

Bridging Climate Awareness and Green Actions: The Role of Employee Psychological States in Fostering Pro-Environmental Behaviors

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The study examines how climate change awareness impacts pro-environmental work behavior in organizations through three proactive psychological states. The study results suggest that climate change awareness increases pro-environmental work behaviors through three psychological states (environmental self-efficacy, environmental accountability, and environmental passion). In addition, green pay and rewards enhance employees' psychological states toward pro-environmental work behavior. This paper revealed how climate change awareness influences pro-environmental work behavior by affecting employees' proactive psychosocial states. In addition, the multilevel study explains how individual and organizational variables interact to influence personal initiatives toward environmentally friendly work behaviors.

Keywords: climate awareness, green action, pro-environmental work behavior, environmental self-efficacy, environmental accountability, environmental passion

INTRODUCTION

Considering the widespread positive impacts of pro-environmental policies and practices (Brammer & Pavelin, 2006; Erdogan et al., 2015; Orlitzky et al., 2003; Rupp et al., 2013), business organizations have been developing and implementing a wide variety of environment-oriented policies and strategies as part of their environment management systems (Darnall et al., 2008; Robertson & Barling, 2015). However, the successful implementation of environmental policies and strategies in an organization requires the voluntary participation of its employees (Boiral et al., 2015; Kim et al., 2020; Robertson & Barling, 2013) since, in the implementation process, they are essential stakeholders of an organization. Therefore, employees involve themselves in a variety of pro-environmental behaviors (PEB) (De Roeck & Farooq, 2018), which is defined as a set of prosocial and proactive behaviors and actions that employees engage in beyond their formal job descriptions in order to promote organizational and societal greening (Robertson, 2018; Robertson & Barling, 2013).

Prior studies have emphasized the significance of PEB by exploring different drivers and consequences of employees' participation in organizations' environmental initiatives (Daily & Huang, 2001; Del Brío et al., 2007; Griffiths & Petrick, 2001; Hanna et al., 2000). However, the underlying psychological mechanisms that motivate employees to participate in PEB proactively remain largely unexplored. Thus,

drawing from the theory of proactive motivation (Parker et al., 2010), this study argues that employees' climate change awareness influences their proactive psychological states toward PEB.

This study makes two significant contributions to the literature by bridging the knowledge gap on this issue. First, this study adds knowledge to the organizational behavior literature by examining the factors of pro-environmental work behavior. This research also adds to the body of knowledge in human resource management by analyzing the impact of HR strategies and policies on pro-environmental behavior among employees.

The next sections of the paper are structured as follows: Section 2 includes a comprehensive review of the literature to create an empirical framework that includes four hypotheses. Methodology and data analysis are covered in section 3. Section 4 discusses the results. This study ends with a discussion and a conclusion.

THEORETICAL DEVELOPMENT

Employee Pro-Environmental Work Behaviors (PEB)

The proactive and prosocial employee behaviors directed towards environmentally friendly behaviors in organizations are termed PEB. However, environmental behavior in an organization is not only described by the term PEB (Boiral et al., 2015) but also by other commonly used terms such as green behavior (Han et al., 2009; Ones & Dilchert, 2012) and organizational citizenship behavior toward the environment (OCBE) (Lamm et al., 2015). PEB's proactive and prosocial aspects make it distinct from other related concepts describing employee pro-environmental behavior. The proactive aspect of PEB captures employees' self-directed non-mandatory initiatives (Robertson, 2018), and the prosocial aspect covers broader social responsibility, highlighting the moral and ethical consequences of such behaviors (Van der Werff et al., 2013). Therefore, the far-reaching effect of PEB in organizations extends well beyond the workplace (Bissing-Olson et al., 2013).

Proactive Psychological States

Drawing from Parker et al.'s (2010), we contend that employees' proactive behaviors leading to PEB are associated with three proactive psychological states: "can do" (expectancy), which represents an individual's perception of his or her ability to complete tasks, "reason to" (valence) which represents individual's intrinsic motivation and interest to self-start activities, and "energized to" (affect) which represents individual's activated positive affect towards initiatives. Campaigns. The first psychological state ("can do") reflects individuals' perceptions of their ability to perform specific pro-environmental tasks. Climate change campaigns demonstrate how other people engage in pro-environmental activities that enhance individuals' green efficacy in the workplace (Robertson & Barling, 2013). The second proactive psychological state is related to having a convincing reason ("reason to") to engage in pro-environmental behavior. Climate awareness boosts intrinsic motivation, encouraging individuals to develop self-accountability toward pro-environmental behavior (Stone & Cooper, 2001). The third proactive psychological state concerns the initiation of proactive actions ("energized to"), which can be explained by individuals' environmental passion, in which individuals possess motivations to participate in pro-environmental behavior (Robertson & Barling, 2013).

