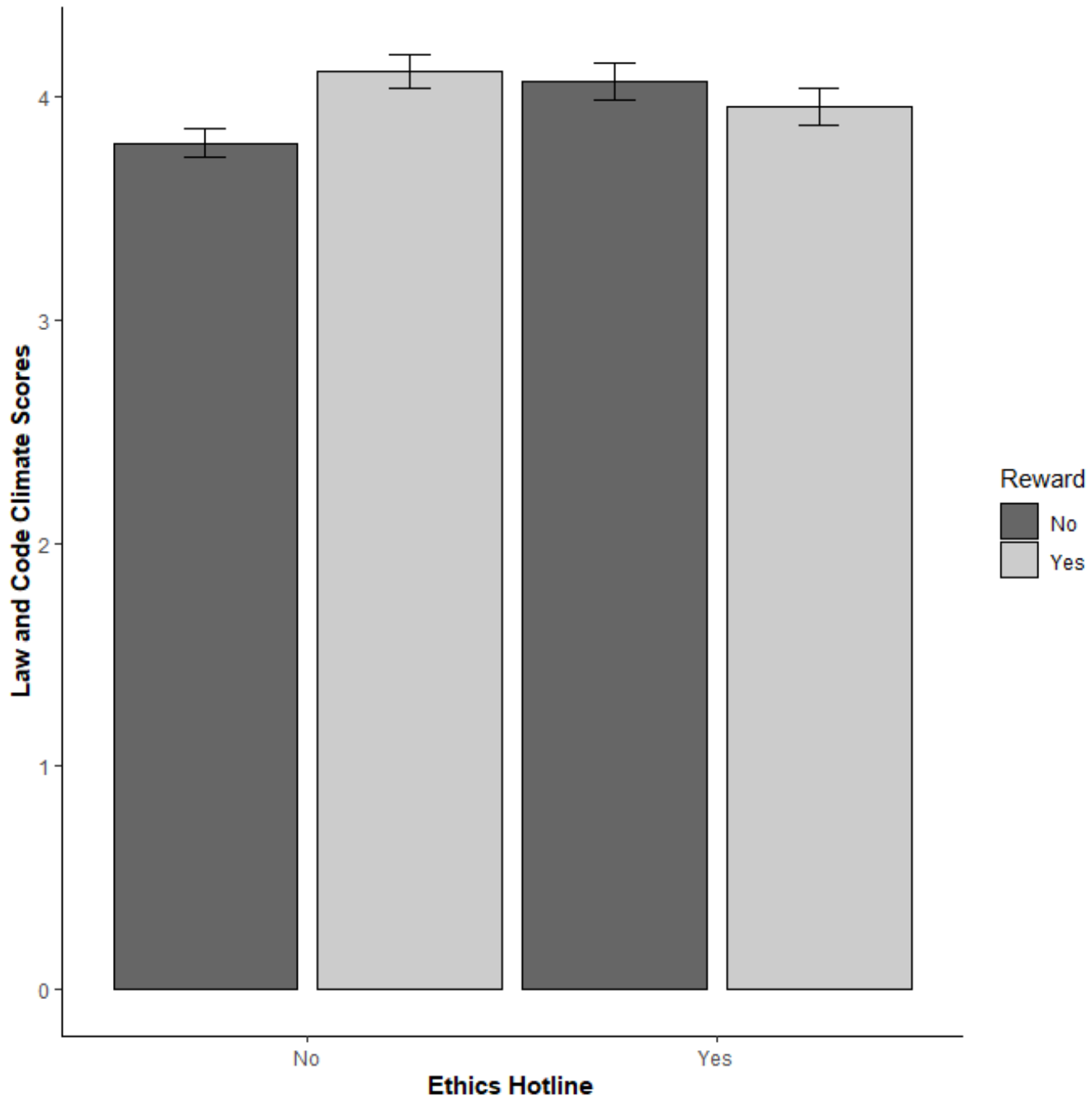


*Ethics Hotline.*

*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (99, 3.74, 0.91); No-Yes (165, 3.98, 0.76); Yes-No (30, 3.47, 0.96).

