

# **The Evaluation of a Bystander Intervention Training to Combat Incivility in a Large New Zealand Healthcare Organisation**

Dissertation submitted in partial fulfilment of the requirements for the degree of  
**Master of Science in Applied Psychology**  
at the University of Canterbury

**Freya Searle**  
University of Canterbury  
2020

## Table of Contents

Acknowledgements .....	3
Abstract.....	4
Introduction.....	5
The Bystander Effect as a Mainstream Phenomenon.....	7
The Bystander Effect and Organisational Culture .....	9
The Bystander Effect Through the Lens of the Theory of Planned Behaviour .....	12
Evaluating an Organisational Bystander Intervention Training Program.....	14
Method.....	20
Training Outline .....	20
Participants.....	20
Procedure.....	21
Measures .....	22
Data Analysis.....	25
Results .....	26
Quantitative Analysis.....	26
Qualitative Analysis.....	41
Discussion.....	44
Limitations and Directions for Future Research.....	49
Contributions to Research and Practice.....	51
Conclusion .....	53
References.....	54
Appendix A .....	65
Appendix B.....	66
Appendix C.....	67
Appendix D.....	72
Appendix E.....	78
Appendix F.....	82

## **Acknowledgements**

Firstly, thank you to my supervisor Joana for your patience, support, and knowledge this past year, there is no way I would have wanted to go through this process (or gotten through it) with anyone else. Thank you, Katharina, for your ongoing enthusiasm and words of wisdom and thank you Chris for sharing your passions in IO and piquing my interest in the health and safety field.

Thank you to my office girls Miriam and Siobhan for the coffees, catchups, random acts of kindness and the ability to make our office feel like home, against all odds! You motivated many trips into university and were always there for me.

Thanks, Mum, for the snacks and positivity and Dad for your technological knowledge and for spending the past 23 years helping me to “rope” learn mathematics.

Thank you to everyone who has made me laugh, dance, smile, and over the past two years, I appreciate you all!

Finally, Thank you to the APSY 2020 cohort, you have become like family to me and I couldn't imagine a better group of people to have gone through this course with. I can't wait for the reunions, stories and business opportunities we will share together over the next few decades and I keep my fingers crossed that our consultancy firm one day makes it off the ground!

## **Abstract**

The purpose of this study was to evaluate the potential of a bystander intervention training to combat organisational incivility. The evaluation was grounded in the Theory of Planned Behaviour and its underlying factors that feature heavily in behavioural change and bystander intervention literature. Three surveys were administered to 140 employees from a large healthcare organisation in New Zealand over the course of three months; collecting pre training, post training and follow up data. Pair wise comparison t-tests and ANOVAs were carried out to check for significant changes to predictor means, intention to intervene and to track changes in these factors over time. The findings of this study show that the bystander intervention training resulted in significantly different mean scores for most predictors of bystander behaviour and intent in the expected directions post training. However, training transfer was not achieved as no significant changes in behaviour were found at follow up and there was a decline in most of the predictors from post training levels. The key limitations of this study include the insufficient power achieved for data analysis, the limited behavioural data collected and the lack of a holistic change management approach from the organisation. Despite these limitations and the inconclusive support for the training's success, this study does add to the field in a meaningful way. To the researcher's knowledge this is the first study to evaluate bystander trainings as a tool to combat incivility. It also offers up a multitude of plausible explanations for the training transfer failure and potential steps forward for combating this issue.

## **Introduction**

The importance placed on workplace wellbeing continues to rise in New Zealand at both an individual and organisational level. This is unsurprising given that the average person spends 90 000 hours of their life at work, and that wellbeing is correlated with decreased absenteeism (Kerr, & Vos, 1993), decreased turnover (Amin, & Akbar, 2013), and increased performance (Lamb & Kwok, 2016). In 2018, absenteeism from New Zealand organisations cost the economy 1.79 billion dollars, a quarter of which was directly ascribed to employee stress and wellbeing, making it both an expensive and ongoing problem that needs to be addressed (Business NZ & Southern Cross Health Society, 2019).

There are many factors that can affect employee wellbeing, driving turnover and absenteeism in an organisation to levels well above the industry average. One of the most pervasive of these factors is organisational culture. Organisational culture is defined as a set of shared assumptions, values, and beliefs held by the members of an organisation that form the basis for decision-making rationale (Schein, 1990). When the culture is toxic, it can be one of the most detrimental and difficult to change problems an organisation faces because it affects a multitude of layers (Gibson & Barsade, 2003).

Toxic organisational cultures are characterised by repetitive cycles of poor communication, self-centred behaviours and disharmony; they are often hubs for uncivil and bullying behaviours (Fink-Samnack, 2018). Addressing the negative behaviours and other detrimental outcomes of a toxic culture often entails fundamental changes to organisational practices, such as accountability systems, pre-existing social norms that encourage such behaviour, and an awareness of individual differences (Choi, & Park, 2019).

Social norms are closely tied to organisational culture and can be understood as unwritten rules and standards that are adhered to because of the innate desire individuals have of wanting to fit into a group (Liu, Gao, & Agarwal, 2019). This conformity is advantageous for survival and solidifies the directionality of an organisation's culture (Durand, & Kremp, 2016). When the social norms are beneficial to the whole, contributing to both individual, group and organisational goals a positive organisational culture is more likely. However, social norms that predominantly reinforce self-interest are detrimental to the collective wellbeing and often lead to a negative organisational culture (Philippe & Durand, 2011).

Changing any social norm and realigning an organisation's culture requires holistic behavioural interventions that set clear standards, define misconduct, and motivate employees to engage in more altruistic behaviours through reward systems and leadership role modelling (Coulson-Thomas, 2015). Bystander intervention trainings are a behavioural intervention proposed as a possible way to achieve this desirable end state. With the potential to target underlying factors that shape toxic organisational cultures, challenge pre-existing social norms, and encourage positive behavioural changes, bystander intervention training could serve as a multi-faceted organisational change tool (Coker, Cook-Craig, Williams, Fisher, Clear, Garcia, & Hegge, 2011). Although predominantly used to address serious forms of behavioural misconduct such as sexual assault, the underlying principles of this type of training theoretically transfer to different settings, social groups, and behavioural transgressions.

The proposed training aims to prevent the bystander effect, defined as any situation where witnesses to someone in distress do not intervene to remedy the situation and prevent further escalation or harm to the victim (Latane & Darley, 1968). This is achieved by challenging and altering individuals' perceptions of current social norms and any feelings of low self-efficacy they

may have about intervening on behalf of another, until they believe that inaction in such scenarios is an unacceptable form of behaviour (Banyard, 2008). Successful behavioural change programs, including those involving bystander effect prevention, have often used Ajzen's Theory of Planned Behaviour as a model framework. This theory conceptualizes and provides support for the precursory relationship of attitudes about behaviour, normative beliefs, and perceived control on behavioural intent leading to behaviour (Ajzen, 2011).

It is the crossover between the contributing factors to an organisation's culture and the bystander effect that present such training as a plausible framework for organisations reporting high levels of incivility and a negative culture. By addressing the inaction surrounding uncivil behaviours in the workplace, bystander intervention training should decrease overall incivility and minimize its escalation into bullying or harassment as well as prevent any further solidification of a harmful organisational culture (Hodgins, MacCurtain, & Mannix-McNamara, 2014).

Drawing on the Theory of Planned Behaviour, the present study integrates previous research on behavioural change, workplace culture, and bystander effect prevention, and evaluates the effectiveness of a bystander intervention program aimed at decreasing workplace incivility in a large New Zealand healthcare organisation. The evaluation will be carried out using three online surveys: one before the intervention, one two weeks following the training, and one two months later to capture training reactions and any changes in the attitudes, beliefs and behaviours of participants.

### **The Bystander Effect as a Mainstream Phenomenon**

The bystander effect became an actively researched area of social psychology during the 1960's, after the preventable rape and murder of a young woman named Kitty Genovese in 1964.

Psychological interest in this case stemmed from the fact that there were over 30 alleged witnesses who later reported seeing or hearing the crime unfold yet did nothing to assist Kitty at the time of the attack (Manning, Levine & Collins, 2007). Since then, research has focussed on uncovering the influential factors that lead to the phenomenon of group inaction under such grave circumstances, and ways to prevent it from happening (Latane, & Darley, 1968).

Social norms, distance from the victim, self-efficacy, and personal cost of intervening are all factors that have been found to affect the likelihood that someone will aid another in distress (Latane, & Darley, 1968). Unlike a lottery, where a greater number of tickets increases your chance of winning, the opposite is found to be true when you need assistance. Research has found that individuals who require help are less likely to receive it if they are surrounded by a larger group, especially if they lack an emotional bond with those group members (Levine, & Crowther, 2008). This is because of a cyclical process by which all members of a group look to each other for social cues on how to act. Inaction arises because all group members are seeking information in the same manner. Low self-efficacy or fear of negative consequences from intervening also decreases the likelihood of intervention. Finally, overarching social norms act as a reference point for deciding whether witnessed behaviours are socially acceptable. The more a behaviour is perceived as socially acceptable, the less likely it is to be stopped (Latane, & Darley, 1968).

Latane and Darley (1968) were the first to model this information and the underlying factors as a set of decisions individuals make ahead of intervening on behalf of another. The first component of this decision-making process is noticing a behaviour and identifying it as problematic. Then, an individual would need to decide if they felt personal responsibility for a situation and the resulting outcomes. Finally, they would need to consider if they knew how to engage with the situation to achieve a desirable resolution.