PEB necessitates a robust belief that individuals "can do" it (Parker et al., 2010). Self-efficacy is an individual's belief in their capacity to complete tasks or implement changes, which can be task-specific or general (Bandura, 1986). We emphasize green self-efficacy, which refers to a person's confidence in their ability to attain environmental goals (Chen et al., 2015). Employees with a high level of green self-efficacy typically possess abundant psychological resources and are confident in completing complex environmental tasks (Faraz et al., 2021).

Employees require a compelling "reason to" implement PEB, even if they believe they can achieve environmental objectives (Parker et al., 2010). We argue that one such reason is individuals' intrinsic motivation in action, given that perseverance in self-starting activities must be autonomous instead of externally imposed (Deci & Ryan, 2013). Environmental self-accountability, defined as an individual's

desire to live up to their environmental aspirations, is crucial in fostering intrinsic motivation for self-initiated environmental actions (Frese & Fay, 2001; Stone & Cooper, 2001). We view environmental passion as a positive, environment-related emotion for participation in sustainable development. Environmental passion is an emotion generated by individuals' enjoyment of and recognition of environmentally conscious behaviors. Based on our discussion, climate awareness can spark such behaviors. A fervent passion for the environment positively facilitates the learning and transmission of environmental concepts among employees, increasing PEB.

In recent years, efforts to improve public attention to and response to climate change (including more significant support for ameliorative legislation and personal actions) have emphasized the significance of framing the topic in a manner that is engaging and accessible for individuals.

So, we hypothesize that:

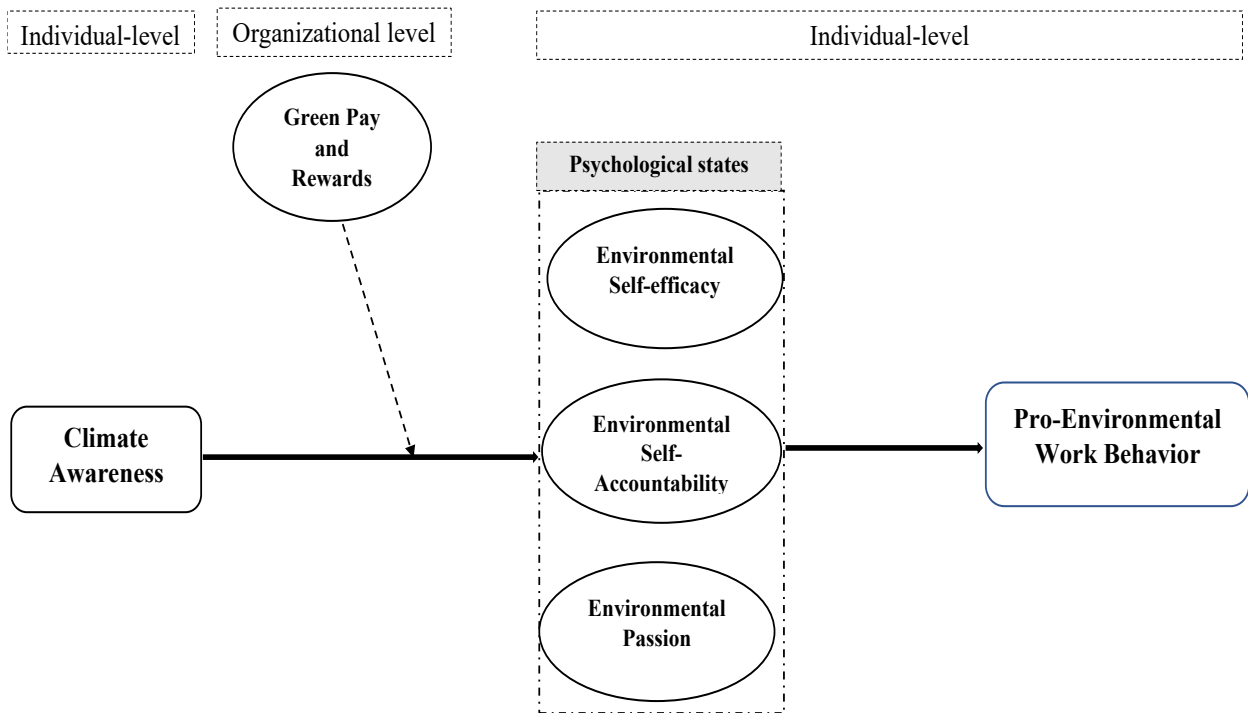
H1: *Climate change awareness (CCA) positively influences (a) environmental self-efficacy (ESE), (b) environmental self-accountability (ESA), and (c) environmental passion (EP).*

