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The role of interpersonal conflict as a cause of work-related stress in construction managers in Ireland

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Abstract

Purpose – The purpose of this study is to provide evidence to support an emerging theory that interpersonal conflict is the primary cause of workplace stress among a self-selected sample of Irish construction managers.

Design/methodology/approach – Eighteen construction managers working in Ireland were recruited for this study. Using semi-structured interviews and interpretative phenomenological analysis as the research methodology, the causes of their workplace stress were investigated.

Findings – Participants reported that the principal cause of their workplace stress was high levels of interpersonal conflict between colleagues. The effects of this interpersonal conflict included avoidance behaviour, ill health, absences from the workplace and loss of productivity issues. Deadlines, penalty clauses, lack of appreciation, cliques, costs, communication, temporary contracts and delays were also reported stressors.

Research limitations/implications – A limitation of the study is the small sample of 18 construction managers and the limited geographical area.

Social implications – The social implications of this study could be to clearly identify that interpersonal conflict may be under reported in the construction industry, and there is a possibility that it is being misclassified as other workplace behaviours such as bullying, harassment and workplace violence. If this is so, this could aid future researchers in addressing this challenging workplace behaviour.

Originality/value – he current consensus in the literature is that the three main causes of workplace stress are bullying, harassment and violence. However, the role and importance of interpersonal conflict as reported in this study, with the exception of North America and China, is not reflected in the wider health and safety research

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Conflict of interest: The authors declare that there are no conflicts of interest.

Informed consent statement: Informed consent was obtained from all subjects involved in the study.

Ethics review: The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Ethics Committee of Technological University Dublin (Ethical Approval Number REC 20–247) on the 8 July 2022.

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literature. In addition, interpersonal conflict and its reluctance to be reported is largely absent from construction safety research. The findings of this study may be explained if the workplace stress research community is currently misclassifying interpersonal conflict as a manifestation of bullying, harassment or violence. If this is the case, interpersonal conflict needs further research. This is to establish if this cause of construction-related workplace stress needs to be reconsidered as a standalone phenomenon in the wider family of challenging workplace behaviours.

Keywords Bullying, Interpersonal conflict, Workplace stress, Workplace misbehaviour, Construction manager

Paper type Research paper

Introduction

Construction is a project-driven industry that places a high premium on product delivery on time, within budget and to required standards. Modern construction projects have become more complex in nature, the complex relational and lengthy process of designing and building makes construction a process in which conflict is virtually ensured (Jaffar *et al.*, 2011; Wang *et al.*, 2023). These characteristics of the industry contribute to workplace stress. Therefore, it is not surprising that research has confirmed a strong presence of workplace stress within the industry, (Lingard and Francis, 2004; Vaux and Dority, 2020). Many construction managers experience excessive levels of workplace stress, and this can lead to psychological, physiological and sociological effects on employees (Leung *et al.*, 2011). Workplace stress and burnout experienced by construction managers also have costs for the individual, the organisation and the community (Yang *et al.*, 2018).

Mental ill health caused by workplace stress has substantial economic costs to nations, organisations and individuals, which is extremely prevalent in the heavy labour industries. In the UK, for example, approximately 400,000 workdays per year are reported lost to mental ill health and, specifically among construction workers, there were 1,419 suicides between 2011 and 2015, amounting to 3.7 times the UK national average (Burki, 2018). Many studies have linked work stress to poor mental health and suicide; however, concerns have been raised about the scarcity of research addressing other factors that can interplay with work-related factors to cause mental health issues and suicide (Sunindijo and Kamardeen, 2017).

There has long been consensus that workplace stress caused by bullying, harassment or violence is a serious safety and well-being concern (Ballard and Easteal, 2018; Einarsen *et al.*, 2012; Namie, 2007). Construction is no different and has been described as a high-stress profession where professionals are subjected to a plethora of occupational demands that can harm their psychological well-being and mental health (Love *et al.*, 2010). Interpersonal conflict is a further workplace stressor that has emerged in recent years in diverse sectors including construction (Brockman, 2014; Bruce *et al.*, 2022; Chen *et al.*, 2017; Ning and Ling, 2013). It can arise for several reasons such as differences in opinion, communication issues, power struggles and personality clashes (Abugre, 2020).

