

# The Impact of Organisational Culture on Transportation Behaviours: An Exploratory Analysis

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**Abstract:** By annually accommodating a growing number of students, higher education institutions contribute significantly to the daily flow of individuals. This flow exerts a significant impact on greenhouse gas emissions caused by transportation. Several studies have addressed promoting sustainable transportation at the individual level, while little attention has been drawn to examining the impact of organisations in this realm. This paper proposes a model of organisational influences on pro-environmental behaviours. Therefore, we thus identify a set of variables within organisations that expect to influence these behaviours. Among these variables, organisational culture appears as a major predictor. Organisational culture is a set of values, norms, beliefs, meanings and behaviours. Based on this definition, we propose to study organisational culture through measurable elements such as the organisation's values, norms and perceived practices. Additionally, we have identified variables directly influenced by organisational culture, such as leadership and organisational trust. Further variables, including personal norms and facilitating conditions, interact with the organisational culture and provide a more precise understanding of pro-environmental behaviours. This framework will be used to investigate student transportation behaviours. The results are expected to provide valuable insights for developing a culture of sustainable transportation at the organisational level.

**Keywords:** Organisational culture, Transportation, Pro-environmental behaviour, Sustainability, RSE, leadership

## 1. Introduction

Growing awareness of environmental challenges should lead organisations to adopt more sustainable practices. These practices depend on organisational culture, which is rather difficult to capture in its complexity. This study aims to model organisational culture's impact on stakeholders' environmental behaviour. We introduce this model in Figure 1 and explain it step by step afterwards.

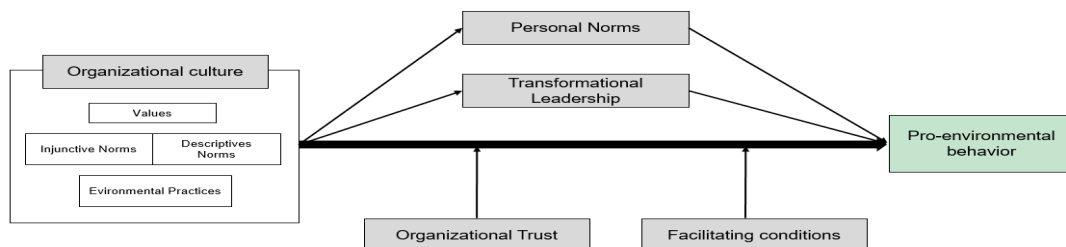


Figure 1: Representation of the Model: Effect of organisational culture on environmental behaviours

## 2. Organisational Culture and Environmental Behaviours

Pettigrew (1979) defines organisational culture as a set of values, norms, beliefs, meanings, and behaviours. In this spirit, we approach organisational culture by combining organisational social norms, which define acceptable behaviours and practices, values underlying those norms, and practices resulting from them. These three elements are often measured independently to identify an organisation's culture, perhaps limiting a more comprehensive understanding. We, therefore, propose to integrate these variables to the same extent.

For Cameron and Quinn (2011), understanding organisational values highlights organisational internal dynamics. These authors model organisational culture by focusing on two axes of opposite values: internal vs external focus and stability vs flexibility. This model maps four major organisational cultures: Clan, Adhocracy, Hierarchy and Market. Perennial organisations have their own cultures that spread in each quadrant. Concerning our subject, it appears that Adhocracy, Clan and Hierarchy cultures facilitate the integration and anchoring of environmentally friendly practices (Osei et al., 2023).

Each of the four major organisational cultures defined by Cameron and Quinn (2011) carries specific values that promote distinctive social norms within the organisation. Social norms refer to socially valued behaviours in a group (Cialdini, 1990). They can be divided into injunctive and descriptive categories (Cialdini, 1990). Injunctive norms are related to organisational concerns and prescribed practices. Descriptive norms, meanwhile, deal with practices actually implemented (Norton et al. 2014; Mouro & Duarte, 2021). Social norms affect the environmental behaviour of members of the organisation (Thøgersen, 2006). Indeed, they mediate the relationship between environmental policies and green behaviour (Norton et al., 2014).