**Figure P13**

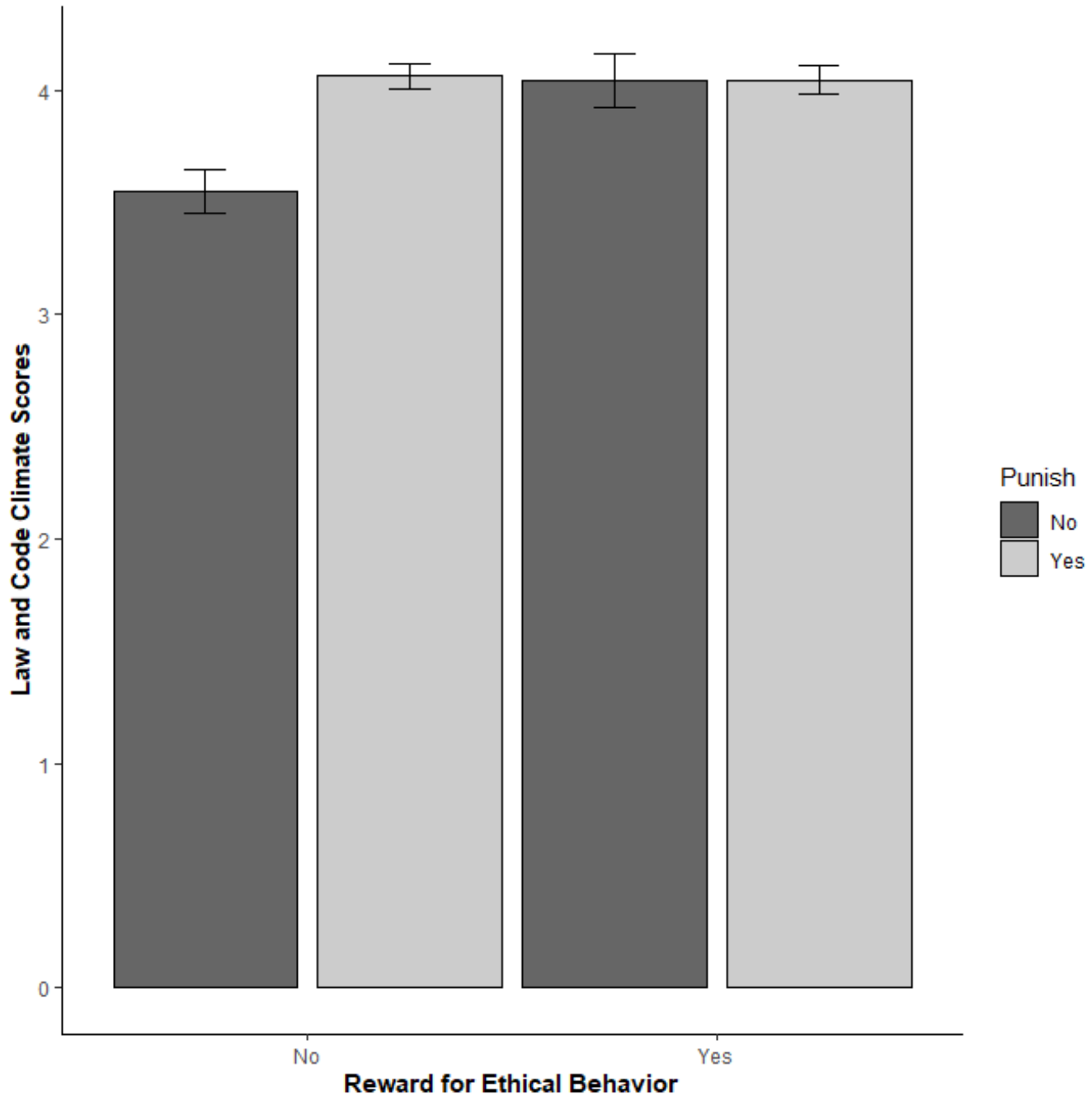
*Plot of Means for the Presence (Absence) of Reward for Ethical Behavior on Average Law and Code Climate Scores as a Function of the Presence (Absence) of an Ethics Hotline.*



*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (183, 3.79, 0.87); No-Yes (81, 4.12, 0.68); Yes-No (94, 4.07, 0.83), Yes-Yes (64, 3.96, 0.67).

**Figure P14.**

*Plot of Means for the Presence (Absence) of Punishment for Unethical Behavior on Average Law and Code Climate Scores as a Function of the Presence (Absence) of Reward for Ethical Behavior.*



