



# Exploration Study of Green Counterproductive Work Behavior Dimension

Tiarapuspa Tiarapuspa<sup>1</sup>, Wahyuningsih Santosa<sup>1\*</sup>, Devani Laksmi Indyastuti<sup>2</sup>, Sulistyandari Sulistyandari<sup>3</sup>, Ainiyah Humaira Salsabila<sup>1</sup>, Lidya Permata Sari Gill<sup>1</sup>

<sup>1</sup> Department of Management, Faculty of Economics and Business, Universitas Trisakti, Jakarta, Indonesia.

<sup>2</sup> Department of Management, Faculty of Economics and Business, Universitas Jenderal Soedirman, Indonesia

<sup>3</sup> Department of Finance, National Yunlin University of Science and Technology, Yunlin, Taiwan  
wahyuningsih@trisakti.ac.id

**Abstract.** Although it has been acknowledged that some employees engage in counterproductive green work behavior, little research has been done to explain how this construct is adapted to the context of a green society. This study aims to explore the dimensions of green counterproductive work behavior that can assist in developing research instruments in the behavioral area. The method used is an exploratory study using an open questionnaire to collect data. This study's sample used purposive sampling on employees who work in the service and manufacturing industries and have worked for at least three years. The number of samples obtained is 118 respondents. The results of this study indicate that there are 13 categories as dimensions of green counterproductive work behavior. Further research still needs to be done to test the validity and reliability of these green counterproductive work behavior categories.

**Keywords:** Green Counterproductive Work Behavior, Green Society, Exploration, Dimensions.

## 1 Introduction

Green society began to become a concern among both academics and practitioners. Organizational performance that includes environmental performance is recognized as a competitive advantage. In addition to positive behavior, research on negative performance behavior needs to be carried out because negative behavior can reduce organizational productivity. For example, counterproductive green behavior in the work environment adversely affects the organization.

Research on counterproductive behavior in the workplace has been widely carried out [1], [2], [3], [4]. Moreover, research that focuses on green attitudes and behaviors [5] [6] [7] [8] [9]. However, the study of green counterproductive behavior is still a concern, and this causes the green counterproductive behavior research instruments to need to be developed.

Green counterproductive work behavior associated with the organization was found in the research [6], although the construct used is still temporary and has not been tested. Furthermore, a systematic review study on the measurement of green behavior conducted by [10] found that only a few efforts were made to build this construct of counterproductive green behavior. [6] suggested that it is necessary to develop a scale for measuring green counterproductive behavior, including by adapting the construct categorization of counterproductive behavior from Robinson (1995), which is adjusted for green behavior [11].

This study answers suggestions from a systematic review study conducted by [10] that it is necessary to conduct research that leads to the formation of green counterproductive work behavior constructs. The problem in this study is: How can the shape of green counterproductive work behavior constructs be explored?

## 2 Literature Review

### 2.1 Green Counterproductive Work Behaviour

Ones et al. (2012) define green counterproductive work behavior (Green CWB) as employee behavior that can reduce environmental sustainability [5]. Examples of green CWB behavior in the workplace include using raw materials from unsustainable sources, failing to separate waste even though containers are available, being unwilling to sacrifice one's comfort to reduce energy use, or leaving the office without turning off lights and air conditioning [5]. Research Ones (2013) suggests that non-green behaviors should be considered a form of green CWB [1]. Green CWB is a form of behavior that is both intentional and unintentional. Previous research perspectives on green CWB still offer a measure of behavior as a form of involuntariness [10]. The construct of intentional green CWB behavior has not received attention from previous research. Based on the explanation above, the research question "How is the construct of Green CWB and the Items that make up the Behaviour?"

CWB is translated as voluntary behavior that violates significant organizational norms and thus threatens the welfare of the organization, its members, or both [11]. Across targets (organization and members) and levels of violation (severe and minor), CWBs are usually organized into four categories. [11] suggest that CWBs against organizational members can be severe (e.g., personal deviance in the form of physical assault) or minor (e.g., political deviance in the form of gossip about others) and that CWBs against organizations can also be severe (e.g., property deviance in the form of sabotage) or minor (e.g., production deviance in the form of waste of resources).

The CWB literature thus offers a conceptualization of green CWB behavior in the form of environmentally harmful behavior expressed in varying degrees. No research has been found in the literature regarding employees' intentions to harm the natural environment explicitly. However, it seems reasonable to suggest that green CWB behaviors stem from the accumulation of one individual's judgments, reflecting a specific form of CWB aimed at the organization but of a minor nature or sometimes referred to as sloppy work [12]. Green CWB behaviors can reflect the accumulation of minor behavioral lapses or small

individual decisions that reduce environmental sustainability ( e.g., Lamm et al., 2013). Inappropriate environmental actions committed by individuals in their daily work, such as wasting energy, therefore reflect a lack of concern for the environment in the workplace with no purposeful intention to harm the natural environment. In this case, the lack of engagement may be caused, for example, by a disregard for the environment due to inadequate knowledge, selfishness, or lack of reflection on the consequences of one's actions [14].