Human behaviour is rarely black and white due to a myriad of contextual factors that influence the underlying intention, resulting action and interpretation by others. Therefore, the first decision point described by Latane and Darley does not always have a universally accepted conclusion (Biel, & Thøgersen, 2007). Rape and murder might be easily distinguished as unacceptable behaviours by most in the twenty first century, but less extreme acts are not always so easy to discern. For example, lying is also predominantly viewed as a socially unacceptable behaviour. Yet the premise of “white lies,” which are “small” lies viewed to be less hurtful than the truth, exists as a somewhat acceptable form of behaviour in many social circles (Erat, & Gneezy, 2012). The distinction between the acceptability of these two types of lies is a result of the variation that exists in the perceptions of right and wrong between different individuals in differing settings. Perceptions are heavily influenced by context and culture, which is why organisations have a pivotal role in shaping their culture to clearly signal what constitutes acceptable and non-acceptable behaviour. (Fischer, Krueger, Greitemeyer, Vogrinic, Kastenmüller, Frey, & Kainbacher, 2011).

### **The Bystander Effect and Organisational Culture**

Bullying and other uncivil behaviours frequently occur in schools, social groups, and workplaces worldwide (Alvesson, & Sveningsson, 2015). Yet, these settings are frequently overlooked when it comes to bystander research, despite directly affecting a larger percentage of the total population than the explicit criminal activity that has made the effect so infamous. Although the extant literature on bystander training focusses on illegal behaviours, many of the psychosocial factors that account for the bystander effect in the context of criminal activity also account for its pervasiveness in organisational settings. The same influencers that affect bystander behaviour in extreme scenarios: negative social norms, self-efficacy, and perceived personal cost

of intervening, reinforce toxic organisational cultures and can lead to high levels of unchallenged incivility and bullying behaviour (Banyard, 2008; Meyer, & Zelin, 2018). By targeting these equivalent factors through the promotion of positive behavioural changes and the prevention of the bystander effect, less organisational incivility is deemed acceptable.

Organisational cultures are predominantly influenced by structure, processes, traditions, values, leadership, employee factors, and even national culture (Bloor, & Dawson, 1994). When these influences promote incivility, it is often due to unclear or negative social norms, low sense of personal responsibility for social dynamics in the organisation, and a lack of self-efficacy to stand up against varying degrees of incivility or misconduct (Pearson, Andersson, & Porath, 2005). Without clearly laid out expectations and consequences surrounding acceptable behaviour, employees look to others for guidance and are thus susceptible to the bystander effect and exposure to high rates of bullying (Baron, 2005).

When looking closely at an organisational setting, these behavioural role models often take the form of leaders (Freitas, Silva, & Marques Santos, 2019). The hierarchical structures found here can also serve to worsen the bystander effect, as individuals often feel less efficacious to stand up to a manager who disrespects a co-worker, compared to someone they perceive as holding equal status (Detert, & Treviño, 2010). The potential personal risks to their employment or working relationships also serves as a deterrent under these circumstances. This trepidation is stronger if an employee believes the organisational culture aligns with such behaviour and they are not supported for speaking out against it (Ortega et al., 2014).

New Zealand culture introduces another barrier to positive workplace cultures through the existence of two harmful social norms, which in turn also increase the likelihood of bystander inaction. These attitudes are the 'tall poppy syndrome' and "she'll be right" attitude (Kirkwood,

2006). Tall poppy syndrome presents as the inability to accept and celebrate the successes or unique qualities others possess. Instead, those who stand out or speak out are targeted with mean spirited actions or words to bring them back in line with everyone else (Dediu, 2015). Not only does this cull productivity and creativity within an organisation, it can produce a toxic climate where incivility is seen as a justifiable behaviour (Dediu, 2015). The potential personal cost, where intervening may make you stand out and transform you into the new target, alongside the ongoing modelling of uncivil behaviour, further cements these ideas (Dasborough, & Harvey, 2017).

The “she’ll be right” attitude perpetuates the tall poppy syndrome and consequently the bystander effect. This cultural phenomenon reflects the belief that preventative or corrective measures are rarely needed because a problem will naturally resolve itself in an acceptable way if unaddressed. This attitude is becoming increasingly criticized through its linkage to a failure to seek support with mental health (Wang, Angermeyer, Borges, et al., 2007). It also creates similar barriers to other forms of corrective and preventative action such as behavioural reformation (Keppel, 2012). In a bystander setting, it means that individuals are reluctant to intervene when they witness or are targeted by incivility and bullying because they believe that, in time, their inaction will lead to a natural and less effortful resolution (Dasborough, & Harvey, 2017). In practice, this does not lead to a decrease in such uncivil behaviours. Instead, the initial conflicts fester and lead to higher absenteeism and turnover costs within an organisation (Amin, & Akbar, 2013).

When left unchecked, minor uncivil behaviours can escalate into more serious forms of misconduct, like workplace harassment and bullying, due to the “foot in the door phenomenon” (Snyder, & Cunningham, 1975). This phenomenon shows that incremental increases in the intensity of a behaviour make the final behaviour seem less extreme than if the same behaviour

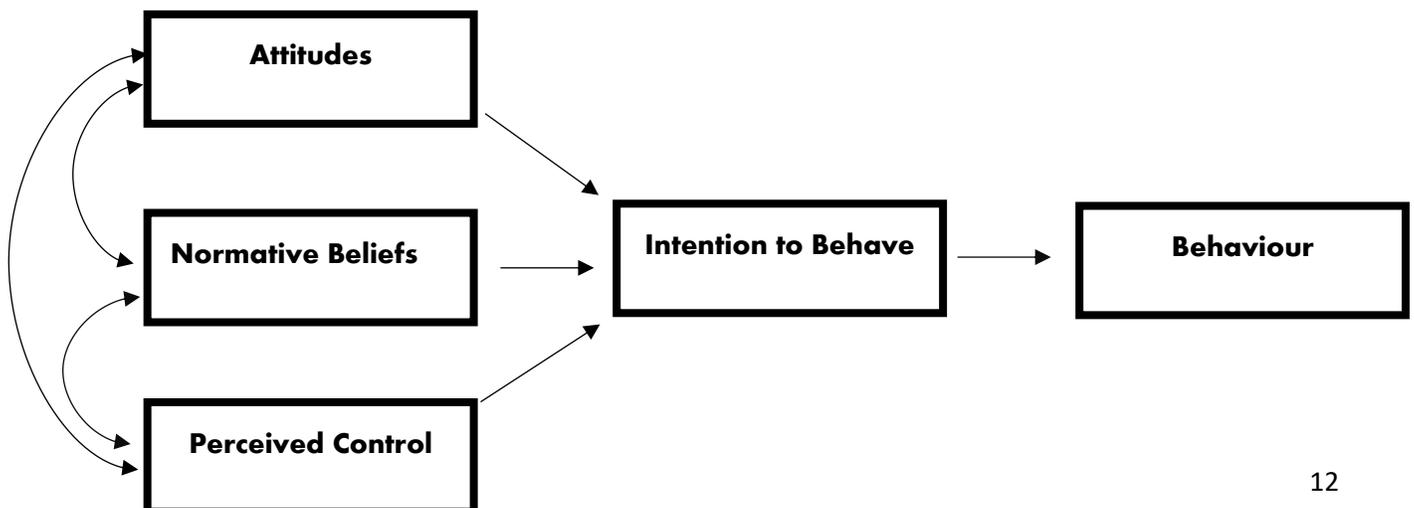
occurred initially (Baron, 1973). The foot in the door phenomenon in an organisational context helps to explain why the line between appropriate and inappropriate behaviour slowly shifts over time without clear standards and until bullying is fully incorporated into an organisation's culture as an everyday occurrence (Schneider, Ehrhart, & Macey, 2013).

### **The Bystander Effect Through the Lens of the Theory of Planned Behaviour**

The Theory of Planned Behaviour is a behavioural model adapted from the Theory of Reasoned Action to explain and determine changes in an individual's behaviour based on their motivations, attitudes, and sense of personal ability (Madden, Ellen, & Ajzen, 1992). This theory shows that intention serves as a motivator and is a strong determinant of behaviour. There are three main predictors of intent that form this model (Ajzen, 1991, see figure 1). These predictors are personal attitudes, normative beliefs, and perceived control. Under this model, personal attitudes refer to the thoughts and feelings an individual has about behaving in a certain way. Normative beliefs reflect the thoughts and feelings the individual believes others hold towards the behaviour. Finally, perceived control highlights the need for individuals to believe they have access to the right resources and possess the ability to behave in a specified way (Ajzen, 2011).

**Figure 1**

*The Theory of Planned Behaviour*



Under this model, the bystander effect (a lack of behaviour) results from low or no intention to behave in an intervening manner when faced with incivility or other bullying stimuli. This stems from a negative culture (i.e., normative beliefs) where the witnesses believe the majority view incivility as the sanctioned norm, rather than as exceptional and inappropriate behaviour. They also feel a low sense of personal responsibility, believing that someone else is more suited to offering assistance than they are (i.e., attitudes about intervening), and hold the perception that the potential personal costs of intervening outweigh the benefits (i.e., low perceived control).