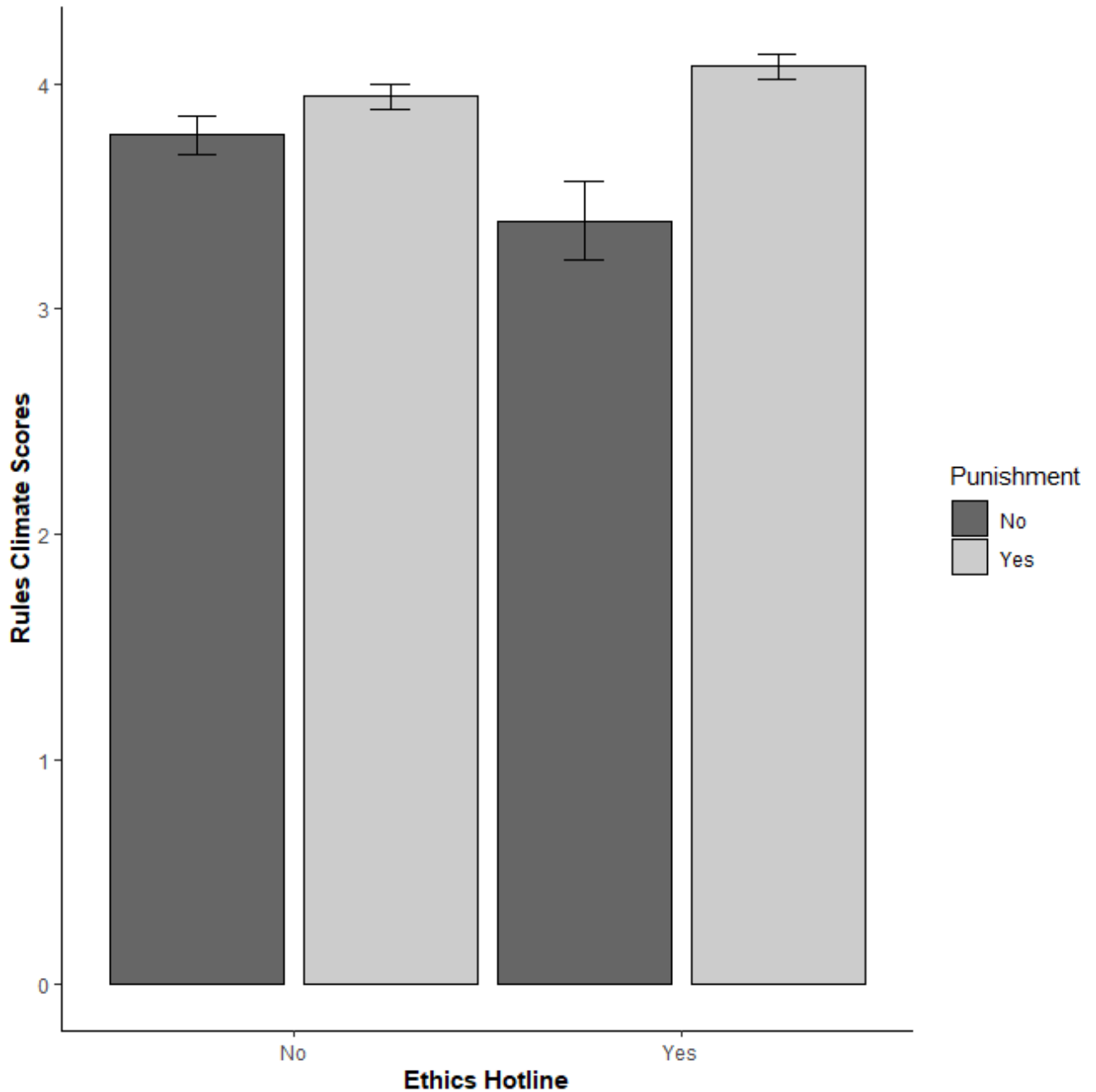
*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (96, 3.55, 0.96); No-Yes (181, 4.06, 0.75); Yes-No (33, 4.05, 0.70); Yes-Yes (112, 4.05, 0.68).

**Rules climate.** I ran an ANOVA for rules climate scores including all ethics program components as predictors. There were significant main effects for the presence (absence) of ethics training and the presence (absence) of punishment for unethical behavior on average rules climate scores such that the presence of these ethics program components resulted in significantly higher rules climate scores (See Table P4).

There was a significant interaction effect between the presence (absence) of an ethics hotline and the presence (absence) of punishment for unethical behavior on average rules climate scores (see Figure P15).

**Figure P15**

*Plot of Means for the Presence (Absence) of an Ethics Hotline on Average Rules Climate Scores as a Function of the Presence (Absence) of Punishment for Unethical Behavior.*



*Note.* Error bars represent the confidence interval for each condition. The following are the *N*s, Means, and SDs (*N*, Mean, SD) for each condition from left to right: No-No (99, 3.78, 0.85); No-Yes (165, 3.94, 0.72); Yes-No (30, 3.39, 0.94); Yes-Yes (128, 4.08, 0.63).



**Instrumental climate.** I ran an ANOVA for instrumental climate scores including all ethics program components as predictors. There was a significant main effect for the presence (absence) of rewards for ethical behavior on average instrumental climate scores such that the presence of rewards for ethical behavior results in significantly higher instrumental climate scores (See Table P4).