H2: *Employees' pro-environmental work behavior (PEB) is positively influenced by (a) environmental self-efficacy (ESE), (b) environmental self-accountability (ESA), and (c) environmental passion (EP).*

Individual's proactive psychological states about sticking to or avoiding PEB are also influenced by contextual and individual drivers of PEB in an organization, along with the role of leadership, human resources practices, and other organizational aspects in shaping individuals' self-conscious emotions leading to PEB (Robertson & Barling, 2013; Shipley & van Riper, 2022). Financial and non-financial benefits tied with PEB are green pay and reward (GPR) that motivate employees to engage in pro-environmental activities (Jabbour et al., 2010). Incentives and rewards are considered powerful drivers of employees' organizational behaviors and activities (Jackson & Seo, 2010). Therefore, we expect green pay and reward (GPR) to moderate the relationship between climate change awareness and employee's proactive psychosocial states. So, we propose the following hypothesis:

H3: *Green pay and rewards positively moderate the relationship between climate change awareness (CCA) and employees pro-environmental psychological states ((a) Environmental self-efficacy, (b) Environmental self-accountability, and (c) Environmental passion).*

**FIGURE 1
CONCEPTUAL MODEL**



MATERIALS AND METHODS

Data and Sample

The data for this study was collected from the residents of the United States who are currently employed using the Amazon Mechanical Turk (MTurk) platform during the period of October 2023. It has been demonstrated that Mturk's participants have various demographic characteristics and provide quality responses (Buhrmester et al., 2016; Keith et al., 2017).

The following measures are employed to ensure data quality for the study:

- The survey questions were randomized.
- Respondents are not allowed to skip questions.
- Two check questions were included in the survey.
- A minimum response time was imposed.

The final sample consisted of 214 respondents. The data analysis employed the PLS-based structural equation modeling (SEM) using WarpPLS 8.0 software.

TABLE 1
DESCRIPTIVE STATISTICS

Variables	Mean	SD	CCA	GPR	ESA	ESE	EP	PEB
CCA	4.03	0.03	1.00	0.53	0.48	0.58	0.66	0.59
GRP	3.92	0.04	0.53	1.00	0.33	0.65	0.63	0.62
ESA	4.88	0.06	0.48	0.33	1.00	0.44	0.54	0.46
ESE	3.96	0.03	0.58	0.65	0.44	1.00	0.71	0.62
EP	4.02	0.03	0.66	0.63	0.54	0.71	1.00	0.69
PEB	4.01	0.03	0.59	0.62	0.46	0.62	0.69	1.00

Note: SD=standard deviation; CCA=climate change awareness; GPR=green pay and reward; ESE= environmental self-efficacy; ESA=environmental self-accountability; EP= environmental passion; and PEB=pro-environmental work behavior.

Table 1 shows the mean, standard deviation, and correlation among latent variables. Among others, employees' pro-environmental behavior (PEB) is found to be positively correlated with climate change awareness (CCA), green pay and rewards (GPR), environmental self-efficacy (ESE), environmental self-accountability (ESA), and environmental passion (EP).

Measures

Climate Change Awareness (CCA)

It is measured with six items developed by Apaolaza et al. (2022). An example item is, "I have already noticed some signs of global warming." The items were measured using a 5-point Likert scale where "1" represents "strongly disagree" and "5" represents "strongly agree."

Environmental Self-Efficacy (ESE)

It is measured with four items developed by Robertson and Barling (2013). An example of an item is "I believe that I have the ability to take action to mitigate global warming and prevent climate change." The items were measured using a 7-point Likert scale where "1" represents "Not at all" and "7" represents "very much so."