On the other hand, organisations also frequently implement a corporate social responsibility (CSR) policy as part of the organisational culture (Aguinis, 2011, p. 855). These practices have a tangible impact on stakeholder behaviour (Aguinis, 2011). CSR strengthens employees' engagement and organisational identification (Turker, 2009). High-perceived CSR affects environmental behaviour (Lin et al., 2010). Green culture and green management practices within organisations standardise green behaviours, leading employees to be more likely to adopt green practices (Paillé et al., 2013; Pinzone et al., 2016).

### **3. Elements Influenced by Organisational Culture**

We explore two variable categories constantly intertwined with organisational culture to identify how culture influences environmental behaviours. The first is related to individual-organization interaction, such as transformational leadership and trust; the second is to individual and material characteristics, such as personal norms and facilitating conditions. Both are significant predictors of environmental behaviours and cannot be overlooked.

Transformational leadership is defined as a process of social influence (Bass, 1985) that relies on vision and values (Wang et al., 2018). It predicts the adoption of environmental behaviours in the workplace (Robertson & Barling, 2013). Robertson and Barling (2013) identified descriptive norms as the antecedent of leadership, suggesting that transformational leadership mediates the relationship between organisational culture and environmental behaviours.

Organisational trust is a psychological state where individuals accept vulnerability based on their beliefs about the intentions or actions of others (Rousseau et al., 1998). The development of organisational trust depends on the social exchange process and perceptions of leader decisions (Singh & Srivastava, 2016). When organisational trust is strong, its members are less suspicious of leaders' actions and guidance (Singh & Srivastava, 2016), which can influence pro-environmental behaviours. We anticipate a moderating effect of organisational trust on environmental behaviours.

Personal norms refer to behaviour individuals feel morally obligated to have (Schwartz, 1992). There are significant predictors of environmental behaviours (Javaid et al., 2020; Stern, 1999) and are partially predicted by social norms (Stern, 1999). We expect them to mediate the relationship between organisational culture and environmental behaviours.

The facilitating conditions refer to infrastructures, equipment's, and adaptations designed to promote the desired behaviour. When members perceive infrastructure and equipment as easily accessible, they tend to act more responsibly (e.g., Adams et al., 2017). We anticipate these conditions will moderate the relationship between organisational culture and environmental behaviour.

### **4. Conclusion**

This paper proposes a model of organisational influences on pro-environmental behaviours. To show this relation, we start by defining organisational culture and identifying the variables that compose it, like norms, values, and practices. We also enrich this relationship with mediators and moderators, which can influence it. We will apply this framework to transportation behaviour. Indeed, in 2019, the transport sector in France emitted the highest amount of greenhouse gases (GHGs), totalling 136 million metric tons of CO<sub>2</sub> equivalent. This represents 31% of the national GHG inventory, compared to 22% in 1990 (Notre Environment, 2022). In France, the number of students in higher education has risen sharply over the past thirteen years, contributing to the daily flow of people. More attention should be paid to the impact of organisations, including higher education institutions, on student transportation patterns.

We aim to investigate the effect of higher education institutions' culture on their students' transportation behaviours. We therefore plan to run a survey among our institute's students. Our campuses are distributed all over France, some of them in locations that don't seem favourable for adopting sustainable modes of transport

(no on-campus accommodation, limited or no distance learning, etc.). We aim to investigate the impact of this organisational culture on student behaviour in this type of institution. The results are expected to offer valuable insights into promoting a sustainable transportation culture within organisations and identifying individual and situational factors that affect transportation behaviour. Additionally, we strive to engage institutions, individuals, local authorities, and policymakers in confronting this global challenge by promoting sustainable transportation practices at the organisational level.

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