**Independence climate.** I ran an ANOVA for independence climate scores including all ethics program components as predictors. There was a significant main effect for the presence (absence) of rewards for ethical behavior such that the presence of rewards for ethical behavior resulted in significantly higher independence climate scores. There was a significant effect of the presence (absence) of punishment for unethical behavior on average instrumental climate scores such that the absence of punishment for unethical behavior results in significantly higher independence climate scores (See Table P4).

**Summary of ethics program components.** Similar to the previous analyses, climate scores were generally higher in the presence of ethics program components. Of the 17 significant effects, 15 of them were observed when the caring, law and code, and rules climate were the dependent variables. Regarding the significant interactions, the highest climate scores were observed when both of the ethics program components were present. Nine of the significant effects observed were main effects and eight were interaction effects. Interestingly, a majority of the interaction effects were observed when the law and code climate was the dependent variable whereas the main effects observed were spread between all of the ethical climate dimensions.

When comparing the set of ANOVAs excluding “I don’t know” responses and the set of ANOVAs including “I don’t know” responses as “No” responses, there are a couple of similarities and differences. In both sets of analyses, it was generally true that the presence of ethics program components resulted in significantly higher scores on ethical climate dimensions. Additionally, a majority of the observed effects were observed when the caring, law and code, or rules climates dimensions were the dependent variables. However, there were a couple of differences between the two sets of analyses. The set of analyses that included “I don’t know” responses as “No” responses included almost double the number of responses. This could partially explain the difference in the number of effects observed between the two sets of analyses. Additionally, most of the observed effects in the set of analyses in which “I don’t know” responses were excluded were interactive effects whereas there was a balance of main and interactive effects for the set of analyses that included “I don’t know” responses as “No” responses.

### **Regressions for Moral-related individual characteristics**

In addition to calculating the bivariate correlations between all moral-related variables and each ethical climate type, I also performed multiple regression in which each of the climate types were regressed on the set of moral-related individual characteristics. The purpose of these regression analyses was to determine which moral-related individual characteristics significantly predicted climate scores as well as to determine the amount of unique variance accounted for by each individual moral-related variable.

**Caring Climate.** As mentioned above, I performed multiple regression in which I regressed caring climate scores on the set of moral-related individual characteristics.

There were significant main effects of moral awareness, moral identity symbolization, conservation values, openness values, and self-transcendence values on caring climate scores (See Table P5). The set of predictors accounted for 20% of the variance in caring climate scores.

**Table P5**

*Multiple Regression of Set of Moral-Related Individual Characteristics and Caring Climate Scores*

Predictors	$\beta$	$p$	$R^2$	$F$	$p$
Moral Awareness	0.12	< .05	0.20	11.42	< .001
Perceptual Moral Attentiveness	-0.12	.052			
Reflective Moral Attentiveness	0.04	.544			
MI – Internalization	-0.03	.562			
MI – Symbolization	0.21	<.001			
HO - Self-Enhancement	0.07	.360			
HO - Openness to Change	-0.16	< .05			
HO – Conservation	0.21	< .01			
HO - Self-Transcendence	0.17	< .05			

*Note.*  $N = 422$ .

**Rules climate.** Using multiple regression, I regressed rules climate scores on the set of moral-related individual characteristics. There were significant main effects of moral awareness, perceptual moral attentiveness, and conservation values on rules climate scores (see Table P6). The set of moral-related individual characteristics explained 15% of the variance in rules climate scores.

**Table P6**

*Multiple Regression of Set of Moral-Related Individual Characteristics and Rules Climate Scores.*

Predictors	$\beta$	$p$	$R^2$	$F$	$p$
Moral Awareness	0.14	< .01	0.15	8.20	< .001
Perceptual Moral Attentiveness	-0.16	< .01			
Reflective Moral Attentiveness	0.06	.318			
MI – Internalization	0.07	.160			
MI – Symbolization	0.09	.067			
HO - Self-Enhancement	0.05	.494			
HO - Openness to Change	-0.13	.081			
HO – Conservation	0.26	< .001			
HO - Self-Transcendence	0.04	.562			

*Note.*  $N = 422$ .

**Law and code climate.** Using multiple regression, I regressed law and code climate scores on the set of moral-related individual characteristics. There were significant main effects of moral awareness, and conservation values (see Table P7). The set of moral-related individual characteristics explained 13% of the variance in law and code climate scores.

