

ROLE OF GREEN ERGONOMICS ON CHANGE IN EMPLOYEES' BEHAVIOUR INTENTION: THEORY OF PLANNED BEHAVIOUR APPROACH

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ABSTRACT

Using semi-structured interviews, this study looks into how green ergonomics affects employee attitudes and behavioral intentions. The study uses NVivo 12 for analysis and focuses on behaviors intentions (work load, work reliability, work environment), attitudes (work stress, personality change, happy mood, commitment), and Green Designee. The study sheds light on the relationship between green ergonomic practices and workplace experiences by exploring participant perspectives. Enhancing the rigor of data interpretation, the NVivo 12 analysis has practical implications for organizations looking to improve overall work environments and implement green ergonomic strategies.

1. INTRODUCTION

Green ergonomics is focused on the bi-directional connections between human systems and nature. The objective of green ergonomics is to establish a sustainable workplace that promotes employees' health and wellbeing while reducing waste and saving energy. Improved productivity, fewer absenteeism, and lower expenses related to workers' compensation claims are some additional advantages of green ergonomics. In addition to this it also reduction the negative affect of environmental change (Holme and Watts 2000).

The Theory of Planned Behavior (TPB) is a social behavioral theory that emphasizes the importance of intention in attempting to understand and predict human behaviour. It is seen as a development of the Theory of Reasoned Action and was created by (Ajzen 1998). It asserts that a person's intention, which is impacted by their attitudes, subjective norms, and perceived behavioural control, determines their conduct. TPB has been widely used in a variety of industries to analysis, predict, and organize effective intervention strategies.

The study's goal is to look at how green ergonomics might promote workplace behaviour that is prevalent over time. We will investigate the link between green ergonomics and employees' attitude towards behaviour intention adapting the model based on Theory of Planned Behavior (TPB). The results of this topic will offer significant new information about how to apply green ergonomics in the workplace and the factors that affect employees' behaviour intention. The study will significantly add to the body of understanding on green ergonomics. Additionally, it will have important implications for businesses and policymakers hoping to encourage better behavioural outcomes among workers. The introduction stresses the value of encouraging the possible influence of green ergonomics on employees' behaviour intention towards work outcomes.

1.1. Green Ergonomics:

"Green ergonomics" refers to ergonomic procedures that support nature perspective, more precisely, ergonomics that emphasizes people's affinities with nature. The phrase is derived from the field of design, with various researchers debating the advantages and claims of green ergonomics (Trafimow and Fishbein 1994).

Norton, Ayoko et al. (2021) examines the interaction between an open-planned office space and its inhabitants green ergonomics concepts and also take into account how green open-plan offices might offer non-carbon advantages i.e. boosting resident wellbeing and supporting in the development of a green organizational culture. When visualizing the open-

plan offices of the future, we take into account how these offices could help businesses lessen their environmental footprint while also supplying a setting that promotes the health, happiness, and productivity of their staff (Parkhurst and Parnaby 2013). The meaning of green ergonomics is to develop structures that coexist peacefully with the environment (Dul and Weerdmeester 2003). The scientific field of ergonomics, commonly referred to as "Human factors," encourages systems and focuses on how people interact with other components. The purpose of improvement of both humanoid results and organization efficiency (Butz 2013). Designers must consider both the technical characteristics of the space and how it helps users as they carry out their jobs when taking an ergonomic approach to the built environment, which includes workplaces (Attaianese and Duca 2012). The number of studies examining how ergonomics might integrate new developments with pre-existing issues like safety is rising as a result of recent study and practice (Akyol and Baykasoğlu 2019).

1.1.1. Green Design

Urbanization is a growing trend in human society, as of May 23, 2007, urban regions were home to more than 51% of the world's population, there were more urban residents than rural ones. Furthermore, most of human behaviour takes place in the built environment, whether in urban or rural locations (Hanlon 2007). The National Human Activity Pattern Survey (NHAPS) revealed that more than 87% of US citizens admitted to spent time indoors (Klepeis, Nelson et al. 2001).

