

Article

The Ethical Side of Sustainability: Scoping Out a Theory of Planned Behaviour Approach

William H. Collinge 

School of Civil Engineering, University of Leeds, Woodhouse Lane, Leeds LS2 9JT, UK; w.h.collinge@leeds.ac.uk

Abstract

The ethical dimensions of sustainability can be overlooked by academics and project professionals despite ethics being relevant to the achievement of United Nations (UN) Sustainable Development Goals (SDGs). A survey of United Kingdom (UK)'s construction industry leaders is used to identify ethical challenges and solutions, while highlighting the link between sustainability, ethics and individual behaviour. A Theory of Planned Behaviour (TPB) approach is employed to scope out a series of ethical scenarios via an analysis of people, work tasks, culture and training, and subsequently validated via an industry workshop. It is argued that while project tools and techniques fail to engage adequately with ethical issues (e.g., stakeholder management), a proactive examination of attitude, norm, control and intention by project managers at appropriate project times can assist with the identification of potential ethical issues: a TPB-based prompt sheet being presented to assist project managers with their ethics work. The paper makes an original contribution that highlights the relationship between sustainability, ethical working practices and UN SDGs. Despite the relevance of ethics to SDGs, no prior study has used TPB to model ethical scenarios in construction project management.

Keywords: ethics; sustainability; ethical behaviour; people; project management; UN SDG; sustainable development goals

1. Background and Motivation

Construction projects and industries worldwide continue to suffer from unethical practices that negatively impact project outcomes, the reputations of individuals and corporate profiles. This is despite the best efforts of professional bodies and organisations to improve the situation. The UK-based Chartered Institute of Building (CIOB) states,

“Ethics and ethical behaviour are central to professionalism. It does not matter how skilled and experienced a person becomes: if they behave dishonestly and without regard for the rights of others, they are not a professional person”. [1]

At a national level, ethics is integral to the performance and reputation of construction industries as construction is a global business where companies collaborate and work together to deliver projects, potentially joining together more formally via joint ventures, alliances, etc. Governments recognise that construction has a critical role to play in the delivery of strategic visions. For example, both China and the UK identify construction as critical to achieving long-term national objectives [2,3]. Therefore, a construction industry afflicted by unethical practices may suffer on the global stage. While it has been noted that construction leaders should address unethical practices as part of their responsibilities [4], challenges remain. Part of the problem is the complexity of ethics; the



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pressured nature of project work means it can drop off the radar of stressed design and construction professionals.

Sustainability is now a significant issue for every project professional working in construction. Sustainability principles are enshrined in legislation such as the UK Procurement Act 2023 [5] and in United Nations Sustainable Development Goals (SDGs) [6]: SDG 3: Good Health and Well-Being; Goal 9: Industry, Innovation and Infrastructure; and Goal 11: Sustainable Cities and Communities. While projects are assessed on sustainability issues and metrics, academics have highlighted how maintaining and developing knowledge of sustainability amongst project professionals is also a challenge [7–9].

The connection between sustainability and the delivery of ethical projects has been noted by scholars such as [10–12], although the link to individual actions and behaviour is seldom made. This is despite ethics being identified as an important issue for the industry for some time [10–12]. For example, [13] examined ethical issues facing South African construction, while [14] explored the theory–practice gap regarding ethics in construction by providing a critical review of the ethics decision-making literature. More recent work by [15] examined the issue from the perspective of quantity surveyors in Nigeria, while [16] linked ethics with corporate social responsibility (CSR) and stakeholder engagement on projects. Despite such work, opportunities remain to further explore ethics in construction, especially as industry requires solutions/methods to prevent unethical practices from negatively impacting sustainability processes and outcomes. As a conceptually difficult subject, ethics is also open to further theoretical explorations to develop new understandings and potentially develop practical solutions for industry.

This paper contributes to this subject by reporting on findings from a survey of UK construction leaders in 2024 regarding ethical practices in the UK. It draws attention to the connection between unethical practices and the achievement of sustainability goals; the findings being informative for multiple markets as many respondents had international project interests. By mobilising Theory of Planned Behaviour (TPB) in a construction context through a series of examples using data from the survey, the utility of a fresh theoretical perspective focusing on individual behaviour, an issue of central importance to ethics in construction [13,15,16], is brought forth. The Theory of Planned Behaviour (TPB) [17] asserts that undertaking a behaviour can be explained by three main constructs: personal attitude; subjective norms; and perceived behavioural control. This paper argues that a TPB approach has validity in a construction context to predict ethical behaviour, providing a prompt for project leaders in their planning and control work.

The paper is organised as follows. A review of the literature highlights current understandings of construction ethics and how academics have engaged with the subject, with Theory of Planned Behaviour (TPB) being presented as a conceptual approach upon which ethical scenarios may be modelled. The Section 3 details the work undertaken, detailing the survey, modelling, and industry workshop engagement. This is followed by Section 4 that reviews the survey findings and challenges and solutions to ethics in the industry. A series of snapshots of unethical behaviour from survey respondents are then presented; these snapshots are modelled using a TPB approach. The following discussion explores the findings further, unpacking the strengths and limitations of a TPB approach and presenting a TPB-based prompt sheet for practical use by project managers. The Section 7 draws the insights of the paper together.

2. Ethics in Construction

Ethical behaviour has been recognised as a significant challenge for the construction industry [18]. Ref. [19] identified professionals' disregard for ethical awareness, understanding, and practices as a primary reason to explain poor behaviour, while it has also

been noted that project organisations are often less transparent with ethics due to the industry being project-based and transient in nature [20]. Corruption, collusion, fraud, bribery, and negligence have been identified as common manifestations of unethical behaviour [18,19,21]; organisational behaviour often stems from employees and individual attitudes and beliefs. The construction site has been identified as a specific problematic context for unethical practices [13], with health and safety being highlighted as a category of concern [22].