**Table P7**

*Multiple Regression of Set of Moral-Related Individual Characteristics and Law and Code Climate Scores.*

Predictors	$\beta$	$p$	$R^2$	$F$	$p$
Moral Awareness	0.15	< .01	0.13	7.134	< .001
Perceptual Moral Attentiveness	-0.12	.056			
Reflective Moral Attentiveness	0.05	.465			
MI – Internalization	0.09	.081			
MI – Symbolization	0.02	.741			
HO - Self-Enhancement	-0.06	.457			
HO - Openness to Change	-0.02	.797			
HO – Conservation	0.29	< .001			
HO - Self-Transcendence	0.01	.849			

Note.  $N = 422$ .

**Instrumental Climate.** Using multiple regression, I regressed instrumental climate scores on the set of moral-related individual characteristics. There were significant main effects of moral awareness, perceptual moral attentiveness, moral identity internalization, and self-enhancement values (see Table P8). The set of moral-related individual characteristics explained 17% of the variance in instrumental climate scores.

**Table P8**

*Multiple Regression of Set of Moral-Related Individual Characteristics and Instrumental Climate Scores.*

Predictors	$\beta$	$p$	$R^2$	$F$	$p$
Moral Awareness	-0.10	< .05	0.17	9.15	< .001
Perceptual Moral Attentiveness	0.14	< .05			
Reflective Moral Attentiveness	0.10	.130			
MI – Internalization	-0.21	< .001			
MI – Symbolization	0.04	.395			
HO - Self-Enhancement	0.19	< .05			
HO - Openness to Change	0.02	.799			
HO – Conservation	0.01	.924			
HO - Self-Transcendence	-0.13	.080			

Note.  $N = 422$ .

**Independence Climate.** Using multiple regression, I regressed independence climate scores on the set of moral-related individual characteristics. There were significant main effects of moral identity internalization, moral identity symbolization, and conservation values (see Table P9). The set of moral-related individual characteristics explained 11% of the variance in independence climate scores.

**Table P9**

*Multiple Regression of Set of Moral-Related Individual Characteristics and Independence Climate Scores.*

Predictors	$\beta$	$p$	$R^2$	$F$	$p$
Moral Awareness	-0.02	.759	0.11	5.43	< .001
Perceptual Moral Attentiveness	0.08	.226			
Reflective Moral Attentiveness	-0.05	.826			
MI – Internalization	-0.21	< .001			
MI – Symbolization	0.17	< .01			
HO - Self-Enhancement	0.13	.083			
HO - Openness to Change	0.05	.521			
HO – Conservation	-0.23	< .01			
HO - Self-Transcendence	0.11	.141			

*Note.*  $N = 422$ .

**Moral awareness.** Whereas my stated hypotheses related only to the bivariate correlations, the results of these regression analyses provide further support for some of my hypotheses. For example, I hypothesized that moral awareness was related to the ethical climate factors of caring, rules, law and code, instrumental, and independence. Not only is moral awareness significantly related to the ethical climate factors of caring, law and code, rules, and instrumental (see Table 9), it is also a significant predictor of these four ethical climate factors. These results provide further support for Hypothesis 6.

**Perceptual moral attentiveness.** I hypothesized that perceptual moral attentiveness was related to the ethical climate factors of caring, rules, law and code, instrumental, and independence. Perceptual moral attentiveness had a significant relationship with the ethical climate factors of instrumental and independence (see Table 9). Additionally, perceptual moral attentiveness was a significant predictor of rules and instrumental climate scores. These results provide further support for Hypothesis 7.

**Reflective moral attentiveness.** I hypothesized that reflective moral attentiveness was related to the ethical climate factors of caring, rules, law and code, instrumental, and independence. Reflective moral attentiveness had a significant relationship with the ethical climate factors of caring and instrumental. When included in the regression analyses, reflective moral attentiveness was not a significant predictor of any of the ethical climate factors suggesting that reflective moral attentiveness may not be a useful variable in understanding climate perceptions when controlling for other individual moral-related characteristics. These results did not provide further support for Hypothesis 8.

**Moral identity.** I hypothesized that levels of moral identity were positively related to the ethical climate factors of caring, rules, law and code, instrumental, and independence. Moral identity internalization had a positive relationship with the caring, law and code, rules, and independence factors and a negative relationship with the instrumental factor. Additionally, moral identity internalization was a significant predictor of instrumental and independence climate scores. However, the direction of the predictive relationship between moral identity internalization and the ethical climate factors of instrumental and independence was in the opposite direction hypothesized. These results did not support Hypothesis 9.

To further test Hypothesis 9, I evaluated the correlation coefficients between moral identity symbolization and the five ethical climate factors. Moral identity symbolization was significantly related to the ethical climate factors of caring, law and code, rules, and independence in the expected direction. Additionally, moral identity

symbolization was a significant positive predictor of caring and independence scores providing partial support for Hypothesis 9.