Although previous studies have identified the presence of interpersonal conflict in the construction sector (e.g. Costa *et al.*, 2015; Halpin, 2006; Kassab *et al.*, 2006; Vaux and Kirk, 2018), the role and importance of interpersonal conflict as a cause of work-related stress in the construction industry in Ireland have not been extensively reported. Therefore, this study aims to present evidence that the importance and frequency of workplace stress caused by interpersonal conflict among Irish construction managers are greater than currently acknowledged. This study will begin by defining the phenomenon of interpersonal conflict. It will then detail the prevalence of interpersonal conflict occurrences and discuss why this workplace hazard may not have received the academic attention it deserves.

Literature review

Workplace stress caused by bullying, harassment and violence has a well-researched literature (Ballard and Easteal, 2018; Kemper and Schwartz, 2020; Leon-Perez *et al.*, 2015). However, interpersonal conflict, a challenging workplace behavior, is less well-reported (Van de Vliert, 2010). Brockman (2014) describes interpersonal conflict as occurring when "two or more interdependent individuals perceive an interference with the means to a goal or an interest followed by some form of interaction". A more recent description by Chen *et al.* (2017) presents interpersonal conflict as "a dynamic process that occurs between individuals or groups who are in interdependent relationships and is more likely to occur when a variety of background situational conditions exist".

In layman's terms, it could be considered as a disagreement between two or more people; this becomes entrenched and leads to workplace stress. In this study, the authors define Interpersonal conflict as a "disagreement or antagonism between individuals due to differences in opinions, values, beliefs, needs or interests. It can be a natural part of colleague interaction in the workplace". Van De Vliert (1998) summarises interpersonal conflict by noting that people are reluctant to diverge from well-trodden paths; they avoid, accommodate, negotiate and sometimes fight. Defining interpersonal conflict definitively can be challenging due to its complexity and multifaceted nature (Moeller *et al.*, 2012). Although a consensus definition of interpersonal conflict seems lacking in the literature, interpersonal conflict differs from everyday occurrences of workplace disagreements, arguments and disputes. Interpersonal conflict can begin by or involve these disagreements, arguments and disputes but importantly, such common occurrences do not result in the longer-term and more entrenched workplace stress effects as reported in this study. Interpersonal conflict also has specific characteristics that differentiate it from the established big three challenging workplace behaviours of bullying, harassment or violence which are as follows.

Interpersonal conflict can easily begin and may persist throughout an entire career. It does not have to be intentional or repetitive, nor does it necessarily involve a power imbalance. A perpetrator of interpersonal conflict may change their behavior if they become aware that they are negatively impacting others (Anicich *et al.*, 2015; Kundi and Badar, 2021). Unresolved interpersonal conflict can be a precursor or trigger for further challenging workplace behaviours (Huang, 2012). In addition, interpersonal conflict can be surreptitious, requiring little direct contact, making it difficult to manage (Anderson and Polkinghorn, 2008; Eunson, 2012).

In a study of the Irish teaching profession, Bruce *et al.* (2022) characterised the many facets and manifestations of interpersonal conflict, finding that it can begin easily, often over seemingly trivial matters and build up to last a considerable amount of time, affecting many stakeholders. Interpersonal conflict does not require a power imbalance or repetition, which contributes to its propensity to remain covert and difficult to identify and manage. Bruce *et al.* (2022) also found that continuing harm is not a defining element of interpersonal conflict, contrasting with bullying, harassment and violence at work, where there is a consensus that these challenging workplace behaviours involve actual harm or the intent to cause harm (Einarsen *et al.*, 2011). As expected, interpersonal conflict as a cause of workplace stress has been strongly linked to employee psychological and physical health, productivity issues and safety (Brockman, 2014; Hershcovis and Barling, 2012; Lau and Cobb, 2010; Siu *et al.*, 2004). Interpersonal conflict is responsible for workplace stress-related illnesses (British Occupational Health Research Foundation, 2006).

