How do employee pro-environmental behaviors relate to the perceived success of workplace

environmentally sustainable activities?

by

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ABSTRACT

For decades, understanding the complexity of behaviors, motivations, and values has interested researchers across various disciplines. So much so that there are numerous terms, frameworks, theories, and studies devoted to understanding these complexities and how they interact and evolve into actions. However, little research has examined how employee behaviors translate into the work environment, particularly regarding perceived organizational success. This study advances research by quantitatively assessing how a greater number of individual employees' pro-environmental behaviors are related to the perceived success of environmentally sustainable workplace activities. We have concluded that the more pro-environmental behaviors an employee embodies, the more positively they perceive the success of their local government's sustainable purchasing policy. Additionally, other factors matter, including organizational behaviors, like training, innovation, and reduction of red tape.

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ABSTRACT

For decades, understanding the complexity of behaviors, motivations, and values has interested researchers across various disciplines. So much so that there are numerous terms, frameworks, theories, and studies devoted to understanding these complexities and how they interact and evolve into actions. However, little research has examined how employee behaviors translate into the work environment, particularly regarding perceived organizational success. This study advances research by quantitatively assessing how a greater number of individual employees' pro-environmental behaviors are related to the perceived success of environmentally sustainable workplace activities. We have concluded that the more pro-environmental behaviors an employee embodies, the more positively they perceive the success of their local government's sustainable purchasing policy. Additionally, other factors matter, including organizational behaviors, like training, innovation, and reduction of red tape.

KEYWORDS

INTRODUCTION

For several decades, the global movement to mitigate the negative effects of climate change, biodiversity loss, and resource depletion has increased. Private and public sectors alike are introducing innovative policies and practices to reduce their negative environmental impacts. The success or failure of these innovative policies often depends on individual employees and workforces at all levels and their willingness and ability to take ownership and adapt to ever-changing work environments (Daily et al., 2009; Smith and O'Sullivan, 2012). However, one aspect that has been overlooked is how employees' personal pro-environmental behaviors affect the perceived success of their employers' environmental policies. Employee pro-environmental behaviors include at-home voluntary actions like recycling, composting, purchasing more sustainably, and conserving water. Employee pro-environmental behaviors

focus on behaviors outside of the workplace and differ from organizational behaviors that focus on at-work behaviors, where the majority of current research is focused.

Existing research has explored key drivers of employees' environmentally sustainable beliefs, values, and behaviors both in and outside of the workplace. Many researchers believe that individuals are at the center of organizational innovations and strategies (Ones & Dilchert, 2012). For instance, the theory of planned behavior (Ajzen 1991) posits that behavior is determined by a combination of attitude, perceived norms, perceived behavioral control, and behavioral intentions, and frequently explains pro-environmental behaviors (Yuriev et al., 2020). Other scholarship in psychology, public administration, and management fields have explored employees' pro-environmental behaviors (Katz et al., 2022). What is missing from both discussions is how employees' personal pro-environmental behaviors relate to the perceived success of their employers' environmental policies (Katz et al., 2022). When an individual is committed to pro-environmental behaviors at home, there is an expected spillover effect in the workplace (Verfuerth et al., 2019). Individuals with strong attitudinal commitments to employee pro-environmental behaviors tend to have the same knowledge and habits at work, and home, experience similar emotions and have similar levels of motivation toward behaviors (Yuriev et al. 2018).

This paper contributes to the literature by analyzing local government department directors' employee pro-environmental behaviors and how they relate to the perceived success of their city's sustainability policy, specifically, their sustainable purchasing policy. Using a United States national survey of local government directors, this study also examines the director's pro-environmental behavior attitudinal commitments. We find that employees who report having adopted more pro-environmental behaviors in their personal lives are also more likely to report that the perceived organizational success of their local government's sustainable purchasing policy is greater than their peers with fewer pro-environmental behaviors. Additionally, local governments' organizational behaviors also matter, especially those fostering innovation, embracing employee-wide training, and reducing red tape.

The remainder of the paper is organized as follows—first, a background on employee pro-environmental behaviors and their relationship to perceived success within organizational structures. Followed by an explanation of the research hypotheses, methodology, and the analytical process. Last, findings are reported, followed by a discussion on the study's main contributions and limitations.