The Theory of Planned Behaviour has laid the foundation to the design and evaluation of several successful bystander interventions such as the Green Dot program (Coker, et al, 2011). This training program is globally recognized for effectively targeting and decreasing sexual assault in varsity and military settings long term. The program raises awareness of the bystander issue under these circumstances and teaches a multitude of intervention strategies through role-playing exercises, discussion, and seminars (Coker, et al, 2011). This increases an individuals' self-efficacy which is about their level of perceived control over a given behaviour and provides them with a clearer understanding of acceptable behaviour; based on social norms, and their attitudes towards the behaviour which ultimately leads to the desire to intervene.

Another, lesser-studied bystander intervention training targeted aggressive behaviour towards first responders from bystanders at the scene of an incident (Van Erp, Gevers, Rispen, & Demerouti, 2018). In this scenario, there were two types of bystander: the witness to the original incident and responsible for the aggression towards the emergency responder, and any other emergency responders not directly targeted by the aggressor. This training was also based around

targeting bystander inaction and achieve behavioural change by removing barriers to bystander action. It was administered to first responders so that they were able to intervene on behalf of another safely and effectively, or alongside, their colleague if they were the one receiving abuse. This bystander intervention training also followed the Theory of Planned Behaviour as an evaluation model through the tracking of changes in attitudes, social norms, and perceived control. Self-efficacy, positive beliefs about intervening, intervention and employee wellbeing increased because of the training, despite an inability to prevent the external bystander problem that led to the aggressive behaviour initially (Van Erp et al., 2018).

### **Evaluating an Organisational Bystander Intervention Training Program**

The one-day bystander training evaluated in this study was trialled within a large functional unit in a large New Zealand healthcare organisation to target uncivil workplace behaviour and bullying and foster a more positive organisational culture. The training covered awareness of the bystander issues intervention strategies. The following will outline the underlying factors of the Theory of Planned Behaviour; attitudes, normative beliefs, and perceived control as well as expressing the way in which changes in these factors will be used to evaluate the bystander intervention training. In addition to these factors, changes in bystander intention to intervene, training reaction and expressed behaviours will be measured and discussed. It should be noted that the Theory of Planned behaviour was used as an evaluation framework but was not used for the creation of the training.

#### ***Attitudes***

Attitudes are foundational to achieving the desired post training result of bystander action, although they were not explicitly targeted as part of the training. This category, encompasses a)

attitudes employees hold towards the organisation and b) attitudes toward bystander intervention. Psychological safety was chosen as a key evaluation construct, as it plays an important role in producing successful organisational change outcomes and is linked to a positive organisational culture (Edmondson, Kramer & Cook, 2004). It reflects the level to which employees feel accepted and supported by an organisation and its employees (Ortega et al., 2014). When employees experience high psychological safety, they feel safe to speak openly, take risks and share thoughts and concerns without fear of negative responses and judgements from others (Chen, Jiang, Zhang, & Chu, 2019). At low levels of psychological safety, employees have low trust in an organisation and are less likely to engage in organisational citizenship behaviours (Nembhard, & Edmondson, 2006). The training encourages employees to speak up about incivility and bullying, providing them with communication tools to engage in bystander behaviours, and promoting a sense that it is safe to intervene and speak up in the organisation without fear of repercussions which could alter an individual's level of perceived psychological safety.

*Hypothesis 1.* Feelings of psychological safety will show a statistically significant increase from pre training (T1) to post training levels (T2)

Attitudes towards bystander intervention (i.e., decisional balance) will be assessed by looking at how individuals weigh up the pros and cons of intervening and encompasses their views of possible consequences bystander behaviour. A positive decisional balance score (+) is representative of a positive attitude towards intervening as a bystander, seeing the value in it despite the costs. A negative decisional balance score (-) represents a negative attitude towards intervening as a bystander and seeing focussing in on the potential personal cost. This training may influence decisional balance by raising greater awareness of the potential outcomes of bystander intervention opposed to inaction and encourage individuals to believe the positives outweigh the

negatives, by increasing levels of perceived value or benefit of intervening. Positively valenced decisional balance scores have been indicative of training transfer long term, as the positive behaviours resulting from this attitude act as a reinforcing mechanism (Banyard, & Moynihan, 2011).

*Hypothesis 2a.* There will be a statistically significant increase in positive attitudes about bystander intervention from pre training (T1) to post training levels (T2) (i.e., decisional balance (+)).

*Hypothesis 2b.* There will be a statistically significant decrease in negative attitudes about bystander intervention from pre training (T1) to post training levels (T2) (i.e., decisional balance (-)).

### ***Normative Beliefs***

For employees to engage with behavioural change, they also have to believe that others see a given behaviour as desirable and part of the culture. The less civil an organisational culture is perceived to be, the more likely it is that the bystander effect exists, and that the organisation has a bullying problem (Meyer, & Zelin, 2018). Organisational culture is the embodiment of the organisation's shared values and norms, whilst the climate is individual perceptions of the culture (Ostroff, Kinicki, & Muhammad, 2012). By assessing the civility culture and climate, the need for such a training within the organisation will be highlighted and provide a baseline by which to measure any cultural shifts (Burke, & Hutchins, 2007). Civility beliefs are important for increasing the likelihood that employees will rely on their personal judgement and use their skills to intervene when they witness incivility because they see it as a normal and

expected behaviour within the organisation. This culture of civility should also decrease the number of uncivil acts occurring in the organisation over time (Meyer, & Zelin, 2018).

However, it is possible that there are few reported incidences because of a lack of awareness surrounding bullying within an organisation. If bullying has become so ingrained in an organisation's culture, then it is possible employees have become desensitized to the point they do not actively notice the behaviours or see them as negative acts (Jabr, Denke, Rawls, & Lamm, 2018). In this case, there may be a mismatch between the perception of what is acceptable in terms of organizational incivility and the true level of incivility present within the organisation (i.e., the way it is experienced by employees).

*Hypothesis 3.* Perception of civility norms will show a statistically significant increase from pre training (T1) to post training levels (T2)

*Hypothesis 4.* The perceived number of uncivil acts will decrease from pre training (T1) to post training levels (T2).

### ***Perceived Control***

Self-efficacy is the belief an individual has in their own ability to achieve a desired outcome and is often stated as an important factor in both training transfer and bystander literature (Banyard, 2008; Burke, & Hutchins, 2007). This is often a result of the provision and mastery over several factors. Pertaining to bystander efficacy, which is the personal belief in an individual's ability to carry out a successful intervention, the bystander must believe they possess the skills, support, and are confident to engage in the behaviour (Banyard, 2008). Without the alignment of all these factors which make up self-efficacy, the likelihood of bystander intervention decreases. By measuring employee feelings of efficacy related specifically to bystander interventions,

changes in the intention to enact the learnt intervention strategies can be detected. This training could address a lack of perceived control through education, roleplaying, and resources provision (Banyard, 2008). By raising awareness of the bystander issue and workplace incivility through discussion and problem identification exercises, employees feel both accountable and confident to act on their newly acquired judgements of behavioural acceptability using one of the intervention strategies taught during the training (Coker et al., 2011).

*Hypothesis 5.* Feelings of bystander efficacy will show a statistically significant increase from pre training (T1) to post training levels (T2).

### ***Intention to Behave***

Intention to behave results from the combination of earlier measures (attitudes, beliefs and perceived control). An increase in intention to behave should be apparent if there is an increase in perceived control, positive normative beliefs and attitudes which align with bystander intervention. Intention to intervene will be examined by providing employees with workplace incivility scenarios that outline the four intervention strategies taught in the training and highlighted in pre-existing bystander literature – Direct, Delay, Distract, Delegate – and no action as possible response options. Each strategy differs in the level of confrontation required with from delay being the least to direct as the most. The delay strategy involves checking in with the victim later rather than addressing the situation at the time of the incident. Delegate is the involvement of another individual or party to remedy the situation. Distract is the most subtle form, and involves the bystander de-escalating a situation by changing the subject/ focus of the interaction. Finally, the direct strategy is characterized by a physical or verbal response to the situation that immediately addresses the perpetrator head on (Banyard, Moynihan, & Plante, 2007). By rating the intervention strategies as actions that they are more likely to take compared

to inaction, employees are showing intention to behave. Intention to apply intervention strategies may follow from increased feelings of bystander efficacy when it comes to bystander intervention (Burke, & Hutchins, 2007). This also shows retention of training-based knowledge because they are able to correctly identify intervention strategies as preferable to non-intervention strategies. The presence of these findings would also be indicative of training transfer, provided there is an increase from pre training to post training levels that is sustained at follow up.

*Hypothesis 6.* There will be a statistically significant increase in intention to intervene at post training (T2) compared to pre training (T1)

### ***Behaviour***

According to Ajzens Theory of Planned Behaviour, intention to behave directly precedes behaviour (Ajzen, 2011). This means that an increase in the intention to behave as an active bystander should result in the use of the four intervention strategies taught in the training (distract, delay, delegate, direct). The outcome of behavioural change was assessed in two ways. Firstly, by measuring if there had been opportunity to intervene as a bystander, and whether one of the intervention strategies learnt during the training was used at the time (Direct, Delay, Distract, Delegate). Behavioural change was also assessed by examining whether participants had discussed bystander intervention and its importance in their specific environment and workgroups (Gilpin-Jackson, & Bushe, 2007).