In countries where individuals spend more than 90% of their daily time indoors, like the UK, France, Greece, Italy, Finland, and Switzerland, similar patterns of human activity have been observed (Schweizer, Edwards et al. 2007). It has been established that the poor ergonomics design of office workstations and office layouts in many conventional, non-green office buildings is associated with the prevalence of work-related musculoskeletal illnesses (Hedge, Puleio et al. 2011). In accordance with the Bureau of Labor Statistics (BLS), there have been 3.7 million non-fatal occupational illnesses and injuries in the United States in 2008. Of these, 50% resulted in decreased output because of missed workdays, job transfers, or work limitations (England, Gornick et al. 2012).

1.2. Theory of planned behavior:

LaMorte (2019) to anticipate a person's desire to engage in a behaviour at a specific time and place. The Theory of Planned Behavior (TPB) replaced the Theory of Reasoned Action (TRA) as its official designation in 1980. This model's core component is behavioural intent, which is impacted by beliefs about the impact that a behaviour will likely have on the anticipated result (Ajzen 2005). All behaviours that humans have the capacity to control can be explained by the notion. The TPB distinguishes between the behavioural, normative, and control types of beliefs, contending that behavioural performance is a result of both aptitude and motivation (intention) (behavioural control) (Ajzen 2015). The TPB is made up of six constructions that collectively represent a person's level of actual control over their behaviour. (Tornikoski and Maalaoui 2019).

Attitudes: It is necessary to consider how the activity will impact the outcomes in order to determine the extent to which a person regularly regards an individual's action as favourable or unfavourable.

Behavioural intention: The factors that influence behaviour are referred to as behavioural intentions, and the likelihood that a behaviour will be carried out increases with the strength of the behavioural intention.

Subjective norms: It has to do with a person's opinions on whether or not peers and close friends think they should engage in the action. This is the notion that the majority of people either approve or disapprove of the activity.

Social norms: The accepted standards of behaviour within a group of people, a community, or a larger cultural context are meant by this. Social norms are accepted as norms or standards by a group of individuals.

Perceived power: This term refers to the seeming presence of components that could facilitate or obstruct the fulfilment of a behaviour. Depending on perceived power, it is believed that a person has some behavioural influence over each of those aspects.

Perceived behavioral control: This is an individual's evaluation of how easy or difficult it is to engage in the desired behaviour. Because perceived behavioural control varies between contexts and behaviours, a person's views of behavioural control alter depending on the circumstance. The addition of this theory construct led to the replacement of the Theory of Reasoned Action with the Theory of Planned Behavior.

1.2.1. Attitude:

According to Trafimow and Fishbein (1995) theories—including those by (Ajzen and Fishbein 1975; Triandis 1980; Ajzen 1998) people who distinguish between ideas about the impacts of an actions and beliefs about the attitude of important persons towards that behaviour are suggested. These theories presuppose that attitudes and arbitrary norms influence behavioural intentions (Ajzen 2015). The majority of behaviours have been demonstrated to be under the control of attitudes, although some have also been shown to be under the influence of norms (Ajzen 2015).

Motivations to participate in attitudinally controlled behaviour should be significantly impacted by changing attitudes, but intentions to engage in normatively controlled behaviour should be minimally impacted by seemingly tiny changes in the behaviour being investigated (Zhu 2018). Additionally, changing subjective norms should have an impact on behaviours that are controlled by norms, but little to no impact on actions that are controlled by attitudes (Hassan, Shiu et al. 2016) confirmed these predictions.

It's also crucial to consider a claim made by (Fishbein and Ajzen 1981) who suggested that attitudes and subjective norms have a stronger correlation with intents than they do with one another. These conclusions would not have been drawn if these outcomes had been anticipated by the same underlying variable as attitudes. Similar reasoning can be used to argue that some types of beliefs are better than others at predicting attitudes, as shown in (Ajzen and Fishbein 1975) Along with the notion that behaviours may be under attitudinal or normative control, there may also be individual differences in people's predisposition to act as though they are under control.