Environmental Self-Accountability (ESA)

It is measured with three items developed by Pelozo et al. (2013). An example of the item is "I am accountable for protecting the environment." The items were measured using a 7-point Likert scale where "1" represents "Not at all" and "7" represents "very much so."

Environmental Passion (EP)

It is measured using ten items that Robertson and Barling (2013) developed. An example item is, "I enjoy practicing environmentally friendly behaviors." The items were measured using a 5-point Likert scale where "1" represents "strongly disagree" and "5" represents "strongly agree."

Green Pay and Reward (GPR)

It is measured with ten items developed by Tang et al. (2018). An example item is, "Our firm has recognition-based rewards in environment management for staff (public recognition, awards, paid vacations, time off, gift certificates)." The items were measured using a 5-point Likert scale where "1" represents "strongly disagree" and "5" represents "strongly agree."

Pro-Environmental Work Behavior (PEB)

It is measured with six items developed by Robertson and Barling (2013). An example item is, “I turn lights off when not in use.” The items were measured using a 5-point Likert scale where “1” represents “strongly disagree” and “5” represents “strongly agree.”

Validity and Reliability

The combined loadings of all the latent variables are above 0.50, and there is no latent variable with a cross-loading of 0.50 or higher, which signifies the convergent validity of the construct (Kock, 2017). The average variance extracted (AVEs) values are either close to or higher than 0.50, implying that the latent variables passed the discriminant validity test (Fornell & Larcker, 1981).

TABLE 2
VALIDITY AND RELIABILITY INDICES

Model Indices	CCA	GPR	ESA	ESE	EP	PEB
Average Variance extracted (AVEs)	0.56	0.70	0.68	0.58	0.52	0.50
Cronbach’s alpha	0.62	0.79	0.76	0.63	0.77	0.67
Composite reliability	0.79	0.87	0.86	0.80	0.84	0.80

Note: CCA=climate change awareness; GPR=green pay and reward; ESE= environmental self-efficacy; ESA=environmental self-accountability; EP= environmental passion; and PEB=pro-environmental work behavior.

The reliability of the latent constructs is measured using two coefficients of reliability: Cronbach’s alpha and composite reliability. The Cronbach’s alpha and composite reliability values for the latent constructs in this study are more significant than 0.70, which implies that the constructs are reliable measures (Fornell & Larcker, 1981).

Model Fit and Quality Indices

The model fit, and quality indices shown in Table 3 are within the recommended values, which signifies that the model fits well with the data and has acceptable quality.

TABLE 3
MODEL FIT AND QUALITY INDICES

Indices	Values	Recommended values
Average Path coefficient (APC)	0.31 (p = 0.001)	P < 0.01
Average Adjusted R-squared (AARS)	0.40 (p = 0.001)	P < 0.01
Average full collinearity VIF (AFVIF)	2.11	Ideally <= 3.3
Tenenhaus GoF	0.51	large >= 0.36

DATA ANALYSIS AND RESULTS

The results of the hypotheses testing are presented in Table 2. Overall, six out of nine relationships of the conceptual model were found to be statistically significant. We evaluate the hypotheses based on the p-values and 95% confidence intervals (Bollen & Long, 1993; Byrne, 2013; Hair et al., 1998; Kline, 2023). The relationship of climate change awareness (CCA) with environmental self-efficacy, environmental self-accountability, and environmental passion is positive and statistically significant. It implies that a higher level of climate change awareness positively influences environmentally oriented psychological states such as environmental self-efficacy, environmental self-accountability, and environmental passion. Hypothesis 1 is supported.

Two environmentally oriented psychological states (ESA and EP) are positively associated with PEB. However, the relationship between environmental self-efficacy and PEB was non-significant. Hypothesis 2 is partially supported. The positive impact of climate change awareness on environmental self-accountability (ESA) ($\beta = 0.504$, p -value < 0.001) and environmental passion (EP) is also supported ($\beta = 0.550$, p -value < 0.001). It signifies that employees' environmental self-accountability and passion increase with greater climate change awareness. So, Hypothesis 2 is supported.