**Self-transcendence and openness to change values.** I hypothesized that self-transcendence and openness to change values were positively related to the ethical climate factors of caring, rules, law and code, and independence and negatively related to the ethical climate factor of instrumental. Self-transcendence values were significantly, positively related to the ethical climate factors of caring, law and code, and rules. Openness to change values were significantly, positively related to the ethical climate factors of caring and independence. Additionally, self-transcendence values were significant, positive predictors of caring climate scores. Openness to change values were significant, positive predictors of caring climate scores. Taken together, these results provide further, partial support for Hypothesis 10a.

**Self-enhancement and conservation values.** Further, I hypothesized that self-enhancement values and conservation values were positively related to the instrumental factor of ethical climate and negatively related to the ethical climate factors of caring, rules, law and code, and independence. Self-enhancement values were significantly, positively related to the ethical climate factors of caring, rules, instrumental, and independence. Conservation values were significantly positively related to the ethical climate factors of caring, law and code, and rules. Additionally, self-transcendence values were significant, positive predictors of instrumental climate scores. Conservation values were significant, positive predictors of caring, rules, and law and code climate scores and significant, negative predictors of Independence climate scores. Taken together, these results provide further, partial support of Hypothesis 10b.



**Summary of regression analyses.** Of all the ethical climate dimensions, the caring dimension had the highest number of significant predictors and the law and code climate dimensions had the fewest. Additionally, the set of predictors explained the most variance in the caring climate dimension and explained the least variance in the independence climate dimension. Moral awareness was a significant predictor of four of the five ethical climate dimensions, all in the positive direction with the exceptions of the Instrumental climate dimension. An individual's value appears to have the most influence on the perception of a caring climate, as three out of the four higher order value grouping were significant predictors of caring climate scores. Interestingly, moral identity internalization and moral identity symbolization were both significant predictors of Independence climate scores. However, the directions of these relationships were opposite each other.

**Table P10**

*Frequency of Response Combinations for the Set of Ethics Program Components, Excluding “Don’t Know” Responses.*

Ethics Program Component Combinations						
<u>Codes</u>	<u>Training</u>	<u>Hotline</u>	<u>Reward</u>	<u>Punish</u>	<u>Officer</u>	<u>Freq</u>
Yes	Yes	Yes	Yes	Yes	Yes	39
Yes	Yes	Yes	No	Yes	Yes	17
Yes	Yes	No	Yes	Yes	No	16
Yes	Yes	No	No	Yes	No	14
Yes	No	No	No	Yes	No	12
No	No	No	No	No	No	12
Yes	Yes	Yes	No	Yes	No	11
Yes	Yes	No	Yes	Yes	Yes	7
Yes	Yes	No	No	Yes	Yes	5
No	No	No	No	Yes	No	5
Yes	No	No	Yes	Yes	No	5
No	No	No	Yes	Yes	No	4
Yes	No	No	No	No	No	4
Yes	No	No	No	Yes	Yes	3
Yes	Yes	Yes	Yes	No	Yes	3
Yes	Yes	Yes	Yes	Yes	No	3
Yes	No	Yes	No	Yes	Yes	2
Yes	No	No	Yes	Yes	Yes	2
Yes	Yes	No	Yes	No	Yes	2
Yes	No	Yes	No	Yes	No	2
Yes	Yes	No	No	No	No	2
Yes	No	No	Yes	No	No	2
Yes	No	Yes	Yes	Yes	Yes	1
No	Yes	Yes	Yes	Yes	Yes	1
Yes	No	Yes	Yes	Yes	No	1
No	Yes	No	Yes	No	No	1
No	No	Yes	Yes	No	No	1
Yes	Yes	Yes	Yes	No	No	1
No	No	No	No	Yes	Yes	0
No	Yes	No	No	Yes	Yes	0
No	No	Yes	No	Yes	Yes	0
No	Yes	Yes	No	Yes	Yes	0
No	No	No	Yes	Yes	Yes	0
No	Yes	No	Yes	Yes	Yes	0
No	No	Yes	Yes	Yes	Yes	0