1.2.3 Behavioural intentions

According to the argument, "a person's desire to engage in (or refrain from engaging in) The most important direct cause of an action is a behavior (Ajzen 2005). A complete explanation of human behaviour must also take into consideration the basis for developing the key determinants. Intention is a function of three fundamental components (determinants) that integrate personal, social, and control effects (Zagata 2012).

The self-identity component was added by the authors to the conventional planned behaviour model, which considerably improved the ability to predict intentions to consume organic veggies (Zhu 2018). TPB has been demonstrated to provide reliable behaviour prediction from behavior's perceived control and intent, and it has been discovered that significant changes in intents also result in changes in behaviour (Ajzen 2015). They fail to recognise that while the theory is predicted to provide precise intention prediction from attitudes, subjective norms, and perceived behavioural control, which is supported by the majority of applications, the prediction of behaviour from intentions is fraught with potential problems that merit a more in-depth discussion., see (Ajzen 2015).

2. METHODS: STUDY DESIGN

The study methods used to explore the attitudes and views of employees about green ergonomics in the banking sector. To gain significant findings, the study used a qualitative exploratory approach, with semi-structured interviews acting as the main data gathering technique. This chapter describes the research design, participant selection, data collecting processes, ethical issues, and the theoretical framework supporting this study. It is grounded in the Theory of Planned Behavior (TPB) (Ajzen 1991).

This study uses the Theory of Planned Behavior (TPB) framework as a guiding concept to investigate the impact of green ergonomics on changes in employees' behavioural intentions. The methodology for this study will use semi-structured interviews, and NVivo 12 software will be used for data analysis. In the semi-structured interview, a sample of workers from businesses that have adopted green ergonomics will be chosen, and these workers will then be interviewed in person. NVivo 12 will be used to analyze the interview transcripts, with coding and theme analysis being utilized to find trends and relationships in the data. The analysis's findings will be presented in a simple and understandable manner, and they will be used to advance the field of green ergonomics. By simplifying the study process and improving the accuracy and dependability of the results, NVivo will help in gaining important insights into how green ergonomics affect employees' behavioural intentions towards workplace practices.

3. RESULTS

Opens with a presentation of the qualitative and quantitative information obtained from the semi-structured interviews, which has been carefully created and examined to identify trends and themes. The qualitative data, which consists of complicated participant replies, highlights the human element by illuminating views and experiences in great detail. The rigorously tabulated and statistically evaluated quantitative data, however, adds a level of accuracy by giving numerical insights into the number of instances of particular behavioral intents and attitudes among the participants. The important stage of the research into the complex relationships between green ergonomics and employees' behavioral intentions in the banking sector has showed up: the openness of the findings and their thorough examination. The careful data collection, the depth of participant interactions, and the synthesis of voluminous literature are all demonstrated in this chapter. Raw tales and quantitative data combine in this instance to form a rich tapestry of unexplored ideas. Integrating environmentally friendly procedures and ergonomic designs becomes more crucial as organizations develop. Understanding the interaction between green ergonomics and employee behavior acts as the foundation for progressive organizational initiatives in the field of banking, where the human component is both the driver and the beneficiary of change. This chapter goes further into the findings of our research, highlighting the many facets of employee attitudes, intentions, and behaviors in relation to environmentally friendly operations at work.

The study's participants cover a wide range of workers located throughout the huge Swabi Region. The backdrop of our investigation is enriched by knowing their demographic specifics, which enables us to understand the subtleties of how green ergonomics interacts with the complex social structure of Swabi.

The provided table 1.1 undoubtedly provides an overview into the participation demographics depending on the various banks, regions, participant counts, and levels of hierarchy. To make the information more understandable, let's split it down:

Table 1.1 List of banks, participants and job position

Bank	Region	No of participants	Level
Ubl		01	Upper
BOK		02	Upper
BOK		01	middle
Bank Islami		01	Upper
Bank Khushali	Swabi	01	Middle
NRSP		01	Upper
NRSP		01	Middle
Al Faisal		01	Upper
HBL		01	Upper

At each Bank, 1-2 interviews were done. Before going on to the next bank, the interviews were transcribed the next week. The technique was not overly exhaustive based on the number of interviews, but it did need careful attention while coding. Some remarks were coded to numerous nodes where it was practical. NVivo 12 by QSR International was used for the analysis. Due to the nature of semi-structured interviews, more inclusive categories have previously been created. The software was then programmed to produce subcategories using child nodes.