THEORETICAL BACKGROUND AND HYPOTHESES

Employee pro-environmental behaviors

Organizations are a "function of persons behaving in them" (Schneider 1987). All discussions of environmental sustainability in organizations should start with understanding individual behaviors—including those of leaders, employees, and even job applicants (Ones, & Dilchert 2013). Researchers use various terms to explain employee pro-environmental behaviors, including positive sustainable behaviors, organizational citizenship behavior for the environment, eco-positive behaviors, and employee green behaviors, to name a few. While there are some differences among definitions, all terms recognize the voluntary nature of the behaviors, the investment of time and energy (commitment), and understanding the extra personal effort (Raineri et al., 2016, Boiral et al., 2018). The definitions also identify how individuals can reduce environmental harm and conserve resources (Ones and Dilchert, 2012).

Pro-environmental behaviors, like purchasing environmentally sustainable products, are a shift for individuals looking to lessen their negative environmental impacts. For example, if someone would like to change from a conventional cleaning product to one that is more environmentally sustainable, it would take effort to research greener alternatives. It could require shopping at a different retailer. A more environmentally sustainable option could be more expensive. The more environmentally sustainable cleaning product may not work as effectively as a product with stronger chemicals. Overall it might not be as easy as purchasing the brands that someone knows and trusts. Each of these activities requires more effort, which is also true for other pro-environmental behaviors, such as energy conservation, water conservation, or composting. That extra effort is justified when there is an attitudinal commitment to

protecting the environment. It is important to recognize that some employee pro-environmental behaviors rely on more commitment of time and effort than others. Recycling, for example, is engrained in many communities and is much more commonplace than a behavior like composting which has a considerable learning curve and takes more, commitment, effort, and time.

Pro-environmental behaviors at work and home are primarily voluntary. In fact, only 13 percent - 29 percent of organizational pro-environmental behaviors are mandated by work assignments (Ones & Dilchert, 2012; Boiral et al., 2015). Because these behaviors are voluntary, an employee can choose to participate in none of these behaviors or many. While social norms or pressures can persuade this participation, they remain a largely private act and depend significantly on the individual's attitudinal commitment, beliefs, morals, and intentions translating into actions and behaviors. Adopting more pro-environmental behaviors shows an attitudinal commitment linked to various personality traits that often reinforce someone's motivation, beliefs, and values around environmental sustainability.

Adopting many pro-environmental behaviors results from self-identity, values, and attitudinal commitments. The positive attitudinal commitment may be essential in promoting perceived short and long-term organizational success (Dodd-McCue, & Wright, 1996). Attitudinal commitment is defined by (a) a strong belief in and acceptance of the organization's goals and values, (b) a willingness to exert considerable effort on behalf of the organization, and (c) a strong desire to maintain membership in the organization" (Mowday et al. 1979). Attitudinal commitments to sustainability activities strengthen employee pro-environmental behaviors by creating and maintaining an organizational culture supporting citizenship and environmental sustainability (Mesmer et al., 2013). Values also play a significant role in explaining specific beliefs and behaviors and can act as predictors of attitudes and behavioral intentions (Stern 2000; Stern & Dietz 1994).

Current studies of pro-environmental behaviors focus more on employee organizational behaviors during the workday than employee behaviors at home or during personal time (Katz et al., 2022). However, there is also a noticeable gap in the literature concerning both forms of behaviors and how they

relate to the perceived success of organizational efforts. While these definitions are helpful and offer great insight into the development of pro-environmental behaviors that lead to pro-environmental activities, current research does not share concise agreed-upon definitions or a consensus on what constitutes an employee's strong pro-environmental behavior. There is also no agreed-upon scale to account for time and effort, making the various pro-environmental behaviors an individual embraces challenging to understand and quantify. A recent study on pro-environmental behaviors identified over 30 unique measuring scales (Katz et al., 2022). Another review of 49 recent studies revealed 42 unique measures of pro-environmental behavior (Markle, 2013).