**Table P10**  
**(continued)**

<u>Codes</u>	<u>Training</u>	<u>Hotline</u>	<u>Reward</u>	<u>Punish</u>	<u>Officer</u>	<u>Freq</u>
Yes	No	No	No	No	Yes	0
No	No	No	No	No	Yes	0
Yes	Yes	No	No	No	Yes	0
No	Yes	No	No	No	Yes	0
Yes	No	Yes	No	No	Yes	0
No	No	Yes	No	No	Yes	0
Yes	Yes	Yes	No	No	Yes	0
No	Yes	Yes	No	No	Yes	0
Yes	No	No	Yes	No	Yes	0
No	No	No	Yes	No	Yes	0
No	Yes	No	Yes	No	Yes	0
Yes	No	Yes	Yes	No	Yes	0
No	No	Yes	Yes	No	Yes	0
No	Yes	Yes	Yes	No	Yes	0
No	Yes	No	No	Yes	No	0
No	No	Yes	No	Yes	No	0
No	Yes	Yes	No	Yes	No	0
No	Yes	No	Yes	Yes	No	0
No	No	Yes	Yes	Yes	No	0
No	Yes	Yes	Yes	Yes	No	0
No	Yes	No	No	No	No	0
Yes	No	Yes	No	No	No	0
No	No	Yes	No	No	No	0
Yes	Yes	Yes	No	No	No	0
No	Yes	Yes	No	No	No	0
No	No	No	Yes	No	No	0
Yes	Yes	No	Yes	No	No	0
Yes	No	Yes	Yes	No	No	0
No	Yes	Yes	Yes	No	No	0

**Table P11**

*Frequency of Response Option Combinations for the Set of Ethics Program Components, Including “Don’t Know” Responses.*

Ethics Program Component Frequencies						
<u>Codes</u>	<u>Training</u>	<u>Hotline</u>	<u>Reward</u>	<u>Punish</u>	<u>Officer</u>	<u>Freq</u>
Yes	Yes	Yes	Yes	Yes	Yes	39
Yes	Yes	No	No	Yes	No	39
Yes	Yes	Yes	No	Yes	Yes	38
Yes	No	No	No	Yes	No	36
Yes	No	No	No	No	No	28
No	No	No	No	No	No	27
Yes	Yes	No	Yes	Yes	No	26
Yes	Yes	Yes	No	Yes	No	24
Yes	Yes	No	No	No	No	17
Yes	Yes	No	Yes	Yes	Yes	14
Yes	Yes	No	No	Yes	Yes	13
No	No	No	No	Yes	No	11
Yes	No	No	Yes	Yes	No	9
Yes	Yes	Yes	Yes	Yes	No	8
Yes	Yes	No	Yes	No	Yes	7
Yes	No	Yes	No	Yes	No	7
Yes	No	No	No	Yes	Yes	6
Yes	Yes	Yes	Yes	No	Yes	6
No	No	No	Yes	Yes	No	6
Yes	Yes	No	Yes	No	No	6
Yes	Yes	Yes	No	No	Yes	5
Yes	No	No	Yes	No	No	5
Yes	No	Yes	No	Yes	Yes	4
Yes	Yes	No	No	No	Yes	4
Yes	No	Yes	No	No	Yes	4
Yes	No	Yes	No	No	No	4
Yes	Yes	Yes	Yes	No	No	4
Yes	No	No	Yes	Yes	Yes	3
Yes	Yes	Yes	No	No	No	3
Yes	No	No	No	No	Yes	2
Yes	No	Yes	Yes	Yes	No	2
No	No	No	Yes	No	No	2
No	No	Yes	No	Yes	Yes	1
No	Yes	Yes	No	Yes	Yes	1
No	Yes	No	Yes	Yes	Yes	1

**Table P11**  
**(continued)**

<u>Codes</u>	<u>Training</u>	<u>Hotline</u>	<u>Reward</u>	<u>Punish</u>	<u>Officer</u>	<u>Freq</u>
Yes	No	Yes	Yes	Yes	Yes	1
No	Yes	Yes	Yes	Yes	Yes	1
No	No	Yes	No	Yes	No	1
No	Yes	No	Yes	Yes	No	1
No	No	Yes	Yes	Yes	No	1
No	No	Yes	No	No	No	1
No	Yes	Yes	No	No	No	1
No	Yes	No	Yes	No	No	1
Yes	No	Yes	Yes	No	No	1
No	No	Yes	Yes	No	No	1
No	No	No	No	Yes	Yes	0
No	Yes	No	No	Yes	Yes	0
No	No	No	Yes	Yes	Yes	0
No	No	Yes	Yes	Yes	Yes	0
No	No	No	No	No	Yes	0
No	Yes	No	No	No	Yes	0
No	No	Yes	No	No	Yes	0
No	Yes	Yes	No	No	Yes	0
Yes	No	No	Yes	No	Yes	0
No	No	No	Yes	No	Yes	0
No	Yes	No	Yes	No	Yes	0
Yes	No	Yes	Yes	No	Yes	0
No	No	Yes	Yes	No	Yes	0
No	Yes	Yes	Yes	No	Yes	0
No	Yes	No	No	Yes	No	0
No	Yes	Yes	No	Yes	No	0
No	Yes	Yes	Yes	Yes	No	0
No	Yes	No	No	No	No	0
No	Yes	Yes	Yes	No	No	0

## Appendix Q

### Academic Integrity Program components

INSTRUCTIONS: Please answer the following questions to the best of your knowledge.