TABLE 4
PATH COEFFICIENTS, CONFIDENCE INTERVALS, AND EFFECT SIZE

Hypotheses and Relationship Paths	Path coefficient	95% confidence interval	Effect size	Supported?
H _{1a} : CCA > ESE	$\beta=0.43$ ($p=0.001$)	0.31, 0.56	0.21	Yes
H _{1b} : CCA > ESA	$\beta=0.50$ ($p=0.001$)	0.38, 0.62	0.30	Yes
H _{1c} : CCA > EP	$\beta=0.62$ ($p=0.001$)	0.50, 0.74	0.42	Yes
H _{2a} : ESE > PEB	$\beta=0.10$ ($p=0.075$)	-0.02, 0.23	0.05	No
H _{2b} : ESA > PEB	$\beta=0.21$ ($p=0.006$)	0.08, 0.33	0.13	Yes
H _{2c} : EP > PEB	$\beta=0.50$ ($p=0.048$)	0.37, 0.62	0.36	Yes
H _{3a} : GPR*CCA > ESE	$\beta=0.09$ ($p=0.064$)	-0.03, 0.22	0.03	No
H _{3b} : GPR*CCA > ESA	$\beta=0.16$ ($p=0.001$)	0.03, 0.29	0.07	Yes
H _{3c} : GPR*CCA > EP	$\beta=0.11$ ($p=0.001$)	-0.01, 0.24	0.04	No

Note: CCA=climate change awareness; GPR=green pay and rewards; ESE= environmental self-efficacy; ESA=environmental self-accountability; EP= environmental passion; and PEB=pro-environmental work behavior.

The moderating effect of green pay and rewards (GPR) on the relationship between climate change awareness and environmental self-accountability is positive and statistically significant, which implies that green pay and rewards strengthened this relationship. However, the other moderating effects of green pay and rewards were non-significant. Hypothesis 3 is partially supported.

DISCUSSION

This study adds insight into the psychological mechanisms by which climate change awareness (CCA) promotes pro-environmental work behavior (PEB), contributing significantly to the burgeoning literature on sustainability in organizational environments. By incorporating the theory of proactive motivation (Parker et al., 2010), the findings confirm that CCA improves three psychological states—environmental self-efficacy (ESE), environmental self-accountability (ESA), and environmental passion (EP)—that shape employees' motivation to participate in PEB. This reinforces prior claims that internal cognitive and emotional processes modulate the influence of organizational and contextual factors on individual behavior (Robertson & Barling, 2013).

Interestingly, CCA had a good effect on all three psychological states, while only ESA and EP substantially influenced PEB. This shows that having faith in one's environmental capabilities (ESE) may not always transfer into action unless accompanied by emotional or moral motivation. This finding is consistent with recent research showing that self-efficacy alone may be insufficient without affective and

normative support (Ng & Burke, 2010). As a result, future interventions should increase efficacy and foster environmental responsibility and passion among personnel.

The moderating function of green pay and rewards (GPR) in the CCA-ESA connection sheds light on how organizational practices can improve the efficacy of climate awareness. According to self-determination theory (Deci & Ryan, 2013), GPR can serve as both an extrinsic incentive and a validator of intrinsic motivations, increasing employees' sense of accountability. This outcome is consistent with empirical evidence that HR interventions can improve sustainability performance (Renwick et al., 2013; Tang et al., 2018).

This study emphasizes the significance of integrating climate change education with reward systems to cultivate a workforce committed to sustainability. Furthermore, it adds to the expanding set of multilevel models in green behavior research by demonstrating the interaction of individual cognitive-emotional states with organizational systems (Ones & Dilchert, 2012; Shipley & van Riper, 2022). Overall, these findings highlight the importance of taking a comprehensive strategy for building PEB that includes cognitive awareness, emotional engagement, and systemic organizational support.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

While the study significantly contributes to understanding how climate change awareness and psychological states interact to encourage pro-environmental action, it is important to highlight numerous limitations. First, the cross-sectional character of the data limits drawing clear conclusions about causal links. Although the theoretical model assumes directed links based on existing frameworks, longitudinal data would allow for observing changes over time and a better understanding of the dynamic interaction between consciousness, psychological states, and behavior. Future research should use longitudinal or experimental designs to determine temporal causality (Little et al., 2007; Podsakoff et al., 2003).

Second, while Amazon MTurk provides diversity in participant demographics, questions about sample representativeness persist. The findings may not be applicable across industries, country cultures, or organizational kinds. Cultural aspects such as individualism-collectivism or uncertainty avoidance may influence the observed connections (Hofstede & Hofstede, 2001; Kim et al., 2020). Future studies should replicate the model with samples from different sectors and geographic regions to improve external validity.