Someone with a strong environmental self-identity who embodies these traits is more likely to see themself as the type of person committed to pro-environmental behaviors and will consequently be more likely to act pro-environmentally at home and work and, therefore, participate in more pro-environmental behaviors (Gatersleben et al., 2014). The more pro-environmental behaviors someone voluntarily participates in, the more they identify as an environmentally conscious person and the more committed and motivated they are to act in a way that aligns. For example, individuals with values that benefit the environment and with a stronger energy-saving self-identity consume less meat, shower less frequently, have a more fuel-efficient driving style, and have a stronger commitment to reducing their energy use (Van der Werff 2013).

Individuals that self-identify as environmentally conscious tend to embrace several pro-environmental behaviors, partly because many pro-environmental behaviors require similar actions and attitudinal commitments and work toward a shared goal (to lessen environmental impacts and act more sustainably) (Gatersleben et al., 2014). Some researchers even suggest that pro-environmental behavior can be perceived as uni-dimensional rather than multi-dimensional because such behaviors share a common goal—protecting the environment (Gatersleben et al., 2014; Kaiser & Wilson, 2004). More pro-environmental behaviors strengthen the attitudinal commitment to sustainability activities at home and within organizations. More pro-environmental behaviors also solidify attitudinal commitments to sustainability and build stronger environmental identities.

The perceived success of workplace sustainability activities and the role of pro-environmental behaviors

Employee perceptions have been classified as one of the main factors that influence morale and, ultimately, the organization's health (Cummings & Worley, 2001) and predict organizational performance (Cameron, Whetten, & Kim, 1987). For example, organizational decline predicts negative indicators such as resistance to change, low morale, and high turnover, even when the status of the organizational stakeholder (management or low-level employee) is controlled (Cameron, Whetten, & Kim, 1987).

Economic indicators, for example, may not be consistent sources of information due to the inaccessibility of financial records or other performance indicators. Utilizing financial measurements as success indicators is also problematic due to their association with ever-changing market conditions. Thus, the economic ebb and flow may create favorable conditions for some mismanaged organizations while more innovative organizations or activities struggle (Boga & Ensari, 2009). Also, many environmentally sustainable activities often cost more than traditional activities and as such, the cost may not be a true measure of success.

It is important to understand the relationship between pro-environmental behaviors at home and the spillover effect that takes place at work. Emerging research has examined potential spillover effects of pro-environmental behaviors and attitudes between the work and home settings. People spend a large amount of their time within their homes and workplaces (Klade et al., 2013) and therefore, employees who already engage in more pro-environmental behaviors at home are likely to also bring these behaviors to their workplace (Verfuerth & Gregory-Smith, 2018; Verfuerth et al., 2019).

Pro-environmental behaviors show greater attitudinal commitment and reflect strong environmental sustainability behaviors and values (Gatersleben et al., 2014). These behaviors and values are congruent throughout all aspects of a person's life, and as a result, a spillover takes place between

work and home. Individuals with strong attitudinal commitments to employee pro-environmental behaviors tend to have the same knowledge and habits at work, and home, experience similar emotions and have similar levels of motivation toward behaviors (Yuriev et al. 2018). An environmental work-life balance accounts for mutual influences among sustainability-oriented values, attitudes, and experiences in private life and behavior in the workplace, which all enhance perceived organizational success of sustainability activities.

The perceived success of organizational activities is related to attitudinal commitment, congruence, employee satisfaction, and value alignment (Yaniv & Farkas, 2005). When employees are more committed, they perceive activity success as higher (Shahid et al., 2013). There is an individual desire for congruence of values and behaviors between employees and the organization (Harrach et al., 2020, Ashforth and Mael, 1989). The more employees can bring their whole personalities to work, the more engaged they will be. More engaged employees perceive organizational success as higher than employees who are less engaged (Kataria et al., 2013)

Furthermore, when employees perceive that their self-identity aligns with those of their organization, they feel rewarded for their efforts and look for opportunities for value expression, which, in turn, contributes to the enhancement of organizational policies and practices (Collier and Esteban 2007). When employees find value in their work and their job aligns with their self-identity, they are more invested in their organization's activities and perceive the success of these activities as being higher (BeBe et al. 2012).