3.1 Findings

The categories and sub-categories from the NVivo 12 are tabulated in table 4.2 with the number of references made, mentioned with the categories.

Main Category (References)	Sub Category 1 (References)	Sub category 2 (References)
Green ergonomics	1.1Green Designee	Office Design (6) Lights and Surrounding (4) Chair & Tables (13)
Attitude	Work Stress	Personality Change (1) Happy Mood (1) Feel Good (5) Commitment (2)
Behaviour intention	Work Load	Work Reliability (3) Work Environment (6)

Table 1.2 List of Nodes and child nodes from NVivo 12

The employees' comments regarding above categories are given below:

3.1.1.Green Ergonomics

This understanding highlights the relevance of green ergonomic techniques in both defining employees' experiences and in favorably affecting their behavioral intentions within the banking sector. Knowing how these methods affect people offers useful insights into the relationship between green ergonomics and employees' objectives, demonstrating the transformational potential of eco-friendly workplace practices to encourage positive behavioral changes among employees. This is evident from the following remarks:

(Y): My third question relates to health and safety. If the organization provides health insurance for you and your family, how does it affect your attitude? (H): It makes a significant difference. Health insurance is crucial. It reduces stress and ensures our families receive proper treatment.

(Y): Now, if the organization provided round tables for health and safety purposes, would it affect your behavioral intention? (A): Yes, it would change my behavioral intention. (Y): How would it impact your intention? (A): If the organization provides tables without sharp corners that could harm me, I would feel safer and less prone to injury or illness. This would definitely change my intention.

P1. "Participants' opinions in safety and health in design of furniture highlight the dedication of employee to designee for furniture influencing the decisions that the organization can make for providing a safer workplace for employee."

3.1.2.Attitudes

Participants highlighted that views are adaptable and open to a variety of variables, both good and bad. Their viewpoints made it clear that changes in attitude, whether favorable or bad, have a significant impact on an organization. The findings provided a detailed knowledge of how changes in attitude may have a big influence on the dynamics of the organization. The participants' acute understanding of the complex interactions between personal perspectives and organizational efficiency is reflected in their knowledge of the possible consequences, which highlights the need of creating good attitudes. Given that attitudes have the power to either favorably or negatively influence corporate culture, such complex findings highlight the need of adopting strategic ways to controlling attitudes.

if your organization or branch were to change your office design, would it affect your attitude? (H): Yes, it definitely would. (Y): So, what kind of design would you prefer? (H): Our office design should be convenient for cash operations and document sharing among managers. We need a design that allows us to handle these tasks efficiently.

(Y): If the organization provides all the things you want, like chairs, tables, and colors according to your preferences, will it change your attitude? (F): Yes, my attitude will change because when everything aligns with my preferences, I feel good, and that automatically changes my attitude. (Y): When your attitude changes, does it affect your behavioral intention? (F): It can affect things like workload and efficiency.

P2. "Due to ergonomic change the attitude of the employee will change due to reduce in work stress and having good feeling."

3.1.3. behavioral intention

Changes in workers' behavioral intentions in the banking industry can be considerably facilitated by changing attitudes. This idea is developed through the many aspects that are covered below, where behavioral intents are deftly divided into sub-child notes. This link was clarified by the participants' points of view during the interviews, which showed that shifts in attitude act as a basic catalyst, influencing the complex behavioral intents that employees have in the banking sector. This realization emphasizes the complex nature of these connections and the importance of having a thorough grasp of how attitudes and behavioral intentions interact in this field.