*Hypothesis 7.* Intention to behave as a bystander (T2) will be significantly associated with an increase in the use of bystander intervention strategies (delay, distract, delegate or direct) at follow up (T3)

*Hypothesis 8.* Intention to behave as a bystander (T2) will be significantly associated with an increase in discussions about bystander intervention at follow up (T3)

## **Method**

### **Training Outline**

The bystander intervention training aimed to target a wide range of commonly occurring negative workplace behaviours by challenging harmful attitudes and beliefs that facilitate incivility and bullying. The training, delivered to multiple groups over the course of a week, consisted of three main sections. Section 1 covered the importance of intervening and raised awareness of what constitutes harmful behaviour. Section 2 focused on teaching four strategies of intervention; Direct, Delay, Distract, Delegate, and included information on their best fit for a given situation.

The last section of the training involved open discussion and roleplaying to practice each of the four intervention strategies in a range of different workplace scenarios. Section one of the training targeted behavioural and normative beliefs about civility and bystander intervention in the organisation, whilst sections two and three targeted the control beliefs portion of the Theory of Planned Behaviour pertaining to the ability, self-efficacy and skills required to intervene.

### **Participants**

140 individuals representing a division of a large healthcare organisation in New Zealand undertook a one-day bystander intervention training as part of their ongoing job training

requirements. Of those, 105 completed the pre training survey, 67 the post training survey and 39 in the follow up. The response rate from pre-training and post-training surveys was 29% and 18% for participants completing all three surveys. 69% of participants identified as females and 30% identified as male. The reported age range was 26 years to 65 years old ( $M = 37$ ). The average reported employment tenure within this organisation was ( $M = 4.7$ ) years and ranged from .5 years to 37 years. Participation was voluntary and no external incentives were offered for participation. Ethics approval and Māori consultation were sought and provided to both the University of Canterbury (UC) and the organisation for the evaluation study and the training.

## **Procedure**

Employees in the division received an email from the organisation outlining the purpose of the training as well as an invitation to participate in the evaluation study, which was voluntary. Participants were informed of the time commitment involved, the voluntary nature of study participation, and that confidentiality was ensured. The time commitment requested was the completion of 3x 20-minute surveys: one before the training (pre-training), one within two weeks of training completion (post-training), and one two months after training (follow-up). The full email can be found in Appendix A. The organization provided email addresses for all training participants, but only those who agreed to participate were contacted again. Participant responses to the three surveys were linked through their email addresses and stored on the UC server through Qualtrics to ensure the organisation had no access to raw data. This identifying information was removed from the results prior to data analysis.

The pre- training survey contained additional information about the study and a consent form for participating in the study (see Appendix B for full information sheet). This survey (Appendix C) was sent out two weeks prior to the training launch date and employees were able

to complete it up until the day of their training session. Space for additional comments was provided after each measure to collect qualitative feedback. The post-training survey link was sent out one week after the final training wave had been completed. Participants were again given two weeks to complete the survey, with a reminder email sent after one week. In addition to the pre-training questions, the post-training survey included both quantitative and qualitative training evaluation questions (see Appendix C).

The follow-up survey was launched two months after the training sessions finished and remained active for two weeks, with a reminder email sent one week later. (Appendix C). It contained the same measures as the post-training survey but replaced the training evaluation questions with two additions measures of behaviour.

## **Measures**

All items were scored against a 5-point Likert scale: *1= strongly agree, 2= somewhat agree, 3= neither agree nor disagree, 4= somewhat disagree and 5= strongly disagree.*

### ***Attitudes***

#### **Psychological safety**

The construct of psychological safety was measured using a contextually adapted version of Edmondson's (1999) 7-item brief psychological safety questionnaire one factor scale ( $\alpha = .85$ ) (Edmondson, 1999). This scale was designed to measure an individual's belief that their team will support them and be non-critical of them if they speak and behave openly (Edmondson, 1999). Items were made contextually specific by changing the word team to unit/ workgroup and included items such as "*It is safe to take a risk in this unit/workgroup*".

### **Decisional Balance**

Attitudes towards bystander intervention was measured using an adapted version of Banyards (2007) 11- item two factor decisional balance scale (+) ( $\alpha = .65-.71$ ) and (-) ( $\alpha = .70-.79$ ) (Banyard, 2007). This scale was designed to measure the weight an individual placed on positive or negative outcomes of intervening in a sexual assault context. Items were changed to better fit the organisational context by changing “friends” to “co-workers” and “physical harm” to “negatively impact my career and work relationships”. This scale included items such as “*Co-workers will look up to me and admire me if I intervene.*”

### **Subjective Norms**

#### **Civility norms and perception of negative workplace behaviours**

The constructs of organisational civility culture and climate were measured using adapted versions of two reliable scales. The 4-item one factor Civility Norms Brief questionnaire ( $\alpha = .81-.85$ ) (Walsh, Magley, Reeves, et al., 2012) was used to tap into perceptions of civility as a normal behaviour within the organisation. The 22-item Negative Acts Frequency questionnaire (NAQ) (Einarsen, & Hoel, 2001) was also to assess incivility culture and climate in a more targeted manner, by looking at perceptions of frequency for negative workplace behaviours. The NAQ is a well-established scale ( $\alpha = .91$ ) (Rai & Agarwal, 2017). Items from the NAQ were altered to align with the organisation’s terminology of “unit/workgroup” where necessary and include items such as “*Rude behaviour is not accepted in our unit/workgroup*” in the Civility Norms Brief questionnaire and “*You are exposed to an unmanageable workload*” in the NAQ.

### **Perceived Control**

#### **Bystander efficacy**

The construct of self-efficacy in a situation requiring bystander intervention was measured using an adapted version of Banyards (2007) 14 item, two factor Bystander Efficacy scale ( $\alpha = .82$ )

( $\alpha = .80$ ) (Banyard, 2007). This scale has been adapted to change the setting and situation from college sexual assault to incivility in an organisational setting using the training program scenarios and the Negative Acts questionnaire for guidance. A sample item is *“Please consider how confident you feel to act in the following situation - Talking to a co-worker who I suspect is being harassed/bullied.”*

### ***Behavioural Intent***

Behavioural intent was measured using a 12-item questionnaire based on content from the intervention training. Employees rated the likelihood that they would intervene or would not intervene in each situation using one of the four strategies taught during the training (Direct, Delay, Distract, Delegate). Example items are *“I would directly address a manager if they were constantly interrupting a colleague.”* *“If a co-worker burst into tears after reading an email, I would find someone to check on them”* *“I would distract manager if they were constantly interrupting a colleague and* *“If I overheard gossip about a coworker I would go and tell someone.”*

### ***Bystander Behaviour***

Bystander Behaviour was measured qualitatively and quantitatively. In the quantitative portion, participants were asked to report whether an opportunity to intervene had arisen, and if they had intervened using any of the four strategies taught during the training (delay, distract, delegate, direct). This was coded as intervening (yes = 1) and no intervention (no = 0) Space was also provided for participants to provide a qualitative account of the situation, including details pertaining to the who, what, why and how. Four questions were also included to assess behavioural changes in beliefs and attitudes about bystander intervention within their organisation. For

example, *“I have challenged others to think about how their actions affect others’ wellbeing”* The full set of behavioural questions can be found in Appendix C.

### ***Training evaluation***

Employees were asked to rate six statements regarding the relevance and helpfulness of the training. Items included *“What was taught was valuable to create a safe and healthy workplace culture.”* Two qualitative questions asking for positive aspects of the training or possible improvements were also included; *“Please use the space below to outline three positive aspects of the training”* and *“Please use the space below to outline three ways you think the training could be improved.”* Additional space was provided for further elaboration.

### **Data Analysis**

All quantitative data was analysed using Jamovi (1.6.1). Qualitative data was explored thematically. Principal axis factor analysis using oblique rotation was run on all measures at each time point to explore their factor structure. Composite scores were created for factors with eigenvalues  $>1$  and item loadings  $> .40$ . Items below this were excluded from the final matrix (Costello & Osborne, 2005). Reliability analysis was ran on all measures at each time point to ensure measures met the .70 alpha cut-off and items with very low item-total correlation or explanatory power were removed. The full set of matrices and reliabilities can be found in Appendix D. Pairwise comparison T-tests were then run to test the overall mean differences between pre training and post training, and between pre training and follow up for predictors and behavioural intent variables. This was carried out to test hypotheses 1 through to 6. T tests were chosen for the primary analysis due to the large difference in sample sizes between pre training (T1) and follow up (T3). ANOVAs and post-hoc analyses using the Bonferroni approach were

then conducted (Appendix F) solely to provide a graphical display of the changes in predictor variables over time. A correlation analysis was run to do a preliminary check for multicollinearity prior to running ANOVA (Appendix E). The assumption of sphericity was also checked and corrected for using Greenhouse-Geisser if violated. Multiple Regression and Logistic Regression were intended to test hypothesis 7 and 8 to see whether higher levels of intention to intervene was related to more bystander intervention discussion or higher implementation of the four intervention strategies (Direct, Delay, Distract, Delegate). Due to the low power achieved (N=25) descriptive statistics were generated instead and independent t tests were run to see if there was a significant difference in the mean scores of predictors for those who intervened post training (T3) using one of the four strategies (Direct, Delay, Distract, Delegate). compared to those who did not intervene. Finally, thematic analysis was carried out according to guidelines laid out by Braun and Clarke (2006). This process involved becoming familiar with the data, coding the data to highlight possible points of interest, identifying themes and finally refining those themes. The purpose of this analysis was to identify strengths and weaknesses of the training from a participant standpoint and to gather accounts of incidents specific to the organisation.