Explorations of how ethics becomes embedded into everyday construction practices has occupied scholars for some time [23]. The development of ethical codes of practice [24–26] as mechanisms of enforcing ethical behaviour [27] has been one avenue of research. Ethics has also been examined from the perspective of ethical ideologies [28] and moral theory [29]. More recent work has examined ethical leadership [30] and organisational ethical climates [31].

Academics have also examined ethical behaviour through theoretical and conceptual explorations. In a state-of-the-art review of the construction ethics literature, ref. [32] employ a theory–characteristics–context methods (TCCM) framework to scope out future research directions for scholars; the authors recommend that future researchers explore the linkage between personal morality and organisational factors that trigger ethical responses and the influence of ethics on project success/performance. Ref. [33] introduced an Aristotelian ethical perspective to examine the structure and agency of ethical relationships in the project management field. In further work, construction ethics was conceptualised through the lens of institutional theory, stakeholder management and economics [32], a “House Model” being used to integrate dimensions of professional development, Environment, Social, and Governance (ESG), welfare, and wellbeing.

The complexity of the issues was highlighted by [34], who noted how a lack of commitment to professional responsibilities and ethical principles may result in negative economic and reputational consequences for construction organisations. Ethical issues in construction are rooted in a complex network of multiple factors that are linked to individual perceptions and behaviour towards construction activities, individuals being linked to construction organisations, and the overall integrity of the industry.

The published work also suggests there is scope for the development of new tools and techniques to assist project professionals. In reviewing ethical dilemmas in project management, ref. [35] advocated for the use of ethical dilemma scenarios as a valid approach for trainers in ethics and project managers, but evidence of actual use by the industry was absent. Ethical dilemmas were also used as the unit of analysis by [36] in a case study of a large Australian university; while the findings exposed the influence of a service culture and workplace norms and culture that stress behavioural dilemma issues, there were no practical tools presented for use in project contexts. Similarly, in a review of project ethics, ref. [37] clarified the complexity and challenges surrounding ethics in project management but did not offer any practical tools and techniques to employ in work situations. More recently, ref. [38] noted that industry digital transformations require the teaching of digital ethics and digital skills training, with practical ethical decision-making techniques being prioritised by business and educational organisations. It should also be noted that while stakeholder management work on projects [39] requires activities such as stakeholder identification, assessment, and engagement [40], examination of ethical behaviour (actual or potential) is not part of such work.

The above review indicates there is scope for further explorations of ethics in construction from theoretical perspectives, and a gap in the development of practical ethical tools for project managers.

Theory of Planned Behaviour

Originally developed by [17], the Theory of Planned Behaviour (TPB) asserts that undertaking a certain behaviour can be explained by three main constructs: personal attitude (i.e., what drives individual ethical/unethical behaviour); subjective norms (i.e., the societal impacts or influence on ethical behaviour); and perceived behavioural control (i.e., the barriers to ethical behaviour). In combination, these constructs (personal attitude, subjective norms, and perceived behavioural control) determine the intention of individuals to act and their subsequent behaviour. The constructs are visualised in Figure 1.

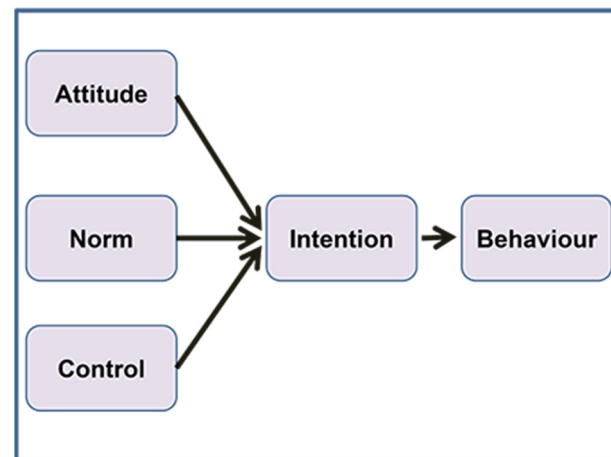


Figure 1. TPB concepts [17].

In project management, it can be contended that ethical behaviour links to specific project outcomes (e.g., meeting project cost/time targets); the importance of ethics is therefore amplified at a project level [18,32]. Personal attitude (i.e., that which drives ethical/unethical behaviour of individuals) can be linked to multiple individual factors and can be difficult to identify and pinpoint. For example, personal beliefs, emotions, and thoughts about an issue are all related to attitude. Subjective norms (i.e., the societal impacts or influence on ethical behaviour) [41] could be community beliefs and comments that persuade the actions of others. This influence could be positive or negative in terms of ethical behaviour. Previous studies have revealed that the impact of a subjective norm is weaker than an attitude on behaviour adoption. The subjective norm can be categorised into two concepts: descriptive norms and social norms. Descriptive norms refer to real activities and behaviour that others are undertaking, while social norms refer to other people's perceptions of how an individual should behave [41].

Perceived behavioural control (i.e., the barriers to ethical behaviour) can be linked to people's perception of the ease or difficulty of performing a particular behaviour [17]. This concept reflects experience in addition to anticipated impediments and obstacles, such as training courses, organisational measures to prevent unethical conduct such as codes of conduct, whistleblowing processes, and behavioural expectation guidelines. It includes the perception of one's own abilities and sense of control over a situation as a combination of locus of control (belief about the amount of control that a person has) and self-efficacy (perceived ability to perform a task) [41].