Hypothesis: *Employees who adopt more pro-environmental behaviors in their personal lives are more likely to perceive their workplace environmental sustainability policies as being more successful.*

METHODOLOGY

To better understand employee pro-environmental behaviors and the perceived success of implementing their local government's sustainability policy, We focus on employees' perceived success of their local governments' sustainable purchasing policies. A sustainable purchasing policy refers to the set of activities undertaken by an organization to implement purchasing that reduces negative effects on the environment. Sustainable purchasing policies are a newer form of government sustainability policy. Most U.S. cities have either struggled to implement one or do not have one at all. Consequently, sustainable purchasing policies have not reached their potential to help local governments mitigate their environmental impacts (Darnall et al., 2017).

Arizona State University's Sustainable Purchasing Research Initiative (SPRI) surveyed local government directors to obtain the data used for this study. In 2017, SPRI surveyed 616 department directors in cities throughout the United States. SPRI had a response rate of 33.8 percent, and the final sample consisted of 48.2 percent finance directors, 36.5 percent public works directors, and 15.3 percent environment directors. They received responses from at least one director in 58 percent (459) of the cities surveyed (Darnall et al. 2017).

Knowing the struggles that local governments face with successfully implementing a sustainable purchasing policy, SPRI wants to know more about the successes and limitations of adoption and implementation. These surveys provide valuable insight into local government managers' perceptions that oversee sustainable purchasing for their local governments. It is important to focus on the word perceived throughout this study as the managers' perceptions are the only factors analyzed for success. Several personal, organizational, or other outside factors could influence the director's perceived success, including department culture, government red tape, education, and training, to name a few.

Not every director worked for a city that had adopted a sustainable purchasing policy. Of the 616 directors surveyed, only 153 directors reported having a sustainability policy. After removing "Don't Know" responses associated and missing data, the sample size consisted of 137 directors. These individuals are the focus of this study.

Perceived Success of Local Government Purchasing Policies

To measure directors' perceived success of their sustainable purchasing policy, they were asked, "How would you assess your city's overall implementation of your sustainability policy?" Response options ranged from - 5 = very unsuccessful to 5 = very successful. Directors did not have a "Don't Know" option.

The perceived success of environmental activities also depends on employee collaboration, support of management, a culture that supports innovation, and a reduction in red tape (e.g., Cantor et al., 2012; Ramus, 2001; Ramus and Steger, 2000).

Employees, especially at the management level, are often at the center of implementing sustainable activities. Perceived success or failure is often due to their individual attitudinal commitment.

Directors' Pro-environmental Behaviors[1]

Department directors were asked, "In your personal time, how frequently do you?" with the following options: (1) recycle at home, (2) conserve energy at home, (3) conserve water at home, (4) purchase environmentally friendly items, and (5) compost. Response options ranged from 1 = very infrequently to 5 = very frequently. Directors who responded "Don't Know" were removed from the analysis. We created a summation variable based on Directors' responses across all five behaviors that ranged from 0 to 25. Twenty-five means that the director reported "very frequently" across all five behaviors, whereas a value of 5 means that the director reported "very infrequently" across all five behaviors. The mean value of this variable (figure 1) was roughly 19, meaning that many directors who

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[1] The independent variable on pro-environmental behaviors results from a series of questions SPRI asked the local government department directors. SPRI asked about six unique pro-environmental behaviors (1) recycling at home, (2) conserving energy at home, (3) conserving water at home, (4) Purchasing environmentally friendly products, (5) composting food waste, and (6) Donating either time or money to an environmental organization. All six behaviors on their own are highly correlated, and it became clear that individual behaviors were not as important as the collective group of behaviors. We then created a summation independent variable (Sum of behaviors) for the pro-environmental behavior's variable.

work in local governments with a sustainable purchasing policy also report frequently undertaking multiple pro-environmental behaviors.

Control variables

Other factors may also influence directors' perceived success of their local government's sustainable purchasing policies. Those factors include red tape barriers, a culture of innovation, environmental training for all employees, and participation in a professional organization.