## **Results**

### ***Quantitative Analysis***

Prior to hypothesis testing, exploratory factor analysis was run to discern the factor structure of the scales and examine whether items needed to be removed from further analysis (Howard, 2016). Scale reliability and item-total correlation was also checked for each scale at all three time points. An alpha of .70 was used as an established minimum reliability cut-off (Costello, & Osborne, 2005). Scales that did not meet this cut-off were examined closely to see if the removal of items would increase reliability. Items with low item-total correlation were also examined to

see if the scale was made more robust by their removal. The minimum item-total correlation was set at .3 (Cristobal, Flavián, & Guinalú, 2007) and items were removed one at a time.

### ***Exploratory Factor Analysis and Reliability Analysis***

Civility Norms loaded onto one factor at all three time points with loadings ranging from .89 to .94 which is consistent with the literature (Walsh, Magley, Reeves, Davies-Schriels, Marmet, & Gallus, 2012). This scale had high reliability at all three time points:  $\alpha = .90$  at pre training,  $\alpha = .93$  at post training and  $\alpha = .94$  at follow up. The scale had good item-total correlation and no items were removed prior to further analysis.

The Psychological Safety scale also loaded onto one factor as expected for all time points with loadings ranging from .66 to .85 (Edmondson, 1999). This scale also showed high reliability with  $\alpha = .87$  at pre training,  $\alpha = .86$  at post training and  $\alpha = .87$  at follow up. item-total correlation were also satisfactory and no items were removed.

The Negative Acts Questionnaire was expected to split into two or three factors. Previous studies had found that the scale primarily contained two underlying factors representing work related negative acts (work) and negative acts that were more related to the individual (personal). Some literature highlighted a possible third factor of negative work acts related to work overload. Items included in this factor were 19, 20, 21 and 22 (Einarsen, Hoel, & Notelaers, 2009). However, this factor was not consistently present in this study and a two-factor solution was found. Item 2 failed to load onto either of the two factors at follow up and was removed. The Negative Acts (personal) factor had a pre training reliability of  $\alpha = .93$  which was improved to  $\alpha = .94$  after the removal of items 20 and 21 and 22 containing item-total correlation of .35, .34 and .20 respectively.

The post training reliability was  $\alpha = .86$  after the removal of item 19 which had an item-total correlation of .40. Finally, the Negative acts (personal factor) had  $\alpha = .90$  at follow up. The Negative Acts (work) factor had a pre training reliability of  $\alpha = .79$  after the removal of item 2 with an item-total correlation of .22 the post training reliability was  $\alpha = .80$  and the follow up reliability was  $\alpha = .86$ . Concerns over the potential lowering of content validity was addressed by looking at the items removed to ensure there was some degree of crossover with remaining items.

Bystander Efficacy was expected to split into two factors relating to helping someone you knew and helping a stranger (Hoxmeier, 2019). Three factors were originally extracted for this scale from the pre training data, but these same factors were not found in post training and follow up data. The removal of item 3 for low item-total correlation at .22 and item 6 at .40 led to the consistent extraction of two factors at all three time points. These factors differed from the previous literature, as the items in the factors reflected the type of intervention one felt efficacious about, rather than the relationship with the victim. The factors obtained in this study reflected taking a physical preventative action (act – items 8, 9 and 11 to 13), or speaking up (speak – items 1 to 7 and 10). A possible explanation for the difference in item content for each factor could be a result of the item adaptations to fit the context of organisational incivility, instead of the sexual assault context it was created for. The Bystander Efficacy (speak) factor had a pre training reliability of  $\alpha = .91$ , post training reliability of  $\alpha = .85$  and reliability of  $\alpha = .81$  at follow up. Whilst the Bystander Efficacy (act) factor had slightly lower reliabilities of  $\alpha = .86$  at pre training,  $\alpha = .84$  at post training and  $\alpha = .80$  at follow up.

Items on the Decisional Balance scale loaded onto two factors as predicted, with the positive altruistic items 1 through to 5 loading onto one factor (+) and the selfish items 6 through to 11 loading onto another factor (-) (Banyard, 2007; Hoxmeier, 2019). Loadings ranged between

.61 and .87. When split into its separate factors, pre training reliability for the Decisional Balance (-) was  $\alpha = .80$ , post training  $\alpha = .81$  and follow up  $\alpha = .80$ . The Decisional Balance (+) factor had lower reliabilities of  $\alpha = .72$  at pre training,  $\alpha = .71$  at post training and  $\alpha = .82$  at follow up. No items were removed from either factor of the Decisional Balance scale at any time point.

The Training Intention scale was developed for the purpose of this study. Training intention items loaded onto four different factors, which were labelled according to their content. Factor 1 included items 1 to 3 and involved intent to intervene when the manager is the aggressor (manager). Factor 2 included items 4 to 6 and covered intent to intervene when a co-worker was the aggressor (co-worker). Items 7 to 9 loaded onto factor 3 and reflected intent to intervene when the individual is the target of incivility (personal). Items 10-12 loaded onto the fourth factor and outlined intent to intervene in situations where the incivility was not directly witnessed by the bystander (hearsay). The removal of item 5 (factor 2) 3 (factor 1) and 9 (factor 3) was necessary to maximise reliability and ensure the items consistently loaded onto the 4 factors. The removal of 3 items was deemed acceptable for both reliability and validity purposes given that the scale still contained more than 4 items, and that reverse coded and non-reverse coded items were still present (Costello, & Osborne, 2005). The final pre training reliability for Factor 1 (manager) was  $\alpha = .72$ , post training  $\alpha = .70$  and follow up  $\alpha = .71$ . Factor 2 (co – worker) had the highest reliability with  $\alpha = .79$  pre training,  $\alpha = .75$  and post training and  $.80$  ad follow up. Factor 3 (personal) had the lowest reliability of the training intent factors with  $\alpha = .70$  at pre training,  $\alpha = .69$  at post training and  $0.65$  at follow up. Finally, factor 4 (hearsay) had a pre training reliability of  $\alpha = .73$ , post training reliability of  $\alpha = .72$  and  $\alpha = .70$  at follow up.

The 6 item Training Evaluation scale was administered post training and initially split into two factors with items 1 -5 loading onto factor 1 and item 6 loading onto factor 2. The correlation

between factors was  $r = .54$  so they were combined into one factor. This scale met the minimum reliability cut-off  $\alpha = .73$  and no items were removed.

Finally, The Behavioural Scale created for the purposes of this study was only administered at follow up. This scale loaded onto two factors with items 1, 2 and 4 loading onto factor 1 (own) and item 3 loading strongly onto factor two (other) at .90. Factor (own) incorporates personal behavioural choices and speaking up for oneself or others, whilst factor two (other) incorporates an individual addressing other people who are not engaging in intervention behaviours. If all items were combined the reliability was  $\alpha = .57$ . However, there was low inter factor correlation at 0.12, so this scale had a two-factor solution. Factor 1 had a reliability of  $\alpha = .63$ .

### ***Hypothesis Tests***

#### **T Tests**

Pairwise t-tests were run to determine if there had been a significant change in the mean scores of each factor (attitudes, normative beliefs, and perceived control) which predict intention to behave and behaviours from pre training to post training, and from post training to follow up. Table 1 shows the mean scores of all variables expected to increase from pre training to post training at a group level and Table 2 shows the mean scores of variables expected to decrease. The results of Table 1 show a statistically significant increase in the mean scores of all factors except for intention to intervene on behalf of a co-worker and intention to intervene on behalf of one's self (personal). No variables in Table 2 showed a statistically significant decrease in mean scores.

An increase in feelings of Psychological safety ( $t = -2.14, p = 0.02$ ) provides support for Hypothesis 1, which predicted that feelings of psychological safety will show a statistically significant increase from pre training (T1) to post training levels (T2). The statistically significant improvement in the mean scores of Decisional Balance (+) in Table 1 ( $t = -3.27, p = .00$ ) provides

support for Hypothesis 2a which predicted that there will be a statistically significant increase in positive attitudes about bystander intervention from pre training (T1) to post training levels (T2). However, the lack of a statistically significant decrease in Decisional Balance (-) shown in table 2 ( $t = .50, p = .31$ ) fails to support Hypothesis 2b. An increase in the mean score of Civility Norms ( $t = -2.08, p = .02$ ) provides support for Hypothesis 3 that the perception of civility norms will show a statistically significant increase from pre training (T1) to post training levels (T2) and Hypothesis 4, that the perception of a positive organisational culture and climate will increase from pre training (T1) to post training levels (T2). However, Hypothesis 4 is only partially supported because the mean scores of the negative acts questionnaire in Table 2 do not decrease in a statistically significant way ( $t = .77, p = .22$ ) for Negative Acts (work) and ( $t = .46, p = .33$ ) Negative Acts (personal). Hypothesis 5, which predicted that feelings of bystander efficacy will show a statistically significant increase from pre training (T1) to post training levels (T2) is supported by an increase in the mean scores of Bystander Efficacy (Act and Speak) respectively ( $t = -4.70, p = .00$ ), ( $t = -4.95, p = .00$ ). Finally, the prediction that there will be a statistically significant increase in intention to intervene at post training (T2) compared to pre training (T1) in hypothesis 6 is inconclusive due to mixed findings for intention to intervene. Intention to intervene (manager and hearsay) show a statistically significant increase in means ( $t = -2.61, p = .01$ ) and ( $t = -3.64, p = .00$ ) respectively. There was no statistically significant increase in intention to intervene (co-worker) at ( $t = -.66, p = .26$ ) and intention to intervene (personal) at ( $t = 0.24, p = .59$ ). The lack of significant improvement for intention to intervene on behalf of a co-worker could be due to the high pre training mean score ( $M = 4.33$ ) out of a maximum score of 5. This would imply that employees were already high in intention to intervene on behalf of a co-worker and had little room for an increased score post training.