The Theory of Planned Behaviour (TPB) has been used previously by construction scholars to research a variety of issues. Ref. [42] used the theory to examine the factors influencing intention to adopt solar energy solutions in Zambia, while [43] employed TPB to investigate transitions to a circular economy on construction projects. Ref. [44] explored the applicability of the theory for the adoption of innovative green construction techniques in Ghana, while [45] used a decomposed theory of planned behaviour to construct a

structural equation model to provide deeper understandings of the relationship between behaviour and intention, leading to an in-depth understanding of construction demolition waste behaviour. In another recent paper, ref. [46] employed the theory to assess the behavioural factors that influence professionals' intention to adopt green construction, using a quantitative research design with the use of online questionnaires to elicit information from professionals in South Africa. The recent trend amongst the academic community of using TPB indicates an interest in the theory and the value of its conceptual apparatus; its underlying concepts and focus on behaviour make it an appropriate theory to mobilise in a construction project context.

In this research, TPB was selected because it explicitly separates attitude, norm, and control factors that construction leaders identified as key drivers of unethical acts. In broader terms, a TPB approach complements, rather than replaces, existing frameworks that address trajectories of research for ethics in construction project management, such as the "House Model" [32].

3. Research Method

A survey of UK construction industry leaders in 2024 (see Supplementary File) scoped out their opinions on ethical behaviour in the industry. Construction leaders were identified through the social media platform LinkedIn and via Chartered Institute of Building (CIOB) and Major Projects Association (MPA) membership if their profile description indicated a leadership role. A total of 35 industry leaders were initially approached, with a total of 22 responses being received. While not a high number, the 22 responses are deserving of analysis as representative of valid views of leaders in UK construction. However, it should be noted that the small sample size and resultant percentages can only be indicative of wider industry opinion.

Following a confirmatory email exchange with respondents, the survey instrument was disseminated on 8 May 2024; the survey consisted of open and closed questions formulated from a review of the academic and grey literature relating to ethics in construction. Such survey instruments are recognised as a valid data collection method to employ within this industry [47]. Table 1 presents further respondent information; responses were anonymized in the subsequent collaborative workshop.

Table 1. Respondent information.

Number	Job Title	Company Type	Experience (Years)
1	Senior Manager for Construction Power Plant	EPC Contractor	17
2	Consulting Structural Engineer	Structural Engineering Firm	9.5
3	Sustainability Manager	Contractor	15
4	Director/Co. Chair	Building Services Company	26
5	Senior Project Manager	Construction Contractor	13
6	Senior Project Manager	Groundworks Contractor	20
7	Senior Project Manager	Building Services Company	16
8	Director—Landscape Gardening Company	Landscaping Company	30
9	UK Finance Director	Construction Contractor	23
10	Regional Manager	National Contractor	17

Table 1. *Cont.*

Number	Job Title	Company Type	Experience (Years)
11	Sustainability Adviser	Independent Consultant	23
12	Development Associate	Engineering Consultancy	13
13	Senior Proposals Engineer/Estimator	Energy Company	21
14	Group Compliance Director	Real Estate Property Company	24
15	Structural Engineer	Structural Engineering Firm	15.5
16	Managing Director	SME—Electrical Services	20
17	Managing Director	SME—Mechanical and Electrical Eng.	18
18	Managing Director	Architectural Firm	25
19	Lead Operations Manager	Construction Contractor	18
20	Client Liaison Manager	Construction Contracting Firm	15
21	Assistant Director	Architectural Firm	15
22	Consulting Design Lead	Construction Consultancy	18

The survey results are presented in Section 4 below.

A series of snapshots of unethical behaviour were drawn from the survey respondents and examined in relation to the TPB conceptual model (Figure 1). These snapshots of unethical behaviour emerged from a manual analysis of the survey responses themselves (22 responses being a manageable number). For each snapshot, the researcher identified the presence of the TPB constructs in the story being related (i.e., Attitude; Norm; Control; Intention; Behaviour) and modelled the scenario. This process was done independently of the survey respondents and was driven by personal judgement. The TPB modelling of unethical scenarios were subsequently presented to 16 of the survey respondents in an interactive one-day workshop on 16 July 2024. The participants were presented with the ethical scenarios and modelling proposals beforehand and encouraged to reflect on them before the workshop. At the workshop, each scenario was reviewed and discussed openly, with each concept being critiqued in terms of validity and connection to the previously identified challenges and solutions. The discussion also focused on how current industry approaches aligned to each scenario and what new methods could possibly be employed practically. Workshop discussions were recorded and later transcribed, with notes being taken during the day by the researcher. The results of these discussions are presented later.

4. Results

Overall, 50% of respondents expressed the opinion that ethical issues were not currently adequately addressed by the industry, with 50% reporting their company had implemented some form of ethical policy or guideline. Several issues were highlighted as prominent concerns for respondents, as discussed below.

Payment issues (e.g., overbilling; not paying on time) were ranked as the most prevalent unethical issue (Figure 2), while poor procurement practices (e.g., price-fixing; deception in procurement) ranked second (Figure 3). Unfair labour practices (Figure 4) also ranked highly in terms of unethical practices. As indicated in the Figures, for each issue, prevalence (from “not at all” to “extremely prevalent”) is noted by %.