Red tape barriers

A standard definition of red tape considers the rules, regulations, and procedures that remain in force and entail a compliance burden but do not serve the legitimate purposes the rules intend to serve" (Bozeman, 1993). Directors who perceive red tape as roadblocks to innovation may have lower perceived success opinions than peers. High degrees of red tape can delay and interrupt decisions to implement innovations and create a department culture that binds employees to actions deemed necessary for the successful implementation (Grandia & Kuipers 2015).

To measure red tape, department directors were asked, "My department has too many rules and procedures." Responses were anchored on a six-point Likert scale with 1 = "Strongly Disagree" and 5 = "Strongly agree." Directors did not have a "Don't Know" option.

Culture of innovation

Departments that foster innovative environments often take more risks, value employee suggestions, and strategies, and are willing to trailblaze new activities. Commitment to innovation is an important feature that facilitates individuals' efforts at pushing change initiatives. More specifically, an atmosphere supporting innovation and encouraging creative thinking, risk-taking, and new problem-

solving methods (Howell & Higgins, 1990; Paglis & Green, 2002). Considering that a sustainable purchasing policy is a newer form of government activity, departments that embrace innovation are more likely to succeed and, therefore, more likely to perceive success.

To measure innovation culture, department directors were asked: "This department has a strong commitment to innovation." Responses were anchored on a six-point Likert scale with 1 = "Strongly Disagree" and 5 = "Strongly agree." Directors did not have a "Don't Know" option.

Environmental training for all employees

Training and development is an important activity that increases the performance of an employee in an organization and is a building block that enhances the growth and success of an organization (Oluwaseun, 2018). Training also creates a shared vision around organizational goals (Ansari et al., 2021) and helps employees understand their role and best practices for successful implementation (Bradford & Florin, 2003). Training also provides various benefits to employees in terms of widening their knowledge, skills, and abilities, becoming more efficient team members, and improving career development that strengthens organizational commitment (Hanaysha, 2016).

Several positive activities, strategies, and innovations often result when a local government prioritizes education and training around environmental sustainability. Respondents were asked, "Please indicate whether environmental training for all employees has been implemented or adopted throughout your city?" Responses were anchored on a three-point Likert scale with 0 = "no" and 1 = "yes." Directors who responded "Don't Know" were removed from the analysis.

Affiliation with professional organizations

Professional organizations are a way for employees to connect with peers, share best practices, and create professional development opportunities across sectors and regions (Darnall et al., 2017).

Implementation success of an environmental policy could benefit from employees who are active in professional organizations emphasizing environmentally sustainable development. However, many professional associations are field-specific and may not focus on environmentally sustainable activities. Being active in a professional organization could affect the perceived success of a sustainable purchasing policy either positively or negatively, depending on the type of association or reasoning of why a director might be a member.

To measure directors' affiliation with professional organizations, respondents were asked, "to what extent are you active in a professional association?" Responses were anchored on a six-point Likert scale with 1 = "not active" and 5 = "very active." Directors who responded "Don't Know" were removed from the analysis.

Empirics

We performed regression analysis to assess the associations between directors' individual pro-environmental behaviors and the perceived success of their local city's sustainable purchasing policy. During exploratory regression analysis, we determined that heteroscedasticity was present. For that reason, we used a robust standard error technique. Post-estimation assessment of the regression equation's Variance Inflation Factors (VIFs) indicates that they were within range, with the highest VIF being 1.16, confirming that multicollinearity was not a concern (Hair et al. 2010).

RESULTS

The descriptive statistics for each of the control variables are provided in Table 1

Table 1. Mean, standard deviation, minimum, and maximum of variable

	Obs	Mean	Std. dev	Min	Max
Perceived Success	153	0.803922	2.149231	-5	5
Sum of Behaviors	148	19.12162	3.54544	11	25
Red Tape	151	2.649007	0.9605462	1	5
Innovation	152	3.967105	.8945587	1	5
Training	142	0.302817	0.4611032	0	1
Associations	151	3.192053	1.252811	1	5

Table 2 describes the pairwise correlations between the variables to identify the relationships. This analysis indicates that the correlations are within a reasonable range (e.g., below 0.60, indicating that multicollinearity would not likely be a problem. They were also all statistically significant at $p < 0.05$.