As with other causes of work-related stress, interpersonal conflict is known to cause productivity issues. Brockman (2014) states it is an underrated workplace hazard in construction settings. Slaikev and Hasson (1998) reported that interpersonal conflict erodes construction companies' profit margins and that its full impact has yet to be fully realised. Interpersonal

conflict has also been identified as a determinant of work disability and a predictor of workplace accidents (Siu *et al.*, 2004). According to Montgomery and Rubb (2005), interpersonal conflict can severely damage organisational climate, erode organisational culture and ultimately affect the efficacy of organisations. The literature identifies a strong link between interpersonal conflict and other workplace misbehaviours, such as bullying, describing bullying as "destructive conflicts going beyond the point of no return" and "long-lasting badly managed conflicts" (Zapf and Gross, 2001). Given these findings and the labour-intensive characteristics of the construction sector, interpersonal conflict seems inevitable among the many stakeholders in construction settings.

Brockman (2014) states that interpersonal conflict in the construction industry is unavoidable and a less well-known workplace stressor. Although interpersonal conflict in the construction industry is reported to have a higher financial burden for stakeholders than in other generic sectors, it is an inescapable aspect of this adversarial work environment (Narayanan *et al.*, 1999; Vaux and Kirk, 2018; Whitfield, 2012). Rispens and Demerouti (2016) describe workplace interpersonal conflict as "omnipresent", indicating that while conflict at work is not desired, it has become commonplace across various work environments.

Fullerton (2005) notes that the key to keeping the cost of interpersonal conflict at a minimum is to resolve the conflict closest to the trigger event in both space and time. However, Waite Miller *et al.* (2016) note that many everyday interpersonal conflict disputes end without resolution with parties leaving their place of work refusing to discuss an issue further or simply stop arguing, thus the same issue may become the basis for recurring arguments. Waite-Miller's study further notes that workplace interpersonal conflict can negatively affect employees' mental health and well-being. Interpersonal conflict in work environments is identified as one of the top occupational stressors, strongly linked to a reduction in worker psychological and physical health. In addition, interpersonal conflict has been identified as a determinant of occupational accidents, and other costs related to reduced quality, loss of skilled employees, restructuring inefficiencies, decreased motivation and productivity, absenteeism and employee turnover (Tuckey *et al.*, 2010).

The literature also notes that organisations pay a high price if workplace interpersonal conflict is not addressed quickly and effectively (De Dreu, 2008). Vickers (2014) identifies that conflict and workplace stress are related and can negatively impact the careers, health, well-being and relationships of workers, and those of co-workers, friends and family, and pose a significant risk for organisations in terms of health and safety. In addition, commentators such as Brockman (2014) and Ng *et al.* (2007) note that the existing characteristics of construction sites virtually guarantee that some form of conflict will occur in these settings and is unavoidable.

This study addresses a gap in the current literature regarding the prevalence, frequency and reluctance to report interpersonal conflict in construction settings. Although studies such as Brockman (2014), Chen *et al.* (2017) and Zhang and Huo (2015) have identified interpersonal conflict in the construction sector, the prevalence, frequency and reluctance to report interpersonal conflict found in this study is considerably higher. There seems to be a deficit of research on interpersonal conflict-related studies in the European Union and Irish construction sectors. This study further addresses a research gap by identifying very high levels of interpersonal conflict in an Irish context. There may be a misclassification or underestimation of interpersonal conflict in the construction sector that this study notes is the cause of noteworthy levels of workplace stress. This is an interesting and important area of research, and this study will aim to address these gaps.

Methodology

After ethical approval was granted (Ethics No. Rec 20–247), 18 construction managers from 18 different construction sites in Ireland were recruited and interviewed individually using a

semi-structured interview (SSI) approach. Initially, two participants were recruited through convenience sampling using the authors' contacts in the Irish construction industry. Thereafter, snowball sampling was used to obtain further participants for the study. Two participants took part in pilot interviews. At these pilot interviews, a set of open-ended questions were initially developed to provide a framework for the interview conversation. These questions were then tailored to the interviewees' responses, and follow-up questions were asked to gain a deeper understanding of their experiences and views. Based on the interactions and answers given at these interviews, a set of questions was finalised that can be observed in Table 1 below.

Nomenclature

The methodology considered the difficulties of asking participants about interpersonal conflict due to the unfamiliarity of this term. Hence this term was not used in the questions and instead, an interpretation of responses that fit the characteristics of interpersonal conflict was carefully considered and coded accordingly. The terms, bullying, harassment and workplace violence have distinct characteristics that differentiate them from interpersonal conflict. Certain terms and phrases from participants answering the interview questions were taken to be associated with interpersonal conflict including "arguments amongst staff", "staff not getting on", "staff tension" "strong disagreements" or similar phrases. This approach to coding was used because the term "interpersonal conflict" is not in common usage and was not used by participants in response to questions put to them. This approach also allowed for a distinction between work-related stress caused by bullying, harassment or violence in contrast to interpersonal conflict.