**Table 1**  
*Paired T test of Pre training and Post Training Variables (+)*

Variable	Pre <i>M</i>	Post <i>M</i>	t statistic	df	p	<i>M</i> difference	Effect Size	95%CI Lower	95%CI Upper
Civility Norms	3.40	3.62	-2.08*	61	.02	-0.22	.10	-0.26	-0.52
Psychological Safety	3.24	3.43	-2.14*	61	.02	-0.18	.08	-0.27	-0.52
Bystander Efficacy(act)	3.38	3.80	-4.70**	61	.00	-0.44	.09	-0.60	-0.86
Bystander Efficacy (speak)	3.65	4.11	-4.95**	61	.00	-0.46	.09	-0.63	-0.90
Decisional Balance (+)	3.68	3.94	-3.27**	61	.00	-0.26	.08	-0.42	-0.67
Training Intention (manager)	2.75	3.03	-2.61**	61	.01	-0.28	.11	-0.33	-0.60
Training Intention (co-worker)	4.33	4.39	-0.66	61	.26	-0.06	.09	-0.08	-0.33
Training Intention (personal)	3.27	3.25	0.24	61	.59	0.02	.09	0.03	-0.22
Training Intention (hearsay)	2.74	3.11	-3.64**	61	.00	-0.37	.10	-0.46	-0.72

Note.  $H_a$  N = 64 Note.  $H_{aa}$  \* =  $P < 0.05$  \*\* =  $P < 0.01$  Note.  $H_{aaa}$  Time 1 < Time 2

**Table 2**

*Paired T test of Pre Training and Post Training Variables (-)*

Variable	Pre <i>M</i>	Post <i>M</i>	t statistic	df	p	Effect Size	95% CI Lower	95% CI Upper
Negative Acts (personal)	2.25	2.21	0.46	61	.33	0.04	-0.19	-0.31
Negative Acts (Work)	2.95	2.88	0.77	61	.22	0.07	-0.15	-0.35
Decisional Balance (-)	3.35	3.31	0.50	61	.31	0.04	-0.18	-0.31

Note.  $H_a$   $N = 62$  Note.  $H_{aa}$  \* =  $P < 0.05$  \*\* =  $P < 0.01$  Note.  $H_{aaa}$  Time 1 > Time 2

Table 3 and Table 4 show the change in predictor variables from post training (T2) to follow up (T3). Overall, while there were no statistically significant changes between post-training and follow-up, the means seem to suggest a decline across the predictors and behavioural intent variables of interest between post training (T2) and follow up (T3). The biggest decline occurs for the mean score of Civility Norms with a mean difference of 0.28. Training Intention (personal) shows the smallest decrease with a mean difference of 0.01 between time points. Negative Acts (personal) is the only predictor to increase from pre training ( $M= 2.62$ ) to ( $M =2.71$ ).

**Table 3**  
*Paired T test of Post Training and Follow Up Variables (+)*

Variable	Post <i>M</i>	Follow Up <i>M</i>	t statistic	df	<i>P</i>	<i>M</i> difference	SE Difference	Effect Size	95%CI Lower	95%CI Upper
Civility Norms	3.30	3.02	1.16	25	.85	0.28	.17	.21	undefined	-0.52
Psychological Safety	3.02	3.0 0	0.11	25	.54	0.02	.15	.02	undefined	-0.52
Bystander Efficacy(act)	4.13	3.89	2.41	25	.99	0.24	.10	.47	undefined	-0.86
Bystander Efficacy (speak)	3.76	3.52	1.60	25	.94	0.25	.16	.31	undefined	-0.90
Decisional Balance (+)	4.01	3.75	2.32	25	.99	0.26	.11	.46	undefined	-0.67
Training Intention (manager)	2.78	2.71	0.51	25	.70	0.07	.14	.10	undefined	-0.60
Training Intention (coworker)	4.44	4.38	0.51	25	.70	0.06	.11	.10	undefined	-0.33
Training Intention (personal)	3.39	3.38	0.04	25	.52	0.01	.16	.01	undefined	-0.22
Training Intention (hearsay)	3.01	2.88	0.80	25	.78	0.13	.16	.15	undefined	-0.72

Note.  $H_a$   $N = 26$  Note.  $H_{aa}$  \* =  $P < 0.05$  \*\* =  $P < 0.0$

**Table 4**  
*Paired T test of Post Training and Follow Up Variables (-)*

Variable	Post <i>M</i>	Follow Up <i>M</i>	t statistic	df	p	<i>M</i> difference	Effect Size	95% CI Lower	95% CI Upper
Negative Acts (work)	3.15	3.04	0.75	25	.23	-0.11	.15	0.-14	undefined
Negative Acts (personal)	2.62	2.71	-0.90	25	.81	0.09	-.18	0.-25	undefined
Decisional Balance (-)	3.62	3.56	-0.43	25	.34	-0.06	.08	0.-75	undefined

Note.  $H_a$   $N = 26$  Note.  $H_{aa}$  \* =  $P < 0.05$  \*\* =  $P < 0.01$

### ***ANOVA and Post HOC analysis***

ANOVA and Post Hoc Analysis were run to create graphical displays of the changes over time in variables from pre training to follow up. The complete set of tables from the ANOVA repeated measures can be found in appendix F for reference. These tables were not included in the results because hypotheses (1 – 6) were tested using t tests (tables 1-4)

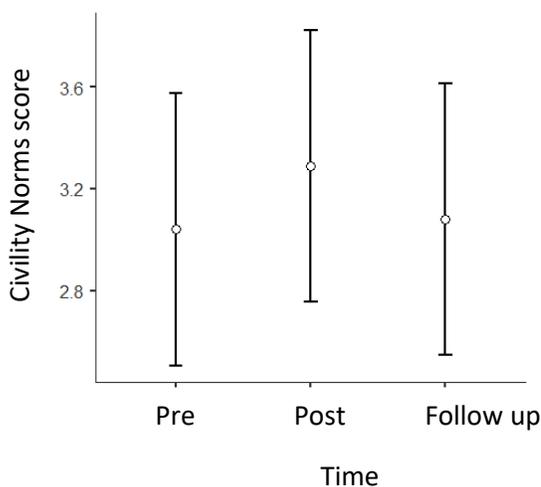
Prior to running the ANOVA, a correlation analysis was run to check for multicollinearity between all three time points (see appendix E). Composite variables with a correlation greater than .7 were noted as possibly having multicollinearity (Mansfield & Helms, 1982. Pre training Civility Norms and pre training Psychological Safety had correlations of .71, follow up Civility Norms had correlations with both follow up NAQ (work) and follow up Decisional Balance (-) of -.75 and -.71 respectively. No corrections for multicollinearity were made at this point as it was assumed that there was not a causal link.

Mauchleys test of Sphericity was conducted on all ANOVA's and corrected accordingly using Huynh Feldt for significant tests with an epsilon greater than .75 and Greenhouse- Geisser for epsilons less than .75 (Lane, 2016) NAQ (personal) required Huynh Feldt correction and Bystander Efficacy (speak) required Greenhouse- Geiser correction.

Figures 2 – 12 graphically illustrate the findings from the Repeated Measures ANOVA Post Hoc analysis and show that there is change in the expected direction for all composite variables post training compared to pre training <sup>1</sup>. This change does not hold at the follow up for any variables except for Negative Acts (work) see figure 4 and Decisional Balance (-) see figure 9. These variable scores continue to decrease from pre training to post training and post training to follow up.

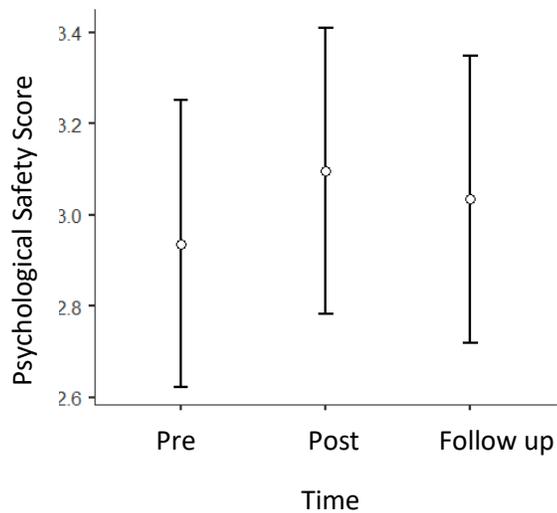
**Figure 2**

*Civility Norms*



**Figure 3**

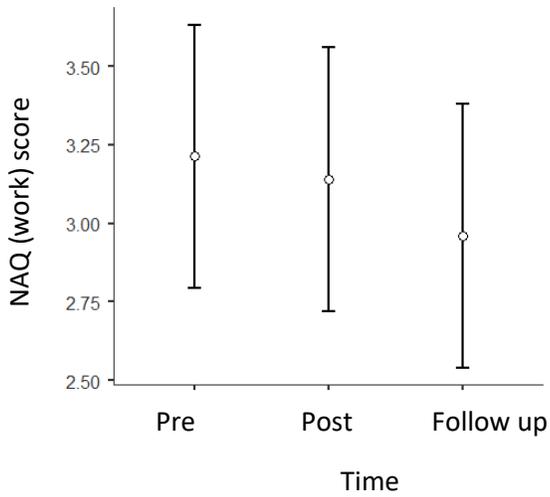
*Psychological Safety*



<sup>1</sup>.The researchers are aware that the figures are truncated, the statistical package used did not allow for the manual alteration of the Y axis.