Table 2. Pairwise Correlation Matrix

	Perceived Success	Sum of Behaviors	Red Tape	Innovation	Training	Associations
Perceived Success	1.0000					
Sum of Behaviors	0.1521	1.0000				
Red Tape	-0.2702	0.0563	1.0000			
Innovation	0.2335	0.0970	-0.0435	1.0000		
Training	0.2694	0.1267	-0.0009	0.1148	1.0000	
Associations	-0.1477	0.1529	0.0208	0.1178	0.0605	1.0000

The independent variable on pro-environmental behaviors results from questions SPRI asked the local government department directors. SPRI asked about six unique pro-environmental behaviors (1) recycling at home, (2) conserving energy at home, (3) conserving water at home, (4) Purchasing environmentally friendly products, (5) composting food waste, and (6) Donating either time or money to an environmental organization. All six behaviors on their own are highly correlated, and it became clear

that individual behaviors were not as important as the collective group of behaviors. We then created a summation independent variable (Sum of behaviors) for the pro-environmental behaviors variable.

The overall model (Table 3) is significant $F(5,131) = 8.19$ ($p < 0.001$). The $R2 = 22$ percent for the, indicating that variations in the independent variable and control variables contribute to 22 percent of the changes in the dependent variable, the perceived success of a local government's environmentally sustainable purchasing policy. The result is considered acceptable for an empirical study in behavioral science.

Table 3. Regression of hypothesized relationships (N = 137)

					Number of obs = 137	
					F (5, 131) = 8.19	
					Prob > F = 0	
					R-squared = 0.2203	
					Root MSE = 1.9782	

Perceived Success	Coefficient	Robust std. err.	t	P> | t |	[95% conf.	interval]
Sum of Behaviors	0.106767	0.046606	2.29	0.024	0.0145686	0.1989646
Red Tape	-0.5568	0.174393	-3.19	0.002	-0.901795	-0.2118139
Innovation	0.453813	. 1972771	2.30	0.023	0.0635522	0.8440744
Training	1.195298	0.391517	3.05	0.003	. 4207844	1.969813
Associations	-0.41288	0.129787	-3.18	0.002	-0.669629	-0.1561309
_cons	-0.63156	1.183494	-0.53	0.594	-2.972789	1.709679

The summation pro-environmental behavior variable coefficient is .1067 ($p = 0.024$), meaning that there is a positive relationship for perceived success of an environmentally sustainable policy when directors participate in more pro-environmental behaviors. These findings support our hypothesis that e*mployees who adopt more pro-environmental behaviors in their personal lives are more likely to perceive their workplace's environmentally sustainable policies as more successful.*

Of the control variables, environmental training for employees is the highest coefficient relating to perceived success, with a positive coefficient of 1.195 (p = 0.003). Department innovation also positively correlates (β = *.4538, p =.023).* Both the red tape variable (β = -.5568, p = .0002) and the professional associations variable (β = -.4128, p=.0002) negatively correlate to the perceived success of a local government's sustainable purchasing policy. As professional association participation increased, perceived success was negatively affected.

DISCUSSION

Our regression model and testing support the hypothesis that ***Employees who adopt more pro-environmental behaviors in their personal lives are more likely to perceive their workplace's environmentally sustainable policies as more successful.***

Perceived Success of Local Government Purchasing Policies

The perceived success of environmentally sustainable activities is related to the opinions and perceptions of the department directors. The perceived success of organizational activities is related to attitudinal commitment, congruence, employee satisfaction, and value alignment (Yaniv & Farkas, 2005), which are grounded in an individual's values, morals, beliefs, self-identity, and education. The enhanced perception of success boosts employees' commitment, motivation, dedication, and overall, increases the demonstration of the expected behaviors (Boga & Ensari, 2009). Furthermore, when employees share common values and beliefs of their organization, they tend to stay in positions longer and seek growth opportunities, reducing turnover, training, and other inefficiencies, which all strengthen the perceived sustainability success of organizational activities (Shahid et al., 2013).