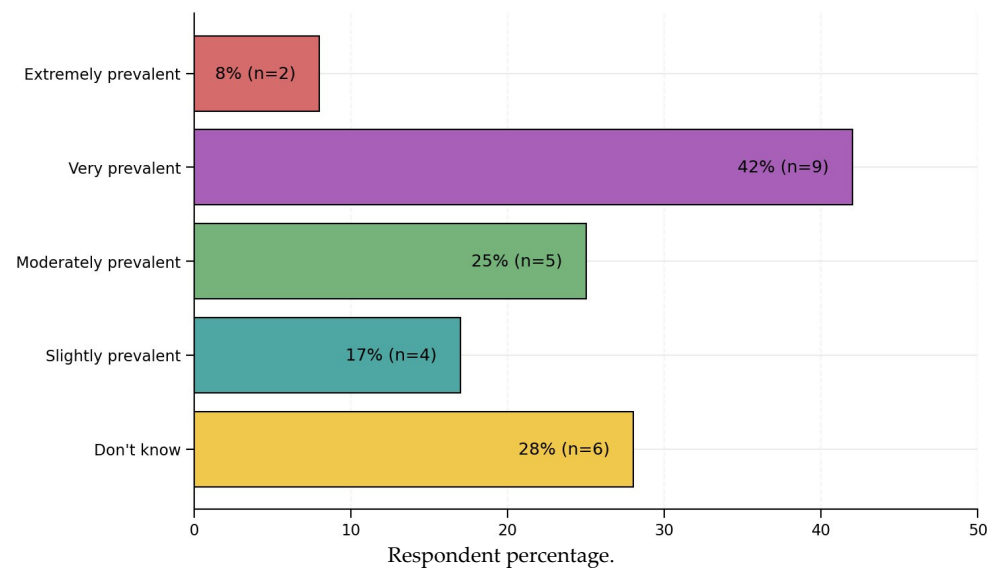


Figure 2. Payment issues (e.g. overbilling; not paying on time).

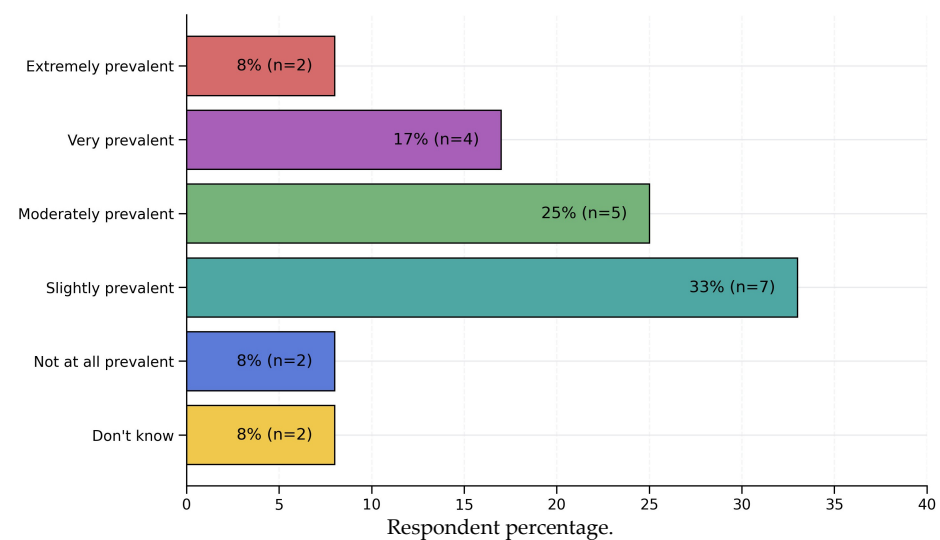


Figure 3. Procurement (e.g. deception or unfairness in procurement; price-fixing).

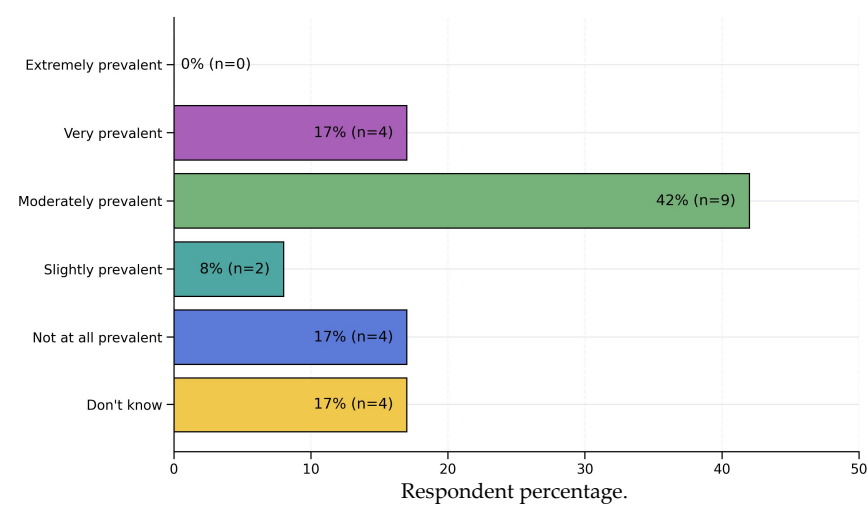


Figure 4. Unfair labour practices (e.g. not paying a fair wage; late payment).

Some respondents elaborated further on these issues; a Senior Project Manager commented:

“We developed a code of practice and provided training to front line workers, engineers and middle management. In addition, we invited external agencies to provide case studies training to staff. We needed to review our policies and guidelines every three years.”

A Managing Director noted a similar response:

“We implemented a number of policies, including a Corporate Hospitality Policy, Recruitment Policy and Disciplinary and Grievance Procedures. These support our policies around ethics in the workplace and equal opportunities. Ethical behaviours are not like quality assurance or financial processes, which can be checked against desired process templates. They are primarily determined by each individual’s character and temperament. The main way to influence ethical behaviour is through a strong business culture as demonstrated by the behaviour of senior managers.”