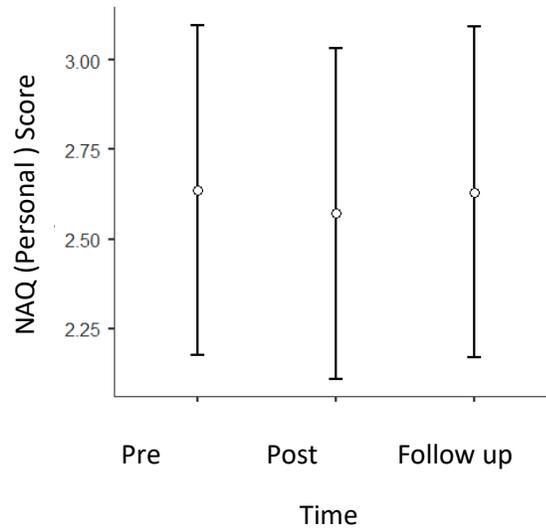
**Figure 4**

*Negative Acts (NAQ) (Work)*



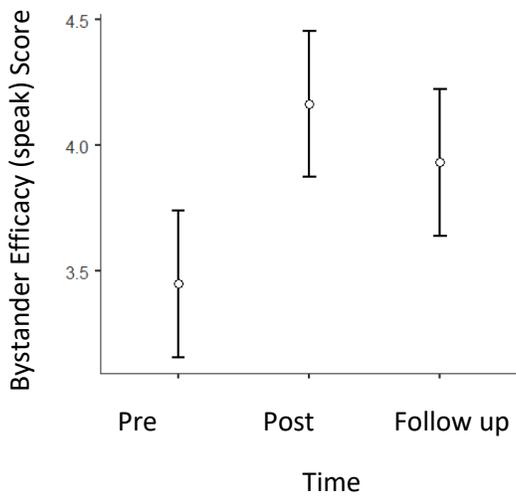
**Figure 5**

*Negative Acts (NAQ) (Personal)*



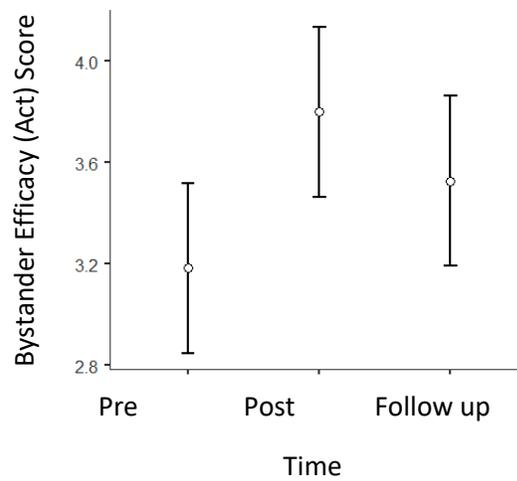
**Figure 6**

*Bystander Efficacy (Speak)*



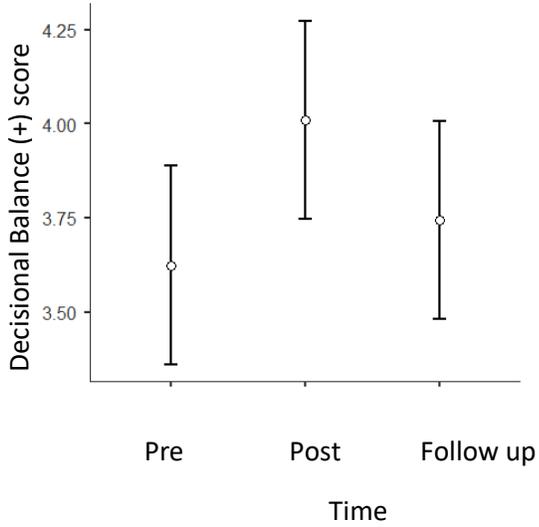
**Figure 7**

*Bystander Efficacy (Act)*



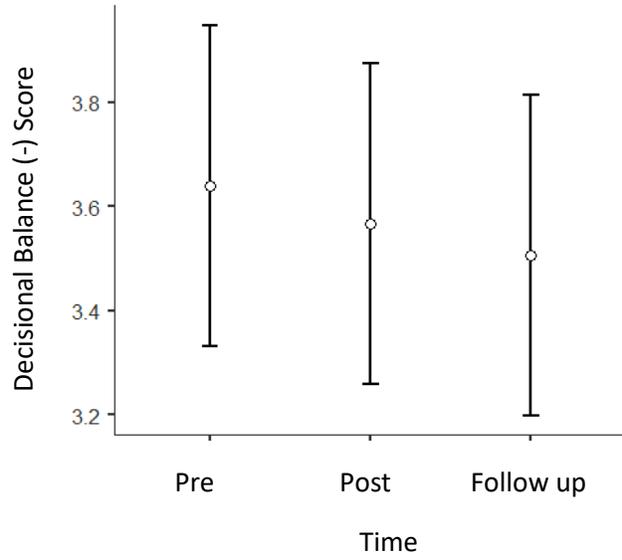
**Figure 8**

*Decisional Balance (+)*



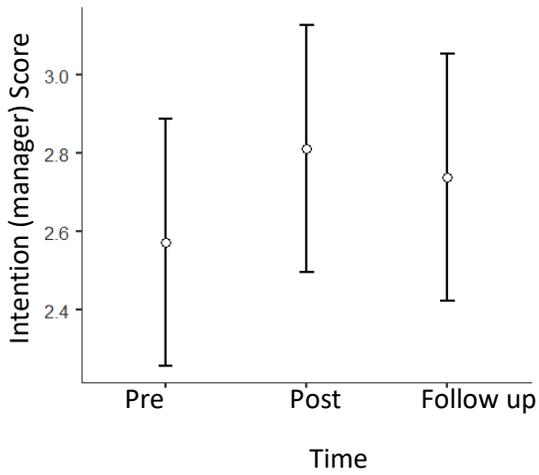
**Figure 9**

*Decisional Balance (-)*



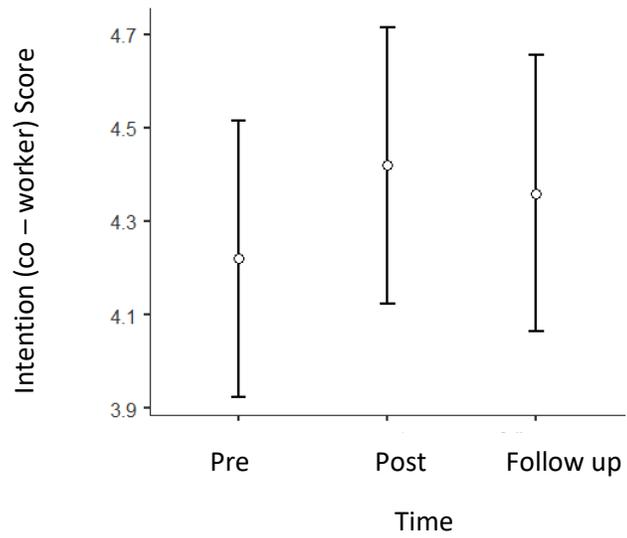
**Figure 10**

*Intention to Intervene (Manager)*



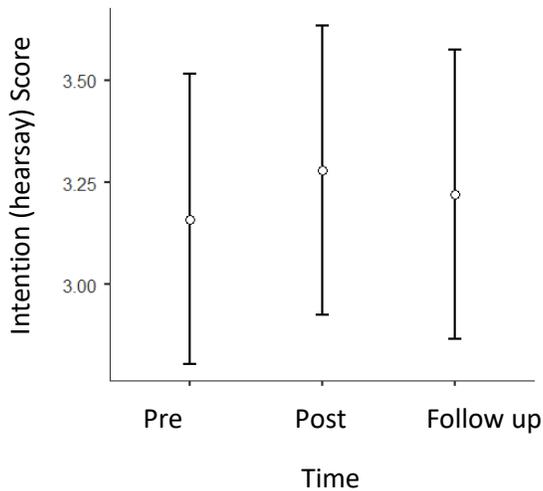
**Figure 11**

*Intention to Intervene (Co-Worker)*



**Figure 12**

*Intention to Intervene (Personal)*



Hypothesis 7 and Hypothesis 8 could not be tested using multiple regression as originally planned due to a limited sample size ( $N = 25$ ) and insufficient power. Instead, descriptive statistics have been included (see table 5) to show the percentage of training participants who had the opportunity to engage in bystander intervention and the strategy they used if they did intervene to examine training transfer at follow up (T3). This data fails to provide sufficient support for an increase in intention to intervene being significantly associated with an increase in the use of the bystander intervention strategies (Direct, Delay, Distract, Delegate) or an increase in bystander behaviour discussion. However, the results of Table 3 and 4 showed that the mean scores for behavioural intent did not significantly decrease from post training (T2) to follow up (T3). This finding shows that it is possible some limited training transfer occurred, but the data provided by this study is insufficient to test this. Possible explanation for the limited transfer seen are discussed further on.