(Y): Okay, let's talk about health benefits. If the organization provides you with a health card for you and your family, will it change your behavior? (F): Yes, it would change my behavior. (Y): How would it change? Could you explain? (F): If the organization takes care of me and my family's health and provides health benefits, I would feel an obligation to give back to the organization. (Y): So, in return, your attitude towards work would change? (F): Yes, it would change my attitude towards work. (Y): Would it increase your loyalty towards the organization and change your behavioral intention? (F): Yes, it would change my behavioral intention. (Y): So, you would be more willing to handle a heavier workload. (F): Yes, if the workload becomes heavy on some days, the employee thinks that if the organization provides so many benefits, they should reciprocate by working harder. (Y): So, it would change your behavioral intention. (F): Yes, it would change from around 80 to 90 percent.

(Y): If the organization were to decorate your office with money plants and flowers, would it change your behavior or intention? (A): Yes, it would change my intention. (Y): How would you like your office to be designed? (A): I would like it to have some decorations with money plants and comfortable chairs. (Y): If the organization fulfills your preferences, such as providing what you want, would it change your behavior or workload? (A): Yes, it would change my behavior because if the organization takes care of me, I would reciprocate positively. (Y): So, if the organization provides something that can positively change your behavior, that's what you mean? (A): Yes, exactly.

P3. "Work Environment designed ergonomically can positively impacts the employee attitude, consequently influencing their behavioral intentions."

4. Discussion

Critical analysis of the complex relationships that exist between green ergonomics, employee attitudes, behavioral intentions, and the effects that these relationships have on workplace comfort and loyalty (Klepeis, Nelson et al. 2001). Our research demonstrates the significant influence that favorable views have in determining how employees will behave when it comes to green ergonomics. Workers who strongly intend to engage in environmentally friendly practices are those who believe that green ergonomics are beneficial and consistent with their values. Positive attitudes are greatly fostered by organizational initiatives that highlight the convergence of company principles with the preservation of the environment. Organizations can influence employees' attitudes and ability to implement green ergonomics programs by actively promoting environmentally conscious practices and raising awareness of their benefits (Kalakoski, Selinheimo et al. 2020).

Our findings have significant implications for organizational procedures. Organizations can invest in education programs, campaigns to raise awareness, and environmentally friendly workplace designs to take advantage of positive attitudes and intentions. These programs strengthen employees' intentions to use green ergonomics practices in addition to promoting positive attitudes. Furthermore, understanding the mutual relationship that exists between comfortability, loyalty, and behavioral intentions emphasizes how important it is for organizations to provide ongoing support. Organizations can foster a positive cycle of loyalty, comfort, and environmentally conscious behavior by fostering a culture that is ecologically conscious and placing a high priority on the well-being of their employees.

5. Conclusions

Employers' attitudes, intentions, and experiences are shaped by the incorporation of green ergonomics, which is becoming increasingly prevalent in contemporary workplaces. The significant ramifications of environmentally friendly work procedures are highlighted by our investigation of the relationship between green ergonomics, employee attitudes, behavioral intentions, and the resulting effect on comfort and loyalty. Our research makes it clear that employees' intentions to adopt eco-friendly behaviors are highly influenced by their positive attitudes toward green ergonomics. Employees who work for companies that actively support environmental initiatives see their employer as sharing their values, which encourages them to commit to adopting environmentally friendly procedures. Consequently, this aim raises employee loyalty to the company and improves workplace comfort. An environment that is encouraging and supportive is created by ergonomically planned workspaces and environmentally friendly services, which increases workers' dedication and job satisfaction. There are significant consequences for organizations. Businesses that invest in green ergonomics foster a devoted and engaged workforce in addition to helping to preserve the environment. Positive attitude-focused tactics, like awareness campaigns and educational initiatives, can play a significant role in influencing the opinions of staff members. Additionally, maintaining the cycle of positive attitudes, intentions, and organizational loyalty depends on continuing these initiatives and placing a high priority on the happiness of staff members.

Essentially, our research provides light on the way to building environmentally friendly, efficient workplaces. Through the implementation of green ergonomics, organizations can cultivate positive attitudes and intentions among employees, establish comfortable work environments, and make an important contribution to environmental preservation and organizational success. Adopting green ergonomics serves as a lighthouse pointing organizations in the direction of a future where environmental responsibility and employee satisfaction peacefully exist together, setting the way for a more sustainable and satisfying work environment for all.

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