A Group Compliance Director provided a further opinion:

“It is critical to make public the standard ethical behaviour expected at a project kick-off meeting and remind the team members from time to time. Furthermore, top management needs to develop a check and balance system to safeguard the execution of good ethical behaviour. It ensures we are focused from the outset. Being transparent and evidencing these processes ensures client satisfaction.”

Survey respondents also provided information regarding industry solutions to ethical challenges. A total of 50% of respondents reported that their organisation had a process for reviewing ethical issues at the beginning of projects, with 100% finding the process useful. As one respondent noted:

“We have Sustainable Procurement Policies and are working at improving the working relationships within our supply chain to ensure a one team approach to successful project delivery.”

Some respondents commented further that:

“It is critical to make public the standard ethical behaviour (minimum requirements) at a project kick-off meeting and remind the team members from time to time. Furthermore, top management needs to develop a check and balance system to safeguard the execution of good ethical behaviour.”

and,

“A team policy ensures we are focused from the outset and can demonstrate that we want to address and ensure ethical issues are kept to a minimum. Being transparent and evidencing these processes ensures accreditation award and client satisfaction.”

A total of 67% of respondents reported that it would be useful to have such a policy and process in place, with one notable comment being:

“There needs to be a real focus and top down driven approach to ethics, from government, to major blue chip clients and awarding bodies. With a focus on punitive action and consequences for not adhering to or implementing the appropriate policies and training. This approach needs to be a joined up and collaborative to engage the supply chain on a journey of continuous improvement. Until this happens issues will continue and be papered over.”

Regarding sustainability certifications, one respondent noted:

“There is an issue regarding BREEAM and other sustainable requirements. There is a lot of greenwashing: some of the targets are certainly unachievable. Additionally, the amount of errors and rework projects do because they chose to finish work quickly is insane. Additionally, the construction industry is slow and too risk averse to adopt new technologies, this leads to ethical issues as the industry is stuck in old, inefficient methods of work.”

A further comment was:

“I have been in the industry for over 50 years and the ethics of the industry in general have improved over that time. However, like all other aspects of construction, i.e., quality, health & safety, clients have a much greater influence on the conduct of a contract than they generally realise.”

The comments indicate that while companies are implementing various measures, the perception remains that more needs to be done to improve the situation. In a following question, four of the 22 respondents reported encountering ethical issues at least once a week at work, while 58% reported that they were confident in addressing ethical issues when they arose.

The overall survey responses in relation to ethics challenges are presented in Figure 5.

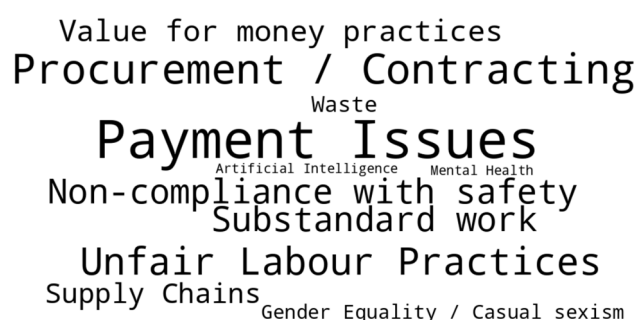


Figure 5. Ethics challenges.

The size of the font corresponds to the frequency of the issue being mentioned by survey respondents. Survey responses in relation to industry solutions to ethics are presented in Table 2.

Table 2. Industry solutions.

Industry Solutions to Ethical Challenges
Corporate guidelines (e.g., codes of practice)
Education of employees and Training courses
Company compliance processes (e.g., whistleblowing)
External agencies (workshops, education)
Declaration of interests (e.g., gifts received)
Supply chain relationships
Corporate policies

Respondents also provided short, narrative snapshots of ethical incidents from their own experience. These snapshots provide tangible evidence of how ethical practices in construction are linked to individual behaviour and the wider construction context.

UN SDGs

From the survey data and comments of industry leaders, a correlation can be made between unethical practices and the achievement of sustainability and better project out-

comes. Table 3 connects the key issues identified by survey respondents with relevant UN SDGs, specifically SDG 3: Good Health and Well-Being, Goal 9: Industry, Innovation and Infrastructure, and Goal 11: Sustainable Cities and Communities. The connection between each issue and UN SDGs is quite high-level and subjective because each UN SDG is not precise in definition.

Table 3. Sustainability, ethics, and UN SDGs.

Poor-quality construction due to inadequate resources being allocated to supervision on-site. Poor standards of work are not corrected due to lack of training of site employees, resulting in poor-quality workmanship not being identified.	SDG 9
Use of poor-quality materials which are cheaper but which do not comply with the specifications, e.g., using alternative products which do not have a construction product certificate.	SDG 9, 11
Specifications which are not fit for purpose due to lack of training, e.g., a corrosion protection paint system which does not adequately address conditions of exposure to the environment.	SDG 3, 9, 11
Poor-quality construction as a result of using methods which get things done more easily or quickly, e.g., compromising on the curing times/methods of concrete, which may affect its 28-day strength.	SDG 11
Negligence of known construction methods and procedures due to attitudes which do not strive for quality, e.g., leaving concrete uncovered in wet or freezing conditions.	SDG 9, 11
Lack of co-ordination between designers in the team, e.g., between structural engineer and sub-contractor designers leading to breaches in structural safety, e.g., temporary work designs or steelwork connection designs.	SDG 9
Structural engineer/main contractor failing to request/provide drawings/designs for checking to ensure that the structure is adequately supported in the temporary design cases or that fabrication drawings/connection designs are checked.	SDG 9
Late payments that have negative effects on supply chains.	SDG 9
Prioritising cost over safety.	SDG 3, 9

5. Modelling Ethical Behaviour

As noted above, respondents provided short, narrative snapshots of ethical incidents from their own experience. The following section presents three of these snapshots. They were modelled by the researcher using the TPB constructs (Figure 1) and subsequently presented to industry leaders in an interactive workshop. The workshop provided an opportunity for open discussion of the TPB concepts and the ethical scenarios. The applicability and value of using a TPB approach in a construction context was thus explored.