When employees are committed to sustainability at home through embracing many pro-environmental behaviors, there is an expected spillover at work. Furthermore, as individuals are committed to pro-environmental behaviors, they are more likely to participate in more pro-environmental

behaviors than fewer. Individuals that self-identify as environmentally conscious tend to embrace several pro-environmental behaviors, partly because many pro-environmental behaviors require similar actions and attitudinal commitments and work toward a shared goal (to lessen environmental impacts and act more sustainably) (Gatersleben et al., 2014). The perceived success of organizational activities is related to attitudinal commitment, congruence, employee satisfaction, and value alignment (Yaniv & Farkas, 2005). When employees are more committed, they perceive activity success as higher (Shahid et al., 2013).

These findings expand upon current research as one of the first studies which we are aware of that tries to quantify and measure pro-environmental behaviors and perceived organizational success around environmentally sustainable activities. We also aim to synthesize previous studies and further research on employee pro-environmental behaviors and perceived environmentally sustainable activities success. Current research excludes conversations around more pro-employee behaviors equating to a stronger pro-environmental behavior trait. While current research has many ways of measuring pro-environmental behaviors, they do not focus on the quantity or the quality of the pro-environmental behaviors but rather on personal traits like agreeableness, openness to experience, and moral relativity.

Pro-environmental behaviors

Having more pro-environmental behaviors instead of one over another positively affects the perceived success of an environmentally sustainable policy. A director with strong pro-environmental behaviors is one who, for example, composts, recycles, and conserves energy rather than composting instead of recycling. Running regression analysis with the individual variables created a lot of noise as there were high levels of multicollinearity.

Our findings are similar to that of current research in that there is a positive correlation between several pro-environmental behaviors and the perceived success of environmentally sustainable activities. When an individual is committed to pro-environmental behaviors, there is an expected spillover effect in

the workplace (Verfuerth et al., 2019). Individuals with strong attitudinal commitments to employee pro-environmental behaviors tend to have the same knowledge and habits at work and home, experience similar emotions, and have similar levels of motivation toward behaviors (Yuriev et al. 2018).

88 (58%) department directors, regardless of pro-environmental behaviors, perceived their local governments as successful, and 41 (27%) department directors perceived their local governments as being neither successful nor unsuccessful. Only 24 (16%) felt their local governments were unsuccessful. Current research has not focused on the relationship between more pro-environmental behaviors and perceived environmentally sustainable success in organizational activities. This study is also one of the first to confirm that more pro-environmental behaviors positively connect to perceived organizational success. Future research would benefit from a better understanding of a strong attitudinal commitment to or embodiment of pro-environmental behaviors.

Future research will benefit by further exploring what constitutes pro-environmental behavior and how individuals with more pro-environmental behaviors show attitudinal commitment to environmentally sustainable activities within their organizations. This study provides a better understanding of how employee pro-environmental behaviors advance the perceived success of organizational policies and practices that can significantly influence the way public and private organizations, large and small, hire, strategize, adapt, and implement.

The significant control variables that we identified address organizational factors like red tape, innovation, and department training. When organizations reduce red tape, cultures of innovation can flourish. Considering that a sustainable purchasing policy is a newer approach to an established government activity, departments that embrace innovation are more likely to succeed and, therefore, more likely to perceive success. Perceived success happens more frequently and with greater efficacy when employees embrace innovation (Boga & Ensari, 2009). Managers who perceive high levels of innovation within organizations tend to feel empowered, think outside the box, build on their intellectual

resources to contribute to organizational success, and thus exhibit innovative behavior (Sosik et al.,1997) and perceive success to be higher (Boga & Ensari, 2009).

Training creates a shared vision around organizational goals (Ansari et al., 2021) and helps employees understand their role and best practices for successful implementation (Bradford & Florin, 2003). In addition, exposure to environmental education at work and employees' commitment to the organization's environmental values were key drivers of spillover between home and work (Cox et al., 2012). Perceived success lies in the skills and abilities of their employees thus, and this means considerable and continuous investment in training and development (Oluwaseun, 2018). If a local government wants to succeed at an environmentally sustainable activity, they would be remiss not to implement training and education around that activity.