## 2.2 Methods

This research used an open questionnaire to collect data. The samples are employees who are working in the service and manufacturing industry. Using purposive sampling was particularly taken for the employees who had already worked more than three years because they could consider the green environment practice in their organization.

This study aims to obtain statement items forming behavior that will be a factor in the counterproductive work behavior dimension. The research method used is an exploratory study approach.

## 3 Results and Discussion

The analysis carried out in this study is described in the form of the following steps:

Step 1. Compiling the answers from 118 respondents, each giving five statements of green counterproductive behaviors, 535 sentences of green counterproductive statements were obtained.

Step 2. Sort sentences relevant to green counterproductive statements and sentences not relevant to green counterproductive statements. Based on the observation, 57 irrelevant sentences were identified which did not match the definition of green counterproductive behavior. For example, the statements were in attitudes (not behavioral categories) and statements that demonstrated green behavior. These irrelevant statements include missing commitments, chatting by WA or line without purpose, always being late for work, and working from home without knowing the time and day off.

Step 3. Eliminating sentences that do not correspond to green counterproductive behavior.

After identifying irrelevant sentences, the sentences were eliminated so that 478 statements remained.

Step 4. Grouping 478 statements based on existing counterproductive behavior type categories

The 478 statement items were successfully grouped into 14 categories of green counterproductive behavior, as follows:

1. Paper wastage. There were 83 statements indicating green counterproductive behaviors, all of which were related to paper wastage (e.g., the use of paper is still quite a lot; using new paper only for drafts; not being careful in drafting documents, making them prone to printing errors and wasteful in the use of resources (paper and printer ink).

2. Reluctant to plant trees: 32 statements (e.g., not providing green space in the office; use of green space for parking purposes; reluctant to engage in tree planting for environmental protection).
3. Reluctant to use a bottle/tumbler: 62 statements (e.g., not using a drink bottle when out of office; frequent consumption of plastic packaged drinks; frequent consumption of plastic packaged drinks).
4. Reluctant to throw garbage in its place: 22 statements (e.g., photocopy toner waste that is not properly disposed of; disposing of used oil; littering cigarette butts).
5. Wastage of office supplies: 3 statements (e.g., continuous printing; wasteful use of ink).
6. Electricity wastage: 98 statements (e.g., Wasteful use of air conditioning; habit of leaving electrical equipment on; not understanding the procedures for using electrical equipment (leaving the room open and the air conditioner on)).
7. Reluctant to recycle: 43 statements (e.g., not utilizing waste according to its use; not recycling properly; used paper is only reused, not recycled).
8. Procedure violations: 25 statements (e.g., frequently using chemical cleaners; working over speed beyond SOP (causing incidents); lack of responsiveness to active smokers in public areas; minimizing overtime hours to save electricity in the use of lights).
9. The excessive use of plastic: 45 statements (e.g., Heavy use of stereo forms; use of plastic food wrapping).
10. Waste of resources (e.g., Always use a private vehicle
11. Water wastage: 51 statements (e.g., careless use of water, wasting drinking water, deliberately leaving water on).
12. Unwillingness to conserve the environment: 1 statement (i.e., not using renewable energy solutions).
13. Unwillingness to tolerate: 13 statements (For example, property development that cannot meet environmentally friendly criteria; not turning off the lights according to the procedure when there is a problem; needs to be not using the green interior design).
14. Safety at work.

Step 5. Identify sentences with the same meaning and combine them into one group. Of the 478 statements that have been grouped into 14 categories, there are still statements with the same meaning, so they need to be removed to avoid redundancy. Step 5 resulted in 78 statements.

Step 6. Refining the sentences of the 78 statements selected to become questionnaire items suitable for distribution to the respondents. After correcting the statement, the 78 statements were again grouped into 14 categories. However, one category only has 1 statement item, namely the counterproductive green behavior of reluctance to use a bottle/tumbler, which is combined with the category of counterproductive green behavior related to the excessive use of plastic. This merger is because the two categories are related to excessive use of plastic, where when someone is reluctant to use a tumbler, it is identical to the use of plastic bottles. Thus, the number of categories was reduced by 1 to become 13 categories. The following are the 13 categories and their statement (S) items:

1. Green counterproductive behavior of paper wastage, including

S 17: I use much paper at work.

S 19: The organization where I work needs to encourage the paperless movement (for example, still printing meeting invitations).

S 20: I use many tissues for various purposes.

2. Counterproductive green behavior of insensitive to greening activities, including

S 11: The greening program is not my responsibility.