5.1. Snapshot 1

“In developing a wind farm in a remote community, the contractor employed unqualified local workers for high risk, working at height jobs. I stopped this practice because of the safety issue. My boss informed me that the community elder had talked to him about this, hoping to release the strict control for gaining their continuous support leading to smooth completion of the project” (Client Liaison Manager).

The respondent went on to say:

“Depending on where the construction projects are taken, international standard practices are normally very helpful. But for ethical issues, we still need to observe the local community practices, such as cultural issues. For example, in some communities, females may not be allowed to work underground. Awareness of the ethical issues around us is an ever-present issue.”

The snapshot may be mapped using the TPB concepts: a combination of attitude, social norm, and control led to the intention and unethical behaviour of the contractor (Figure 6).

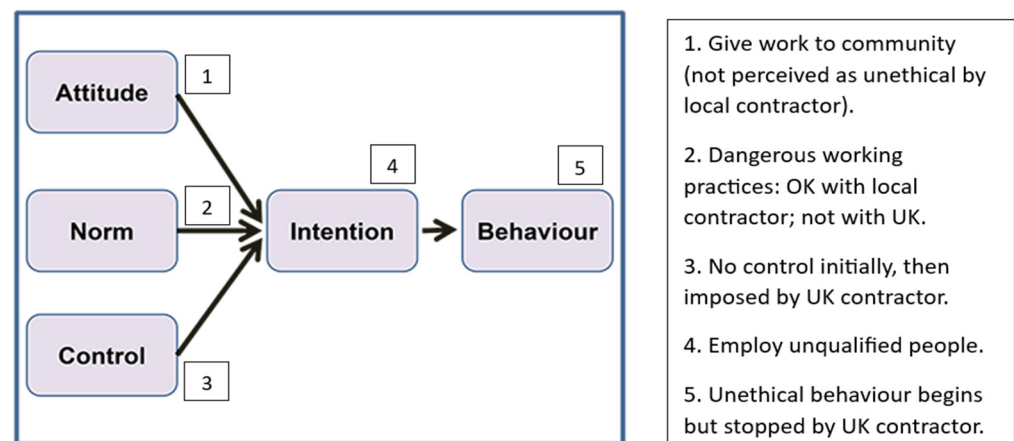


Figure 6. TPB concepts (snapshot 1).

The attitude (drivers of unethical behaviour) was the desire of the local community elder to give work to the community, and the local contractor agreeing to ensure smooth completion of the project. An objection arose from the UK company working on the project: there was a cultural difference between companies, explaining the difference in outlook.

The subjective norms (the social impact/influence on ethical behaviour) were different for the contractor parties. The UK company was driven by UK health and safety principles; the local contractor was driven by a desire to complete the work with minimal disruption from local people.

The control (barriers to unethical behaviour) was the UK company’s policies and principles. Controls were absent for the local contractor and community leader. The resulting intention was to employ unqualified workers at height; the resultant behaviour was unethical (from the perspective of the UK contractor). This behaviour was stopped by the Client Liaison Manager. Workshop participants observed that this scenario revolved around a number of concepts. These were identified as people, work task, culture, and ethics training. Several workshop participants also commented that international contexts can bring extra ethical challenges to project delivery work despite the best efforts of project managers to identify problems ahead of site work.

5.2. Snapshot 2

“A site manager removed scrap electrical cabling from the site for personal gain when it was the property of an electrical subcontractor. While the electrical contractor was aggrieved, they did not make a big issue over it. We interviewed the site manager and decided to dismiss him as this was not the culture we wanted within our company” (Director/Co-chair).

This scenario is visualised in Figure 7.

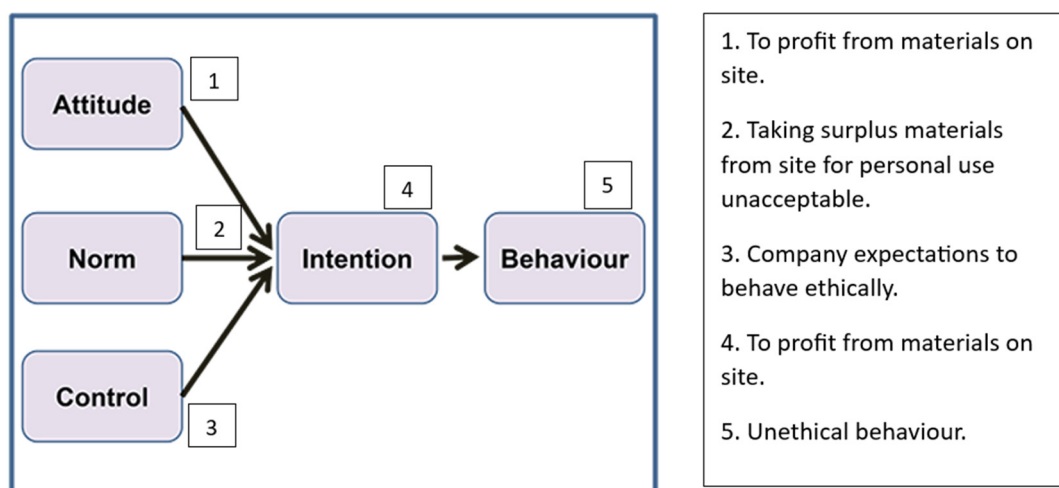


Figure 7. TPB concepts (snapshot 2).