Although interviews with participants contained no direct questions on interpersonal conflict, participants identified various characteristics of the phenomena in their answers. Interpersonal conflict refers to a disagreement or struggle that occurs between two or more individuals who have incompatible goals, values, needs or approaches (Mills and Mene, 2020). This type of conflict arises in various settings, including personal relationships, families, friendships and workplaces. Interpersonal conflicts can manifest in different forms, ranging from minor disagreements to protracted disputes (Barki and Hartwick, 2004).

Q1.	What is your gender?
Q2.	What category is your age? 20–29, 30–39, 40–49. 50–59, 60–69, 70–79
Q3.	How long have you been working as a construction manager?
Q4.	What trade do you have, if any?
Q5.	Do you have a permanent or temporary contract?
Q6.	Have you ever been sick from work because of workplace stress?
Q7.	What has your experience been of stress in your workplace?
Q8.	What effect do you feel that stress has on your productivity at your workplace?
Q9.	What do you think are the main sources of stress in your workplace?
Q10.	How do you cope with stress from work and in general?
Q11.	How do you think your employer could help you to cope with stress?
Q12.	What costs financially or otherwise do you think that stress from work has incurred upon you?
Q13.	How would you feel about declaring stress to your employer and how do you think your employer would feel about you declaring stress to them?
Q14.	Did you seek any outside assistance remote from your employer to help you deal with the stress you were experiencing?
Q15.	Is there anything that you would like to add regarding your experience of workplace stress?

Source: Author's own creation

Table 1.
Interview questions

Therefore, these participants' narratives reported key characteristics of interpersonal conflict which differentiated them from other common workplace misbehaviours such as bullying, harassment and workplace violence.

Data gathering

Snowball sampling techniques used in this study offer real benefits for research that requires access to difficult-to-reach or hidden populations. These are often obscured from the view of social studies and policymakers who are keen to obtain evidence of the experiences of some of the more excluded (Atkinson and Flint, 2001). An appropriate sample size in a qualitative study is an area of conceptual debate and practical uncertainty (Vasileiou *et al.*, 2018). Adler and Adler (2012) advise a range between 12 and 30 participants for studies of a qualitative nature. Hennick and Kaiser (2022) note that studies using empirical data reached saturation between 10 and 17 participants, and for qualitative studies using in-depth interviews this should suffice. It was therefore considered that 18 participants were an appropriate sample size for this study. Data saturation was reached in this study as a point was reached in the data collection process when no additional issues or insights were identified, and the data began to repeat. It was believed that any further data collection would be redundant, indicating an adequate sample size had been reached.

Interviews were conducted between September 2022 and April 2023, in locations throughout the Leinster region of Ireland. This location was chosen as employees suffering from work-related stress are by their nature sensitive and difficult-to-reach populations (Valdez and Kaplan, 1999) which meant that recruitment difficulties were likely to be encountered; hence, the recruitment could be akin to a sample of convenience. The location was also chosen as the bulk of construction activity in Ireland is concentrated in the Leinster region.

SSIs used in this study, have been described as an effective rationale for the data-gathering method for small-scale research (Pathak and Intratat, 2012). This type of interview is commonly used in qualitative research and is characterised by a dialogue between the participant and researcher (DeJonckheere and Vaughn, 2019). The participant acceptance criteria for the study required that the interviewee was presently working as a construction manager for at least one year. The 18 participants in this study were all male construction managers in a management role in the Irish construction industry. Eleven of the participants had obtained a trade qualification before taking on management responsibilities. The mean length of service as a construction manager was 16.83 years, the shortest length of time spent working as a construction manager was three years, and the longest length of service was 50 years. A full breakdown of participants' profiles can be seen in Table 2. The names of those interviewed were anonymised by assigning pseudonyms to ensure confidentiality.