Third, this study only examined individual views of green pay and rewards, not their actual presence or organizational implementation. Previous study reveals frequent differences between perceived and real HR practices (Nishii et al., 2008). Incorporating organizational-level data, such as manager-reported or archive HRM practices, can provide a more detailed view of PEB's organizational causes.

Fourth, while this study focused on three proactive psychological states, other relevant psychological constructs such as environmental identity (Van der Werff et al., 2013), moral licensing (Mazar & Zhong, 2010), and eco-anxiety (Clayton & Karazsia, 2020) may influence or interact with employees' pro-environmental intentions. Future studies could use these characteristics to create a more complete framework.

Fifth, the non-significant link between environmental self-efficacy and PEB requires additional investigation. Efficacy beliefs may require situational activation or behavioral stimuli to appear in action (Ajzen, 1991; Gifford & Nilsson, 2014). Exploring boundary conditions, such as environmental cues, peer behavior, or organizational atmosphere, may reveal how self-efficacy transfers into PEB.

Sixth, while this study used green pay and rewards as a moderator, it did not look into other potentially influential HRM practices, including training, recruitment, or performance appraisal. Research indicates that green HRM is most effective when combined and integrated practices (Dumont et al., 2017; Renwick et al., 2013). Future research should better investigate the interplay of multiple HRM levers to understand their cumulative or synergistic impact on employee behavior.

Finally, using self-reported data from a single source raises concerns about common method bias (CMB). Although efforts such as question randomization and attention checks were made, future research should use multi-source data (e.g., peer evaluations or behavioral tracking) and statistical techniques (e.g., marker variable approaches) to assess and mitigate CMB (Podsakoff et al., 2003).

Despite these limitations, this study establishes the foundation for future integrative research on employee-driven environmental sustainability. This field's future progress must broaden its theoretical breadth, diversify its methods, and contextualize its findings across cultures and organizations.

CONCLUSION

This study empirically proves the psychological mechanisms that link climate change awareness (CCA) with pro-environmental work behavior (PEB). We used the theory of proactive motivation (Parker et al., 2010) to test a multilevel framework that included three proactive psychological states—environmental self-efficacy (ESE), environmental self-accountability (ESA), and environmental passion (EP)—as mediators, as well as green pay and rewards (GPR) as a contextual moderator. The study's primary finding is that, whereas CCA influences all three psychological states, only ESA and EP have a substantial role in the link with PEB. This emphasizes the importance of moral commitment and emotional engagement in achieving long-term environmental action.

This study adds to the emerging understanding that internal psychological mechanisms are just as important as external incentives for developing long-term workplace behavior (Robertson & Barling, 2013; Shipley & van Riper, 2022). The result is that ESA and EP strongly influence PEB and emphasize the importance of developing employees' environmental identity and emotional resonance with sustainability goals. This is consistent with van der Werff et al. (2013), who stated that intrinsic motivation based on environmental identification is a powerful driver of sustainable behavior. The study's relatively weak link between ESE and PEB implies that, while self-efficacy is crucial, it may be insufficient unless combined with affective and normative reinforcement (Ng & Burke, 2020).

Furthermore, this research emphasizes the significance of organizational-level interventions. The positive moderating effect of GPR on the link between CCA and ESA supports the idea that reward systems might help people internalize environmental values. This complements previous research indicating that strategically aligned HRM practices, such as green pay and recognition, can effectively impact employees' environmental behaviors (Renwick et al., 2013; Dumont et al., 2017; Tang et al., 2018). Integrating GPR with climate awareness initiatives may thus result in a feedback loop, encouraging greater commitment to sustainable actions.

From a managerial standpoint, these findings highlight the importance of varied tactics to foster PEB. Managers should create initiatives that promote climate awareness, encourage emotional and moral engagement, and provide supportive HRM systems. This needs more than just delivering knowledge; it also demands developing emotionally resonant experiences and linking rewards with desirable behaviors. The increasing frequency of sustainability mandates and ESG reporting standards adds practical urgency to these actions (Delmas & Burbano, 2011).

In theory, the study adds to widening the conceptual boundaries of proactive motivation theory by incorporating it into the sustainability domain. It emphasizes the need for additional research into the contextual modifiers that may increase or reduce the association between awareness, psychological states, and PEB. It also provides opportunities to investigate additional psychological mediators, such as ecological guilt (Shipley & van Riper, 2022), environmental locus of control (Allen, 1999), and climate change fear (Clayton & Karazsia, 2020).