The attitude (drivers of unethical behaviour) was the desire of a site manager to profit from electrical cabling. The norm (social impact/influence on ethical behaviour) was the expectations of those involved: the contractor and subcontractor were guided by ethical principles, but such principles were absent from the site manager. The control (barriers to unethical behaviour) was absent: the contractor/subcontractor were unable to prevent those actions from occurring. This highlights a gap in preventative action, as the resulting intention (to take cables from the site) resulted in unethical behaviour occurring. As in scenario 1, this snapshot also revolves around people, work tasks, culture, and ethics training.

Workshop participants agreed with the TPB proposal in Figure 7. Participants commented that understanding the perspectives of local workers was difficult, even following efforts to instil ethical principles into the local workforce.

5.3. Snapshot 3

“An under-resourced design project was allocated to an overworked designer who was too busy to progress it. It was neglected to the point where there were many errors on the drawings, the architect was frustrated and the client was becoming aware of the problem. I felt there was an ethical dilemma, that the neglect could not continue and I spent many evenings working late for up to 3 h per day to correct the drawings and get the project into shape suitable for construction, but I wasn’t paid for the additional hours. The culture prevalent at the time was not to request payment for overtime, which was another ethical dilemma. Staff are allocated too much work or teams are allocated too few team members. This breeds a culture of work-related stress” (Development Associate).

This scenario is modelled in Figure 8; the workshop participants agreeing that the unethical behaviour was organisational: the company expected employees to work extra hours with no remuneration. Additionally, overloading of work was accepted as the norm. The attitude was the company culture of unpaid overtime and overloading of work tasks. Subjective norms (social impact/influence on ethical behaviour) were disgruntled employees and a poor reputation of the company to external parties. The control (barriers to unethical behaviour) was absent from the company. This did not have to be the case: there could have been a company policy on working overtime, a proper workload model that management adhered to, or a reporting procedure (e.g., whistleblowing) to flag instances of work overload; these were approaches identified by the survey respondents (Table 2). Workshop participants concurred that in this scenario, culture, people, and work tasks were identified as playing prominent roles.

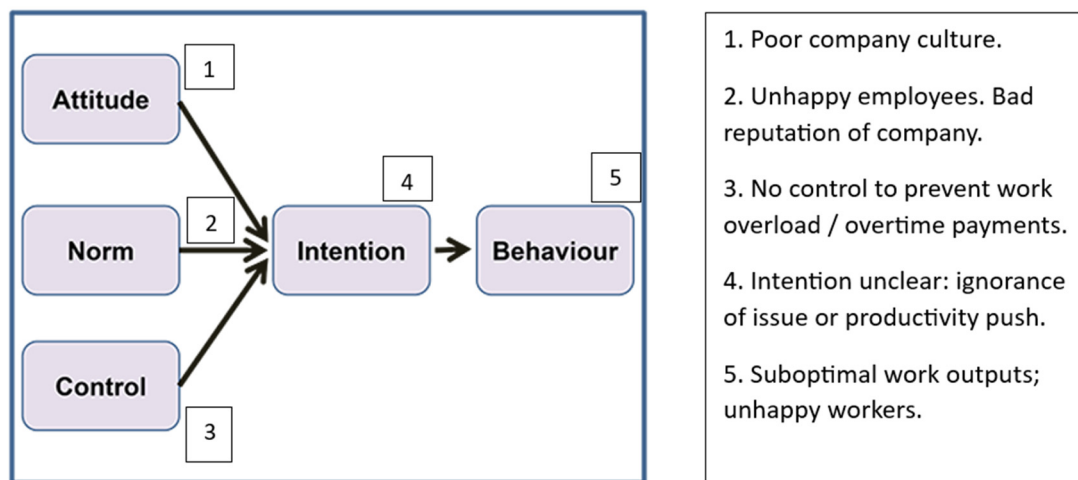


Figure 8. TPB concepts (snapshot 3).

6. Discussion

Through the workshop discussions, it was agreed that each of the scenarios of unethical practice revolved around issues associated with people, work tasks, work culture, and ethics training: the TPB modelling approach highlighting how these issues are linked together. To explore the potential of further employing a TPB modelling approach in construction project settings, these concepts were discussed in more detail with industry leaders.

It was noted that people are linked with attitude (that which drives behaviour). Both survey findings and the snapshots affirm that ethics in construction is tied to people and behaviour: personal attitude (i.e., that which drives ethical behaviour) was a key concept. While industry bodies and companies attempt to educate and influence individual attitudes (i.e., via codes of practice), it can never be guaranteed that employees will act ethically. Therefore, there is a need to interact with people on the project at appropriate points in time (e.g., at the beginning of construction work activity) to reinforce the expected ethical standards. While project managers should be aware of the people working under their management, the ethical background/training of the same persons may not be known. Findings of the survey and the ethical snapshots highlight the importance of this information and that it should be clarified by the project manager before work commences.

Additionally, inter-organisational complexity and the geographic location of the project itself (often being outside the UK) also need to be noted when discussing ethics and people. Project managers should be aware that diverse teams of people working on the same project will create a complex ethical backdrop.

Work tasks were an important feature in each of the snapshots. It was observed that work tasks can be mapped to both intention and behaviour on the TPB model; without a work task, unethical behaviour cannot happen. Because work tasks are present in intention, there is scope for intervention on the part of the project manager. In snapshots 1 and 2, the project manager intervened to stop unethical behaviour from happening, which was a positive result. As projects are commonly divided into separate work tasks (or work packages), these provide appropriate points for ethical issues to be examined, reviewed and scoped out by the project managers in charge.