Data analysis

Interpretative phenomenological analysis (IPA) was the method chosen to assess participant's own experiences of workplace stress. Studies using interpretive phenomenological analysis are predicted on the desire for a deeper understanding of how humans experience the world through language, local and historical situations and the inter-subjective actions of the people involved (Smith and Osbourne, 2008). IPA facilitates the recognition that different people perceive the world in very different ways, dependent on their personalities, prior life experiences and motivations (Rapley, 2001). It was therefore decided that IPA would be the most effective methodology for this study. The qualitative research methodologists Smith and Osbourne (2008) also provide guidance on

No.	Name (pseudonyms)	Sex	Age range	Years of service as construction manager	Trade background	Contract type
1	Michael	M	50–59	25	Carpenter	Permanent
2	Joe	M	50–59	25	Plumber	Temporary
3	Ian	M	40–49	15	Carpenter	Temporary
4	John	M	40–49	20	General operative	Permanent
5	Christopher	M	60–69	40	General operative	Temporary
6	Arnold	M	70–79	50	Carpenter	Temporary
7	Richard	M	20–29	3	Electrician	Permanent
8	Tony	M	50–59	25	Plasterer	Temporary
9	William	M	30–39	12	General operative	Permanent
10	James	M	20–29	5	Welder	Temporary
11	Jason	M	30–29	5	General operative	Temporary
12	Morris	M	40–49	16	Carpenter	Temporary
13	Ruairí	M	30–39	12	General operative	Temporary
14	Mark	M	30–39	12	General operative	Temporary
15	Edward	M	20–29	9	Carpenter	Temporary
16	Alan	M	30–39	8	Carpenter	Permanent
17	Peter	M	30–39	10	Electrician	Permanent
18	Thomas	M	40–49	11	General operative	Permanent

Source: Authors' own creation

Table 2. Participant profile (anonymised)

an eight-step cycle of analysis for data derived from participant interviews. This guidance was followed for this study using NVivo version 12 software.

This eight-step analysis begins with interview data being transcribed *verbatim* from the participants' accounts of their lived experiences of interpersonal conflict-related workplace stress. Steps 2 and 3 involved the reading, and initial notes, ideas or phrases being entered into the NVivo software programme using open coding. This initial coding helped familiarisation with the individual interviews and facilitated a sense of the data that had been collected. Step 4 is where subordinate categories were created under each code allowing for a more in-depth understanding of data.

Step 5 consolidated codes from preceding cycles into a more abstract and literature-based set of subordinate themes thereby creating a final framework. This was followed by the writing of analytical memos against superordinate themes to accurately summarise the content of each category and to propose empirical findings against each finding. Step 7 saw, validation and revisiting of the analytical memos occurred to self-audit proposed findings by seeking evidence in the data beyond textual quotes to support findings. The final step synthesised analytical memos into coherent and cohesive findings.

This study used an inductive coding approach, where a set of codes was created based on the data obtained from participants, allowing the codes to emerge organically. The authors began the coding process with few preconceived notions about what they would find, adopting an open-ended approach to data interpretation without a predefined framework. For each line of the transcripts from the participants' interviews, exploratory comments and notes were made to summarise the participants' feelings or positionality. The authors employed hermeneutic interpretation to understand and analyse the participants' statements from the interviews which were later developed into broader themes. Smith *et al.* (2009) note that IPA draws on phenomenology and hermeneutic philosophy and is guided by an idiographic commitment toward particular instances of lived experiences.

Findings

An overview of the main findings of this study is detailed in Table 3 below.

Interpersonal conflicts and workplace stress

All 18 participants reported experiencing interpersonal conflict in their role as a construction manager which had caused them workplace stress. Six of these participants also reported that they were victims of bullying which had begun as interpersonal conflict. A frequent source of interpersonal conflict related to workplace stress was variously described as "other people", "colleagues" or "clients". All participants had observed interpersonal conflict on construction sites, but there was no discernible pattern regarding which personnel or situations would trigger this challenging workplace behavior. Therefore, interpersonal conflict manifested in various ways. Examples are provided below, beginning with Mark, who described how "certain people do not get on at all, it tends to start over small things and escalates over time". Arnold noted, "Some clients are difficult, there are lots of disagreements, and it stems from them not being familiar with the construction process; conflict is just inevitable with them". Ian noted that:

> [. . .] being in a management role is difficult, there are many times that you become embroiled in a conflict that occurs between other parties and pressure is put on you to take sides, this is very stressful for me as I get on with both parties but must choose a side and risk alienating the other side.