Academic Integrity Code: a formal document describing appropriate conduct at the university with respect to classmates and teachers.

1. Based on the above definition, does your university have an academic integrity code?

a. YES                      b. NO                      c. I DON'T KNOW

2. If your university has an academic integrity code, how familiar are you with the content of that academic integrity code? Please rate using the following scale

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1	2	3	4	5
Not at all familiar		Neutral		Very familiar

3. My university has formal academic integrity training.

a. YES                      b. NO                      c. I DON'T KNOW.

4. If your university has formal academic integrity training, how many hours of academic integrity training have you had in the past 12 months? \_\_\_\_\_

5. If you have had formal academic integrity training, please rate the effectiveness of the academic integrity training you have received

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1	2	3	4	5
Not at all effective		Neutral		Very effective

6. Does your university punish students who violate academic integrity rules?

a. YES                      b. NO                      c. I DON'T KNOW

7. If you answered yes to either question above, please rate the effectiveness of your university's system of rewards and punishments for (un)ethical behavior.

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1	2	3	4	5
Not at all effective		Neutral		Very effective

8. My university has an academic integrity office(r).  
a. YES      b. NO      c. I DON'T KNOW

9. Have you ever contacted your university's academic integrity office(r) for any reason?  
a. YES      b. NO

10. If you answered yes to the above questions, please rate the effectiveness of your university's academic integrity office(r).

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1	2	3	4	5
Not at all effective		Neutral		Very effective

## Appendix R

### Ethical Climate Questionnaire (Academic Sample)

**INSTRUCTIONS:** We would like to ask you some questions about the general climate at your university. Please answer the following in terms of how it really is at your university, not how you would prefer it to be. Please be as candid as possible, remember, all your responses will remain *strictly* anonymous.

1	2	3	4	5
Completely False		Somewhat True		Completely True
<ol style="list-style-type: none"> <li>1. What is best for everyone in the university is the major consideration here.</li> <li>2. The most important concern is the good of all the people in the university as a whole.</li> <li>3. Our major concern is always what is best for the other person.</li> <li>4. At this university, people look out for each other's good.</li> <li>5. At this university, it is expected that you will always do what is right for the customers and public.</li> <li>6. The most efficient way is always the right way at this university.</li> <li>7. At this university, each person is expected above all to work efficiently.</li> <li>8. People are expected to comply with the university's standards over and above other considerations.</li> <li>9. At this university, the law or ethical code of their profession is the major consideration.</li> <li>10. At this university, people are expected to strictly follow legal or professional standards.</li> <li>11. At this university, the first consideration is whether a decision violates any law.</li> <li>12. It is very important to follow the university's rules and procedures here.</li> <li>13. Everyone is expected to stick by university rules and procedures.</li> <li>14. Successful people at this university go by the book.</li> <li>15. People at this university strictly obey the university's policies.</li> <li>16. At this university, people protect their own interests above all else.</li> <li>17. At this university, people are mostly out for themselves.</li> <li>18. There is no room for one's own personal morals or ethics at this university.</li> <li>19. People are expected to do anything to further the university's interests, regardless of the consequences.</li> <li>20. People here are concerned with the university's interests to the exclusion of all else.</li> <li>21. Work is considered substandard only when it hurts the university's interests.</li> <li>22. The major responsibility of people in this company is to control costs.</li> <li>23. At this university, people are expected to follow their own personal and moral beliefs.</li> <li>24. Each person in this company decides for themselves what is right and wrong</li> </ol>				



25. The most important concern at this university is each person's own sense of right and wrong.
26. At this university, people are guided by their own personal ethics.

Adapted from Victor, B., & Cullen, J. B. (1988). The organizational bases of ethical work climates. *Administrative Science Quarterly*, 33(1), 101-125.

## Appendix S

### Demographics (Study 2)

1. Age \_\_\_\_ years
2. Gender (please select one)
  - a. Male
  - b. Female
3. Ethnicity (please select one)
  - a. African American
  - b. Asian
  - c. Hispanic
  - d. Native American
  - e. Pacific Islander
  - f. White/Caucasian
  - g. Other
4. What grade level are you in? (please select one)
  - a. Freshman
  - b. Sophomore
  - c. Junior
  - d. Senior
  - e. Other