Work culture can be linked to several concepts on the TPB model: it is a concept that connects with control (barriers to ethical behaviour), intention to act, and eventual behaviour. Organisations and construction industry bodies can influence working culture via training courses, codes of conduct, and by implementing specific processes (e.g., whistleblowing), as indicated in Table 2. However, cultural values may not be shared

amongst diverse workers on a project: culture being a key concept influencing intention to act. The association of work culture with several of the TPB concepts indicates its importance to ethics in construction. Survey findings, the snapshot scenarios, and the opinion of leaders in the workshop indicate that provision of ethics training to staff by companies is important. Ethics training can be identified as a control mechanism. Ethics training can also be associated with subjective norms (the societal impacts or influence on ethical behaviour), as construction companies and construction industries may supply ethics training.

At the workshop, participants reflected on the need for more tools in project management to engage with ethics in construction. It was therefore proposed that a TPB-based prompt sheet could potentially be used by project managers to assist with such a task: Figure 9 presents a TPB-prompt sheet developed from the workshop discussions. The prompt sheet highlights the link to each TPB concept while indicating possible solutions for those challenges. By way of example, extra security could be added to a construction site if a project manager was suspicious of the ethical attitudes of workers, or if ethical attitude could not be determined with certainty. Similarly, positive ethical messages could be conveyed to the work team to engender an ethical working culture if a gap was identified by the project manager.

<u>People (Attitude)</u> Is there evidence of commitment to ethics by people and organisations on the project? Is the project international in scope (location; subcontractors, etc.)? <i>Identify policies, practices and procedures that commit people/organisations to act ethically. If unclear, be prepared to implement ethics training.</i>
<u>Work Task (Intention; Behaviour)</u> What ethical issues might arise on the project work package and people working on it? <i>Review work activities and connections with stakeholders before work package begins. Identify possible intervention points during work task for ethical interventions.</i>
<u>Work Culture (Intention; Control)</u> Is there a culture of ethical behaviour in the location and amongst the workers on the project? <i>Review and be prepared to implement Ethics Training; Codes of Practice; Declaration of Interests; Whistleblowing processes.</i>
<u>Ethics Training (Control)</u> Do the project companies deliver ethics training for their workers? Do they have ethics policies/procedures in place? <i>Be prepared to implement Ethics Training; Codes of Practice; Declaration of Interests; Whistleblowing processes.</i>

Figure 9. TPB-based prompt sheet.

The TPB-based prompt sheet works through the project manager simply asking questions of people, work tasks, ethical training, and work culture as it is contended that interventions are always possible before work activities commence. In terms of practicality, it is unlikely that project managers would have the luxury of time to explore potential ethical problems in detail on their projects: the complexity of ethical situations becoming evident only after work begins and work tasks begin. In this respect, a TPB-based prompt

sheet may have practical utility for project managers who need simple tools to use in their demanding roles. Additionally, such a prompt sheet could assist in identifying ethical concerns related to sustainability issues on the project. However, it should be stated that the TPB-prompt sheet has not yet been tested in real project contexts.

The TPB analysis suggests that a proactive approach by project managers that builds on the good work already done by companies and professional bodies is possible: early identification of possible gaps in ethics training at appropriate points in time (e.g., at project commencement; work package team formation) is recommended. Consequently, the paper proposes a simple TPB-based prompt sheet for project managers as a practical planning and control mechanism.

Although it could be argued that the survey findings and snapshots provide limited data from which to build a practical generalisable model, it can be countered that the TPB model works on minimal information: the project manager often needs to work with minimal information at the beginning of a project. The key concepts of people, work tasks, work culture, and ethics training are simple to understand and map directly to the Theory of Planned Behaviour (TPB) concepts leading to manifestations of ethical/unethical behaviour. Additionally, the TPB concepts and modelling of scenarios were validated in a subsequent industry workshop. However, it should be noted that the use of a TPB approach assumes rational decision-making, while clarifying intentions does not always predict actual behaviour.

7. Conclusions

The paper examined the ethical side of sustainability in construction project management using data from a survey of construction leaders in 2024. The survey identified several unethical practices, such as non-compliance with safety, use of uncertified materials, substandard work, and prioritising cost over safety. Survey respondents also provided solutions to these problems, including training employees, strict company compliance processes, and the use of external agencies to reinforce the importance of ethical behaviour in construction.

A Theory of Planned Behaviour (TPB) approach was employed through the use of scenario snapshots from the survey respondents. TPB concepts were used to clarify the underlying issues influencing ethics in construction: people, work tasks, work culture, and ethics training were identified as critical for scoping out the likely ethical behaviour of project actors. These concepts mapped to the TPB concepts leading to manifestations of ethical/unethical behaviour. A subsequent workshop with industry leaders affirmed the validity of the TPB concepts in a construction project setting. It was concluded that a TPB-based prompt sheet could potentially assist project managers by simply asking questions about people, work tasks, ethical training, and work culture. Although such a tool has not been employed in real project settings, there is viability in using a TPB modelling approach: the TPB-informed checklist represents a promising future research direction that could be prototyped in live project settings.

The paper advances current knowledge of ethics in construction and theoretical understandings of the ethics concept in a construction context. The findings indicate a link between unethical practices on projects and the achievement of sustainability outcomes: the importance of establishing an ethical culture within organisations and on projects is highlighted. Clear and consistent client-driven messaging on ethical practices can also help address unethical practices happening on construction sites. In conclusion, a link between sustainability and ethical behaviour in construction is evident. While recognising such a link is important, implementing necessary policies and practices to address bad behaviour is key to improving the situation and ensuring construction projects achieve

positive sustainability outcomes. An approach grounded in a TPB conceptual framework is one potential avenue to explore further.

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