Reluctance to report interpersonal conflict-related workplace stress

All the participants indicated a reluctance to approach the human resources department or senior management for assistance with cases of interpersonal conflict-related workplace stress. The reasons for this were diverse, some respondents described their lack of confidence in the ability of human resources or senior management to assist, and others referred to such an action as having a negative impact on the perception of the construction manager's ability to manage and be seen as "weak" or "not able for further responsibility". These participants perceived that the reporting of interpersonal conflict or workplace stress could have negative implications for them as was evidenced in comments by Tony who noted:

> You do not report arguments or disputes on construction jobs if you do, you will not be trusted again with any responsibility, it is a career-limiting move, I know this from experience.

Another participant, Peter noted:

Table 3.
Overview of findings

	Theme	No. of participants
1.	Interpersonal conflict is very prevalent in construction settings and is a noteworthy contributor to workplace stress	18
2.	There is a reluctance and fear to report interpersonal conflict, workplace stress or other workplace misbehaviours to human resources or senior management	18
3.	Staff on temporary contracts experience more interpersonal conflict	18
4.	Experienced health problems from interpersonal conflict-related workplace stress	13
5.	Used avoidance strategies to cope with interpersonal conflict-related workplace stress	12
6.	Interpersonal conflict was responsible for creating cliques and factions in construction settings, thereby exacerbating the problem	6

Source: Authors' own creation

> I was having a difficult time with some work colleagues some time ago, there were a lot of arguments and disagreements with them over a long period, I eventually had to report this to human resources or leave. In retrospect, I should have left the job as once I reported this conflict, things changed negatively for me. From then on, I was bypassed for promotion and excluded from any important things happening in the company. Eventually, I had to leave the company, things became too uncomfortable for me.

Employment contract type and interpersonal conflict

A recurring theme in the study by all participants was how people on short-term or temporary contracts were treated unfavourably as opposed to people on permanent contracts in construction settings. Mark exemplified this by noting:

> People on temporary contracts in construction jobs are mistreated regularly, I have seen them being dismissed for even the smallest thing they did wrong. There is a two-tier employment setting on most jobs because people on temporary contracts have no representation and can be dismissed at any time, this makes it highly likely they will be mistreated, bullied, or involved in conflict this would not happen to people on permanent contracts.

Ian described how interpersonal conflict could occur over simple things:

> There are some very rough people on construction sites, there are lots of reasons why serious arguments could occur. People fight and argue over silly things, conflict can begin over something small and now the parties do not speak, and there is usually a large amount of money involved as well. I was on a job once and had to leave over interpersonal conflict, it began over door ironmongery worth say €150, and it escalated to a point of no return, people on temporary contracts are particularly susceptible.

Similarly, Alan witnessed:

> [. . .] a lot of shouting and veiled threats on site. I saw people belittled publicly and undermined in front of others. I feel particularly sorry for new people starting, as they get an awful time and would be sacked immediately if they did anything wrong. I was publicly humiliated at a toolbox talk once when my contract was temporary, and I never forgot it, I am waiting for the opportunity to get this person back.

Health problems associated with interpersonal conflict

Thirteen of the respondents stated that they had experienced physical health issues such as headaches, high blood pressure, digestive problems and eczema and had incurred financial costs as a result of interpersonal conflict-related workplace stress. Four participants had taken sick leave after experiencing workplace stress due to interpersonal conflict and believed their productivity had diminished as a result. Thomas described how addressing continual conflict on site had caused him to take a few sick days as follows; "every now and then I take a few days off to help me regain control, the job gets too much, and I need to recover". Ruairí explained that:

> [. . .] some people are just not worth dealing with, especially some clients, they are just too much trouble and if a job is running well, they will go out of their way to find something wrong, you are just better off not dealing with them.

Five of the 18 participants referred to the relationship between interpersonal conflict, workplace stress and poor flexibility of employers. This lack of flexibility led to these participants contemplating the leaving of their current employer to find alternative

employment. These five participants noted that the more flexible the work environment, the less interpersonal conflict and workplace stress they experienced.