S 13: Inappropriate use of green land (e.g., for parking lots) is normal.

S 14: The organization I work for considers the provision of green space unimportant.

S 15: The organization I work for has engaged in non-green activities (e.g., cutting down trees) to build operational facilities.

S 16: In the organization where I work, there is no tree planting policy for greening.

3. Counterproductive green behaviors of littering, including

S 2: I rarely throw garbage in its proper place

S 6: In my workplace, there are other things besides cleaning.

S 54: I often throw garbage out of place

4. Green counterproductive behaviors related to wastage of office supplies, including

S 1: In my workplace, I need to pay attention to whether or not ink is being wasted at work (e.g., printer ink).

S 74: In my workplace, there is often a waste of office electronic equipment (e.g., USB, hard disk).

S 75: In my workplace, there is often a waste of office stationery (e.g., staples, pens, markers).

5. Green counterproductive behavior of electricity wastage, including

S 38: In the organization where I work, there are no reminders to save electricity.

S 39: I do not care about electricity usage.

S 40: At my workplace, the organization does not care about the excessive use of air conditioners.

S 41: I am not concerned about the excessive use of air conditioners.

S 42: At my workplace, the organization does not care about the excessive use of lights.

S 46: I am not concerned about the efficient use of electronic devices.

S 47: I leave my home/office guilt-free when the electricity is on and unused.

6. Green counterproductive behavior of unaware of recycling, including

S 3: I need help finding good waste management in my work environment.

S 9: In my workplace, there is no plastic recycling.

S 18: The organization I work for needs to take initiative to recycle paper.

S21: The organization I work for does not allow the waste paper to print office work files.

S22: I always prefer to use new paper rather than used paper for printing office work.

S23: The organization where I work needs more space to store used paper.

S24: There is a lot of waste paper in my workplace.

S48: The organization I work for does not recycle products

S49: I am not used to wasting management (e.g., not disposing of waste according to its type).

S50: I am not in the habit of utilizing waste according to its use (e.g., utilization of unused plastic bottles).

S51: The organization where I work does not instruct waste disposal according to its type (dry waste, wet waste).

S55: The organization where I needs to refrain from socializing on how to utilize waste properly.

7. Green counterproductive behavior in the form of procedure violations, including

S32: I always work outside the SOP (Standard Operation Procedure) in a hurry, causing incidents to occur

S43: In my workplace, there is no electricity usage control device.

S44: In the organization where I work, there needs to be procedures for efficiently using electrical equipment (e.g., air conditioning).

S45: There is no energy-saving electricity program in my workplace.

S58: In the organization where I work, routine maintenance of office facilities still needs to be done (TV, AC, LCD).

S59: In my organization, the performance evaluation system needs to be applied fairly and consistently (e.g., inconsistent application of regulations).

S60: The organization where I work does not socialize the green movement.

S71: In my workplace, there needs to be guidelines for efficient use of space (e.g., using the auditorium for meetings with few people).

S72: In my workplace, there need to be time guidelines for working efficiently (e.g., long-winded meetings).

8. Counterproductive green behavior related to the excessive use of plastic, including

S8: The use of plastic does not need to be limited.

S10: The use of plastic is still reasonable.

S52: I am a person who favors the use of disposable bottles.

9. Counterproductive green behavior related to resources wastage, including

S25: I always use my vehicle for work.

S26: The organization does not provide a vehicle to shuttle its employees.

S27: I often travel without thinking about the impact of fuel pollution

S28: I am more concerned about traveling by vehicle to get things done without thinking about fuel wastage.

S29: I prefer traveling by vehicle over walking/bicycling, including

S61: I often think about things outside of work while working in the organization (lack of focus)

S65: I often need to remember to finish drinking water I have opened (glass, bottle).

S73: In my workplace, I often waste water and soap.

S76: My workplace often wastes food.

S77: I often need more time to finish my food.

10. Counterproductive green behavior in the form of water wastage, including

S53: I often use excessive water.

S62: The organization I work for does not care about excessive water use.

S63: I often need to remember to turn off the water faucet after use.

S64: The organization I work for does not have a water-saving program.

S66: The organization where I work does not control water usage.

S67: The organization where I work often finds leaking water faucets without anyone trying to fix them.

S68: I have a habit of leaving the water on after I have finished using it.

S69: In my workplace, water usage is collected using buckets, so it is often wasted.

11. Green counterproductive behavior in the form of unconserved the environment, including

S4: I found no supervision on hazardous waste disposal at my workplace

It, it is normal to throw garbage in the river.

S12: I have never participated in an environmental awareness movement.

S56: The layout of buildings in my workplace usually lacks environmentally friendly aspects.

S78: The organization where I work does not use energy-efficient fuels (e.g., solar energy, water energy, wind energy).