These control variables tell us that organizational cultures, behaviors, policies, and practices matter, and they matter more than the individual employee pro-environmental behaviors of the directors. However, it is important to understand the interconnectedness between employee pro-environmental behaviors outside of the workplace and organizational citizenship behaviors for the environment within the workplace. This study concludes that it is a combination of both sets of behaviors that ultimately lead to the perceived success of environmentally sustainable activities within the organization. Organizations that want to advance environmentally sustainable activities are encouraged to hire, train, promote, and empower employees with more pro-environmental behaviors. Furthermore, create organizational environments where committed employees with many pro-environmental behaviors can thrive, implement, and advance environmentally sustainable activities.

LIMITATIONS AND CONCLUSION

Other bodies of literature focus on environmentally sustainable behaviors and the positive effects on employee pro-environmental behaviors. This "chicken or the egg" argument deserves further attention.

Learning more about the relationships between both behaviors and how they affect the perceived organizational success of environmentally sustainable activities will benefit future understandings. Employee perceptions of environmental management practices impact their engagement in employee pro-environmental behaviors by mediating perceived organizational support and affective attitudinal commitment to such behaviors (Kuo et al., 2012; Norton et al. (2015). When employees perceive their organizations to be supportive, they tend to engage in pro-environmental behaviors due to social exchange theory and the norm of reciprocity (Afsar et al., 2020).

Many variables outside of those we controlled could positively or negatively affect their responses. Endogeneity is a concern as there could be other unobservable at play that we have not accounted for within the study. When looking at variables that could explain pro-environmental behaviors and the effect on perceived success, we tested several variables that proved to be insignificant. Department director traits that we considered but did not significantly influence perceived success were the director's gender, race, age, and tenure. We also tested department or city-wide variables like the director's department, implemented policies of a similar nature, and the size and financial standing of the city.

The purpose of the SPRI survey was to measure the successes and limitations of a local government's environmentally sustainable purchasing policy. Because of these objectives, the researchers only asked about six pro-environmental behaviors. SPRI could have asked other questions in the survey that might have given a better insight into the pro-environmental behaviors of the directors. Supporting local businesses, buying food in season, and taking alternative modes of transportation, for example, might have correlated more with the perceived success of an environmentally sustainable purchasing policy. These behaviors might have been a better option than relatively commonplace behaviors like recycling or conserving water and energy.

Social justice is an important topic within sustainability that needs a more significant focus. Many social justice behaviors like supporting minority-owned or women-owned businesses are relevant to the

broader sustainability discussion. However, because of data limitations, this study only focuses on employees' individual pro-environmental behaviors. Future research should examine employees' broader sustainability behaviors to determine how they relate to the perceived success of their employers' sustainability policies. We hope that this research provides a strong foundation for that future analysis.

Further research would also benefit from validating the answers chosen by department directors. People usually self-report more affirmatively about their pro-environmental actions than is demonstrated by their actual behavior. Their employee pro-environmental behaviors could be fact-checked or corroborated by family or friends that know them personally. It is one thing to say that you are participating in pro-environmental behavior or action; it is another thing to act consistently. There is also something to be said for doing a behavior correctly instead of simply doing an activity. The Environmental Protection Agency estimates that about 75 percent of the waste produced in the US is recyclable. Yet, the actual recycling rate is only 34 percent, and the average recycling contamination rate is 25 percent—one in every four items (US EPA., 2020). Many people recycle, but most are not recycling correctly; one could wonder if that behavior is genuinely environmentally sustainable. Some form of checks and balances would be challenging to execute but would better account for Social Desirability Bias.

Despite these limitations, further research on employee pro-environmental behaviors and their role in the perceived success of environmentally sustainable organization activities would positively advance action at home and work. This study expands upon previous research and offers future researchers' further insight into what drives organizational innovation and policy change. Individual actors are at the center of organizational change and are often the key drivers to suggesting, adopting, and implementing new policies, procedures, practices, and systems. As organizations look to innovate and mitigate the negative effects of climate change, they would be remiss to hire leaders who lack the attitudinal commitment to pro-environmental behaviors. Employee pro-environmental behaviors provide insight into an individual's attitudinal commitment to environmental sustainability. We know from previous studies and now this study that more committed individuals at home are also more committed in the workplace.

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CHAPTER 2

ACKNOWLEDGMENTS

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CHAPTER 3

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