Avoidance strategies to cope with interpersonal conflict-related workplace stress

Twelve of the 18 participants used avoidance strategies to cope with interpersonal conflict-related workplace stress and did not seek assistance. These 12 participants believed that their employer could be of more assistance, by highlighting workplace stressors more effectively. Six participants sought assistance remote from their employer to assist them with workplace stress. Edward highlighted the difficulty of resolving interpersonal conflict and its impact, stating, "Sometimes preventing people from quarrelling or fighting is very difficult, sometimes they turn on you when you are only trying to help them". Thomas, a construction manager explained that:

> [. . .] there are a lot of stressors on construction sites, there are a lot of difficult people, I have to get away from them sometimes, they are just too much. I have also witnessed a lot of conflict and bullying on sites, even seeing it is terrible, it affects you.

Christopher noted in his interview:

> I know of people who do not get on with each other and some of these conflicts go back many years, I try and reduce this conflict by scheduling them to be on-site at different dates or different times, that way it can save me a lot of trouble because if I don't, they will be coming to me constantly, complaining about the other.

Cliques and interpersonal conflict. The findings also noted that over time, interpersonal conflict between colleagues had caused factions to develop and remain on construction sites. These factions allied themselves with various warring parties and often escalated the conflict. Six of the respondents referred to a "clique effect" with opposing groups on construction sites. Participants described these factions as "some people being treated differently", or "camps", and that "some people are royalty, and some are dirt". In some cases, these factions had been in existence for prolonged periods. Edward described one construction site where he worked as follows:

> I had heard from friends that the site I was going to was well known for cliques, it was controlled by a senior construction manager that I would be working under. This senior site manager had a few people who had been working with him for years and they were a pain. When I finally started working on this site, everything I was told was true. This clique had a huge influence over what happened on-site.

In some cases, factions between personnel originated because of stress caused by personality clashes, petty arguments or disagreements. Each side had recruited allies to support their point of view, thereby creating opposing sides who participated in conflict against each other.

Discussion

Construction managers play a pivotal role in the successful running of construction projects (Turner and Miller, 2005). Studies have shown that managers can spend on average, 30%–42% of their time dealing with conflict between employees (Bobinski, 2006; Wu *et al.*, 2019). The consequences of unresolved interpersonal conflict in the construction industry and the important role construction managers play within this industry highlighted a need to investigate this area of research further.

Given the prevalence of work-related stress in the modern workplace, it was no surprise that this study found that construction managers experienced high levels of workplace stress. What was notable though, was the prevalence and frequency with which interpersonal conflict-related stress on construction sites in Ireland was reported by participants. That all 18 construction managers in this study reported interpersonal conflict as a noteworthy workplace stressor, strongly suggests that this challenging workplace behaviour was the primary cause of workplace stress for these professionals. In addition, six participants reported that they had unresolved arguments that could be classified as interpersonal conflict but had developed into bullying.

The question now raised is why the prevalence of interpersonal conflict as reported in this study, is not more widely publicised. One theory to explain this is that interpersonal conflict could be subject to misclassification and is currently being categorised as forms of bullying harassment or common arguments disagreements and disputes. The lack of a clear and unambiguous conceptualisation for interpersonal conflict has been stated by Barki and Hartwick (2004), and this may be contributing to cases of misclassification. It may also be that a lack of awareness of interpersonal conflict as a workplace hazard as noted by Hoel and Giga (2006) is leading to the non-identification of this challenging workplace behaviour. However, it remains that given such a high prevalence rate as demonstrated in this study, there is a compelling argument that interpersonal conflict should become far more widely considered as a workplace hazard.

This potential misclassification if it is occurring, could well indeed have negative consequences for the Irish and wider construction industry. This is because the remedies for interpersonal conflict could differ from those used for bullying, harassment or workplace violence. The best response to interpersonal conflict reported by the construction managers in this study was to try to avoid or separate conflicting parties. However, the effectiveness of this particular strategy remains open to question. Conflict avoidance has been studied by Fisher (2004) who identified that personnel use avoidance behaviours to mitigate conflict with other personnel. However, Hershcovis *et al.* (2018) caution on the use of an avoidance strategy finding it is ineffective at preventing the reoccurrence of challenging workplace behaviours and can adversely lead to increased emotional exhaustion.