12. Counterproductive green behaviors related to social intolerance, including

S7: I think it is common to litter cigarette butts.

S31: I think it is normal to smoke in the workplace.

S34: I am more concerned about my own needs than the impact of the surrounding environment.

13. Green counterproductive behavior related to work safety and security, including

S30: The organization I work for still uses machines that are not environmentally friendly.

S33: The room layout in my workplace is unhealthy.

S35: In my workplace, the ban on using hazardous chemicals has yet to be promoted.

S36: The organization where I work rarely performs machine maintenance, which can endanger employees.

S37: In my workplace, the cleanliness of the work environment needs to be given more attention.

S57: The room design in my workplace needs better lighting and ventilation.

## 4 Conclusion

Previous research categorized green behavior in the work environment in organizations and industries, mostly in Europe and the United States, into five categories: conserving,

avoiding harm, transforming, influencing others, and taking initiative. This research conducts different research by exploring and categorizing negative behaviors, namely counterproductive green, and carried out in the context of industry and organizations in Indonesia. This study has some similar dimensions because of the same item even with a different name, such as conserving in this research. This research contributes to the scientific literature because instruments on green counterproductive behavior have yet to be widely carried out, especially with fairly complete items.

## References

- [1] D. S. Ones and S. Dilchert, "Counterproductive Work Behaviors : Concepts , Measurement , and Nomological Network," in *APA Handbook of Testing and Assessment in Psychology: Vol. 1. Test Theory and Testing and Assessment in Industrial and Organizational Psychology*, American Psychological Association, 2013. doi: 10.1037/14047-035.
- [2] Tiarauspa, D. L. Indyastuti, and W. R. Sari, "Constructing counterproductive behavior for supporting environmental management system research," in *The 4th International Seminar on Sustainable Urban Development*, 2018.
- [3] A. W. G. Putra, "GREEN " HRM : AN EVALUATION AND THE FUTURE AGENDA," *Bus. Entrep. Rev.*, vol. 10, no. 2, pp. 131–138, 2011.
- [4] M. Kim and S. Lee, "Drivers and interrelationships of three types of pro-environmental behaviors in the workplace," *Int. J. Contemp. Hosp. Manag.*, vol. 34, no. 5, pp. 1854–6119, 2022, doi: 10.1108/IJCHM-09-2021-1094.
- [5] D. S. Ones and S. Dilchert, "Employee Green Behaviors," in *Managing human resources for environmental sustainability*, John Wiley & Sons, Inc., 2012, pp. 85–115.
- [6] N. Raineri, J. H. Mejía-Morelos, V. Francoeur, and P. Paill, "Employee eco-initiatives and the workplace social exchange network," *Eur. Manag. J.*, vol. 34, no. 2016, pp. 47–58, 2016, doi: 10.1016/j.emj.2015.10.006.
- [7] L. Yang, "An empirical examination of individual green policy perception and green behaviors," *Int. J. of Manpower*, vol. 41, no. 7, pp. 1021–1040, 2020, doi: 10.1108/IJM-09-2019-0455.
- [8] Wahyuningsih, "The Attitude of Young People Towards Environmental Issues and Green Products," in *International Conference on Management, Accounting, and Economy (ICMAE 2020)*, Atlantis Press, 2020, pp. 143–147.
- [9] O. Fawehinmi, M. Y. Yusliza, Z. Mohamad, J. N. Faezah, and Z. Muhammad, "Assessing the green behaviour of academics The role of green human resource management and environmental knowledge," *Int. J. Manpow.*, vol. 41, no. 7, pp. 879–900, 2020, doi: 10.1108/IJM-07-2019-0347.
- [10] V. Francoeur, P. Paillé, A. Yuriev, and O. Boiral, "The Measurement of Green Workplace Behaviors : A Systematic Review," *Organ. Environ.*, vol. I, no. 25, 2019, doi: 10.1177/1086026619837125.
- [11] S. L. Robinson, R. J. Bennett, S. L. Robinson, and R. J. Bennett, "a typology of deviant workplace behaviors : a multidimensional scaling study," vol. 38, no. 2, pp. 555–572, 1995.



- [12] M. Belot and M. Schröder, “Journal of Economic Behavior & Organization Sloppy work , lies and theft : A novel experimental design to study counterproductive behaviour &,” *J. Econ. Behav. Organ.*, vol. 93, pp. 233–238, 2013, doi: 10.1016/j.jebo.2013.03.019.
- [13] E. Lamm, J. Tosti-kharas, and E. G. Williams, *Group & Organization Management*. 2013. doi: 10.1177/1059601112475210.
- [14] R. Gifford, “The Dragons of Inaction,” vol. 66, no. 4, pp. 290–302, 2011, doi: 10.1037/a0023566.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