This study contributes to a better understanding of how climate change awareness influences pro-environmental behavior by shedding light on the relevance of various psychological states and HRM practices. The findings have important theoretical, empirical, and practical ramifications. As firms globally face increasing pressure to decrease their environmental footprint, understanding employee behavior's psychological and organizational factors provides practical solutions for achieving significant and long-term change. Future research should develop these models, use multilevel and longitudinal designs, and investigate cross-cultural applications to improve the robustness and generalizability of these findings.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Allen, P. (1999). Reweaving the food security safety net: Mediating entitlement and entrepreneurship. *Agriculture and Human Values*, 16, 117–129.
- Apaolaza, V., Paredes, M.R., Hartmann, P., Barrutia, J.M., & Echebarria, C. (2022). How does mindfulness relate to proenvironmental behavior? The mediating influence of cognitive reappraisal and climate change awareness. *Journal of Cleaner Production*, 357, 131914.
- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ, 1986*(23–28).
- Bissing-Olson, M.J., Iyer, A., Fielding, K.S., & Zacher, H. (2013). Relationships between daily affect and pro-environmental behavior at work: The moderating role of pro-environmental attitude. *Journal of Organizational Behavior*, 34(2), 156–175.
- Boiral, O., Raineri, N., & Paillé, P. (2015). *The nature of employees' pro-environmental behaviors*.
- Bollen, K.A., & Long, J.S. (1993). *Testing structural equation models*, 154. Sage.
- Brammer, S.J., & Pavelin, S. (2006). Corporate reputation and social performance: The importance of fit. *Journal of Management Studies*, 43(3), 435–455.
- Buhrmester, M., Kwang, T., & Gosling, S.D. (2016). *Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality data?*
- Byrne, B.M. (2013). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge.
- Chen, Y.-S., Chang, C.-H., Yeh, S.-L., & Cheng, H.-I. (2015). Green shared vision and green creativity: The mediation roles of green mindfulness and green self-efficacy. *Quality & Quantity*, 49, 1169–1184.
- Clayton, S., & Karazsia, B. (2020). Development and validation of a measure of climate change anxiety. *Journal of Environmental Psychology*. <https://doi.org/10.1016/j.jenvp.2020.101434>
- Daily, B.F., & Huang, S. (2001). Achieving sustainability through attention to human resource factors in environmental management. *International Journal of Operations & Production Management*.
- Darnall, N., Henriques, I., & Sadorsky, P. (2008). Do environmental management systems improve business performance in an international setting? *Journal of International Management*, 14(4), 364–376.
- De Roeck, K., & Farooq, O. (2018). Corporate social responsibility and ethical leadership: Investigating their interactive effect on employees' socially responsible behaviors. *Journal of Business Ethics*, 151, 923–939.
- Deci, E.L., & Ryan, R.M. (2013). *Intrinsic motivation and self-determination in human behavior*. Springer Science & Business Media.
- Del Brío, J.Á., Fernandez, E., & Junquera, B. (2007). Management and employee involvement in achieving an environmental action-based competitive advantage: An empirical study. *The International Journal of Human Resource Management*, 18(4), 491–522.
- Delmas, M.A., & Burbano, V.C. (2011). The drivers of greenwashing. *California Management Review*, 54(1), 64–87.
- Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613–627.
- Erdogan, B., Bauer, T.N., & Taylor, S. (2015). Management commitment to the ecological environment and employees: Implications for employee attitudes and citizenship behaviors. *Human Relations*, 68(11), 1669–1691.
- Faraz, N.A., Ahmed, F., Ying, M., & Mehmood, S.A. (2021). The interplay of green servant leadership, self-efficacy, and intrinsic motivation in predicting employees' pro-environmental behavior. *Corporate Social Responsibility and Environmental Management*, 28(4), 1171–1184.

- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
<https://doi.org/10.1177/002224378101800104>
- Frese, M., & Fay, D. (2001). 4. Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behavior*, 23, 133–187.
- Gifford, R., & Nilsson, A. (2014). Personal and social factors that influence pro-environmental concern and behaviour: A review. *International Journal of Psychology*, 49(3), 141–157.
- Griffiths, A., & Petrick, J.A. (2001). Corporate architectures for sustainability. *International Journal of Operations & Production Management*.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (1998). *Multivariate data analysis. Multivariate Data Analysis (5th Ed)*, 5(3), 207–219. Upper saddle River.
- Han, H., Hsu, L.-T.J., & Lee, J.-S. (2009). Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. *International Journal of Hospitality Management*, 28(4), 519–528.
- Hanna, M.D., Rocky Newman, W., & Johnson, P. (2000). Linking operational and environmental improvement through employee involvement. *International Journal of Operations & Production Management*, 20(2), 148–165.
- Hofstede, G.H., & Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage.
- Jabbour, C.J.C., Santos, F.C.A., & Nagano, M.S. (2010). Contributions of HRM throughout the stages of environmental management: Methodological triangulation applied to companies in Brazil. *The International Journal of Human Resource Management*, 21(7), 1049–1089.
- Jackson, S.E., & Seo, J. (2010). The greening of strategic HRM scholarship. *Organization Management Journal*, 7(4), 278–290.
- Keith, M.G., Tay, L., & Harms, P.D. (2017). Systems perspective of Amazon Mechanical Turk for organizational research: Review and recommendations. *Frontiers in Psychology*, 8, 1359.
- Kim, W.G., McGinley, S., Choi, H.-M., & Agmapisarn, C. (2020). Hotels' environmental leadership and employees' organizational citizenship behavior. *International Journal of Hospitality Management*, 87, 102375.
- Kline, R.B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.
- Kock, N. (2017). *WarpPLS user manual: Version 6.0*. ScriptWarp Systems: Laredo, TX, USA, 141.
- Lamm, E., Tosti-Kharas, J., & King, C.E. (2015). Empowering employee sustainability: Perceived organizational support toward the environment. *Journal of Business Ethics*, 128, 207–220.
- Little, T.D., Preacher, K.J., Selig, J.P., & Card, N.A. (2007). New developments in latent variable panel analyses of longitudinal data. *International Journal of Behavioral Development*, 31(4), 357–365.
- Mazar, N., & Zhong, C.-B. (2010). Do green products make us better people? *Psychological Science*, 21(4), 494–498.
- Ng, E.S., & Burke, R.J. (2010). Predictor of business students' attitudes toward sustainable business practices. *Journal of Business Ethics*, 95, 603–615.
- Nishii, L.H., Lepak, D.P., & Schneider, B. (2008). Employee attributions of the “why” of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology*, 61(3), 503–545.
- Ones, D.S., & Dilchert, S. (2012). Environmental sustainability at work: A call to action. *Industrial and Organizational Psychology*, 5(4), 444–466.
- Orlitzky, M., Schmidt, F.L., & Rynes, S.L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441.
- Parker, S.K., Bindl, U.K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827–856.
- Peloza, J., White, K., & Shang, J. (2013). Good and guilt-free: The role of self-accountability in influencing preferences for products with ethical attributes. *Journal of Marketing*, 77(1), 104–119.

- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Renwick, D.W., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1–14.
- Robertson, J.L. (2018). The nature, measurement and nomological network of environmentally specific transformational leadership. *Journal of Business Ethics*, 151(4), 961–975.
- Robertson, J.L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34(2), 176–194.
- Robertson, J.L., & Barling, J. (2015). *The role of leadership in promoting workplace pro-environmental behaviors*.
- Rupp, D.E., Shao, R., Thornton, M.A., & Skarlicki, D.P. (2013). Applicants' and employees' reactions to corporate social responsibility: The moderating effects of first-party justice perceptions and moral identity. *Personnel Psychology*, 66(4), 895–933.
- Shipley, N.J., & van Riper, C.J. (2022). Pride and guilt predict pro-environmental behavior: A meta-analysis of correlational and experimental evidence. *Journal of Environmental Psychology*, 79, 101753.
- Stone, J., & Cooper, J. (2001). A self-standards model of cognitive dissonance. *Journal of Experimental Social Psychology*, 37(3), 228–243.
- Tang, G., Chen, Y., Jiang, Y., Paillé, P., & Jia, J. (2018). Green human resource management practices: Scale development and validity. *Asia Pacific Journal of Human Resources*, 56(1), 31–55.
- Van der Werff, E., Steg, L., & Keizer, K. (2013). It is a moral issue: The relationship between environmental self-identity, obligation-based intrinsic motivation and pro-environmental behaviour. *Global Environmental Change*, 23(5), 1258–1265.