The literature notes a lack of confidence in methods to address interpersonal conflict-related workplace stress which is not surprising given the evidence that interventions reported in the literature have shown little success (Leung *et al.*, 2015; McNamara *et al.*, 2018; Tepper *et al.*, 2011). The difficulties of pragmatically dealing with workplace stress in all its forms are well known. Unfortunately, a review of interventions for workplace stress, see, for example, Greiner *et al.* (2012) and Chan *et al.* (2020), does not point to any one strategy that can deal with this hazard. It may be a dispiriting thought, but it could be that interpersonal conflict-related workplace stress in construction is now an expectation rather than a preventable or manageable hazard.

However, as noted by Brockman (2014) a preventative approach to addressing interpersonal conflict-related workplace stress may lie with conflict resolution mechanisms. Additionally, role-specific training could be provided for construction managers in terms of mediation, conflict-resolution techniques, assertiveness training and communication skills. According to Rolfe *et al.* (2006), guidelines on dealing with mental health problems at work are more likely to be effective and have a greater impact if accompanied by specific management support. A further practical measure could be the preferential selection at the appointment stage of construction managers who can demonstrate better preventative and mediation skills regarding interpersonal contact (Zhang and Huo, 2015). Furthermore, a stronger emphasis on interpersonal skills and emotional intelligence in the skill sets of

construction managers would also enhance their ability to effectively deal with these issues. It is also suggested by Brockman (2014) that educational opportunities offered at all levels of construction personnel, beginning in apprenticeship programs, would build awareness and skill in managing interpersonal conflict.

Limitations of the study

It can be argued that the prevalence of interpersonal conflict found in this study does not reflect the wider construction industry due to the small sample size and limited geographical location. Clearly, caution should be taken when generalising these findings. Further empirical research is therefore required to further support the idea that the role of interpersonal conflict-related workplace stress is of more importance than currently appears to be the case. However, the finding that all 18 participants reported interpersonal conflict does suggest that it is a widespread occurrence.

Despite some initial concerns about the use of snowball sampling in this study, Cohen and Arieli (2011) note the effectiveness of snowball sampling has been recognised as significant in a variety of cases, mainly regarding marginalised populations. Their study claims that in conflict environments, the entire population is marginalised to some degree, making it "hidden" from and "hard to reach" for the research populations, which in a non-conflict context would not have been difficult. The sampling strategy produced 18 participants for this study. Given the limited geographical location, caution should be taken when extrapolating from these findings. These findings are envisaged as an initial scoping study to promote further discourse and research which may confirm these findings to a wider community.

Conclusion

This research was undertaken as an exploratory study to assess the prevalence of workplace stress among construction managers in the Irish construction sector. It demonstrated that interpersonal conflict is by far, the most frequently reported cause of workplace stress. If the findings of this study generalise to the wider construction industry, it appears that interpersonal conflict is not receiving the attention it deserves from construction safety professionals and academics.

This inattention may be due to this challenging workplace behaviour being misclassified under the better-known causes of workplace stress. So, there is also a need to consider if interpersonal conflict needs a better conceptual definition with exemplified characteristics, to increase its profile as a standalone cause of workplace stress. Due partly to its covert nature, interpersonal conflict also seems to be ineffectively managed, thereby going unresolved. The lack of resolution and fear to report interpersonal conflict further exacerbates and entrenches conflicting parties making it difficult to resolve over time.

As many interpersonal conflict disputes go unresolved, opposing sides may assemble and fabricate into cliques further entrenching opinions and thus broadening the conflict. Cliques can hold considerable power over work environments and interpersonal conflict can easily develop into more insidious workplace misbehaviours as cliques compete for power in the organisation (Pillemer and Rothbard, 2018). The origins of more serious and visible workplace misbehaviours such as bullying, harassment and workplace violence could in all probability have stemmed from interpersonal conflict. There may be a proclivity that the nested phenomena of interpersonal conflict may be misclassified easily which could explain the paucity of research on interpersonal conflict in the construction sector.

Further research is needed to conceptualise interpersonal conflict in construction environments as a standalone workplace misbehaviour with specific characteristics and to

support construction managers to effectively manage it. This study also demonstrates that the origins of many of the more serious and visible challenging workplace behaviours such as bullying, harassment and workplace violence could well have begun as interpersonal conflict. Therefore, the need for further interpersonal-related research for construction is needed. In particular, this research should examine practical and resolution-focussed solutions, for managing the negative effects of this seemingly under-rated cause of workplace stress in the Irish construction sector.

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