Table 5 shows that the largest percentage of those who intervened when presented with the opportunity used the distract strategy (38%). It also shows that given the opportunity to intervene using one of the strategies (Direct, Delay, Distract, Delegate) Training participants were only intervening approximately half of the time with 24% intervention rate compared to a 40% inaction rate.

**Table 5**

*Percentage of Training Participants at Follow up Who Had Experienced the Opportunity to Intervene as a Bystander (T3)*

	Direct	Delay	Distract	Delegate
Intervened	21%	26%	38%	15%
(24%)				
(N=6)				
Did Not Intervene	40%	14%	34%	12%
(40%)				
(N=10)				

Note. Total N = 25

Table 6 shows the t tests of each predictor variable (except for NAQ (work and personal) due to them being unlikely to differ between groups at the same time point (T3)) for employees who undertook the bystander intervention training and had the opportunity to intervene and did, compared to those who did not intervene using one of the four strategies (Direct, Delay, Distract, Delegate). The mean score of Civility Norms, Psychological Safety, Bystander Efficacy (Act and Speak), Decisional Balance (+) and Training Intention (manager) were all higher for the group who intervened compared to the group of individuals that did not. Civility Norms ( $p = .03$ ) and Training Intention (Manager) ( $p = .01$ ) are the only statistically significant differences in the

expected direction. These results show that there could be some difference in predictor levels and intent between those who intervene and those who did not but the results are inconclusive.

**Table 6**

*Independent T test of Predictor Scores for Bystander Intervention Training Participants Who Had the Opportunity to Intervene at Follow Up (T3) and Either Intervened or Did Not Intervene.*

	Intervened <i>M</i> (N = 6)	Did Not Intervene <i>M</i> (N=10)	t statistic	df	p
Civility Norms	3.92	2.70	-1.90	14	.03 *
Psychological Safety	3.21	3.07	-0.75	14	.23
Bystander Efficacy (speak)	4.19	4.02	-0.48	14	.32
Bystander Efficacy (Act)	4.10	3.40	-1.44	14	.08
Decisional Balance (+)	4.10	3.92	-0.51	14	.31
Decisional Balance (-)	2.92	3.72	2.04	14	.97
Training Intention (Manager)	3.33	2.85	-1.21	14	.01 **
Training Intention (Co Worker)	4.25	4.50	-0.87	14	.80
Training Intention (Personal)	3.00	3.45	-0.99	14	.83
Training Intention (Hearsay)	3.11	3.17	-0.20	14	.57

Note.  $H_a$  Did not intervene < Intervention Note.  $H_{aa}$  \* =  $P < 0.05$  \*\* =  $P < 0.01$  Note.  $H_{aaa}$   $N = 16$

### **Qualitative Data**

To support training evaluation, respondents were asked to qualitatively outline three positive aspects of the training and three areas of improvement during the post training survey (T2). A total of 6 themes were identified for positive training aspects with a total of 17 subthemes which are displayed in table 7. Table 7 shows that the key positives of the bystander intervention

training were the trainer’s delivery and the content they delivered as well as the team orientation and practical aspects of the training. Comments included “the trainer was very engaging” and “ it wasn’t just a “sit and listen” kind of training.”

**Table 7**

*Thematic Analyses of the Positive Responses to Bystander Intervention Training*

Theme	Subtheme	Percentage reporting Theme
Trainer	The trainer was knowledgeable	59%
	The trainer had a good delivery style	
	The trainer provided good quality information	
Team Orientation	The training contained group discussions	48%
	The training provided opportunities to engage in practical exercises as a team	
Training environment	The environment felt safe to voice opinions in	38%
	The environment felt safe to share experiences in	
	The environment felt safe to express feelings in	
Relevance	Training acknowledged that incivility was an issue within the organisation	38%
	Training was relevant to everyday work situation	16%
Training Content	Good quality activities	21%
	Good quality examples provided	
	The content was clear	
Perspective taking	Strategies were well understood	20%
	Acknowledgement and learning of differences in perspectives occurred.	

Table 8 outlines the areas of improvement highlighted by participant in the bystander intervention training. A total of 5 themes with 11 subthemes were identified. The key theme regarding possible areas of training improvement related to the content of the training with 51%

feeling that there needed to be more direction about boosting bystander confidence, especially when dealing with leadership. Comments included “More role plays, and practice intervening would have been helpful” and “the people in this room didn’t need training, they have impeccable behaviour its management that needs targeting.”

**Table 8**

*Thematic Analyses of the Responses Containing Improvement Ideas for the Bystander Intervention Training*

Theme	Subtheme	Percentage reporting Theme
Content	Knowing how to approach or intervene with a member of leadership The inclusion of a take home summary containing key points of bystander intervention Role plays	51%
None	The training required no improvement	20%
Training Dimensions	Longer sessions to allow for more activities and discussion Group size that is not too big or too small	16%
Follow Up Sessions	Cultural change discussion focus The provision of further tools and practice Leadership involvement in trainings	8% 10%
Support	The provision of ongoing support from the organisation and leaders Ongoing focus on cultural change	13%

## Discussion

To combat high levels of organisational turnover and poor employee wellbeing because of organisational incivility and toxic organisational cultures, the present study aimed to evaluate the effectiveness of a bystander intervention training in a large healthcare organisation as a possible behavioural change tool to decrease incivility. Building on the extant bystander intervention and behavioural change literature, this study used an adapted version of Ajzen's Theory of Planned Behaviour (Ajzen, 1991) as an evaluation framework to assess changes in bystander intervention intent and overall behaviour. Three surveys were administered to track changes in attitudes, beliefs, and intentions over time as well as measure behavioural change regarding the use of bystander intervention strategies.

There are several key findings of this study. Directly following the training there was a significant increase in most of the means for the predictor variables that were expected to increase; Civility Norms, Psychological Safety, Bystander Efficacy (speak and act), Decisional Balance (+), and Training Intention (hearsay and manager). The exceptions were two factors of behavioural intent (co-worker and personal). This means that after training, the training participants did not have higher intent to intervene as an active bystander on behalf of themselves or a co-worker being subjected to uncivil or bullying behaviours, compared to before they underwent training. These variables did have relatively high pre-training means and therefore may not have had much room for improvement due to the ceiling effect (Campbell, Crumbaugh, Knouse, & Snodgrass, 1970). There was also not a significant decrease in the mean number of negative workplace acts (work, personal). This means that training participants did not report a lower number of role or work-related uncivil behaviours or less uncivil behaviours of a personal nature directly after training occurred. There not a significant decrease in negative beliefs about the consequences of

bystander intervention (decisional balance (-)), despite there being a significant increase in the mean score of positive beliefs (decisional balance (+)). This means that although training participants were more able to see and understand the important benefits of intervening as an active bystander, they did not apply less importance to the possible consequences of intervening as a result of the training. Finally, the descriptive statistics and final t test did not find a significant difference in most predictors for those who intervened compared to those who did not at follow up. The low N (16) makes these findings inconclusive.

According to Ajzen's Theory of Planned Behaviour (Ajzen, 1991), changes to intention occur because of changes in attitudes, beliefs, and perceptions of control and intention to behave is directly linked to behavioural outcomes. The results of this study found that although significant changes occurred in most of the predictor variables at post training, the significant changes witnessed between pre training and post training were not sustained at follow up and declined in many factors showing a disconnect between intention (T2) and behaviour (T3) (Albrecht, 2008). It should be noted that the measure of intention to intervene used in this study was not robust and may have had low validity and low reliability. This means that some of the lack of findings may not solely be a result of an inadequate training. To better test the relationship of this model and bystander intervention trainings in an organizational context, a larger participant pool is required. When behavioural change does not occur in a post training setting (aside from inadequate sample size and non robust measure), it is likely that there is an issue with the training content or delivery strategy (Baldwin, Ford, 1998). The result of this is a lack of behavioural change referred to as training transfer failure (Ajzen, 2011). The most common causes of this disconnect are factors not accounted for in the Theory of Planned behaviour and thus not controlled for or measured in this study; organisational history, role demands or motivation. Negative organisational history can lead

to feelings of distrust and resistance to change which decrease the likelihood of training transfer. Employees may also feel that the desired behavioural change is not practical or possible given their current role requirements and may require alterations to their job to behave in such a way. Motivation may also be low if the employee feels that the new behaviours will lead to a greater workload that they will not be sufficiently rewarded or acknowledged for. Finally, this model also assumes that individuals have access to all the resources required to enact the desired behaviour which may not be the case in an organisation where such access is often outside of an employee's personal control and instead falls to their managers (Foxon, 1993).

There are several plausible explanations for the lack of training transfer found in this particular study which can be categorized under the factors of Ford and Baldwin (1998) training transfer model. This model shows that the alignment of trainee attributes, the training design, and the work environment allows for the continuation of behaviours outside of the training setting (Blume, Ford, Baldwin, & Huang, 2010). The following discussion outlines possible issues with this study and the context in which it was performed under this framework

### ***Trainee Attributes***

While the participants noted training design and delivery as strengths of the training, they pointed out some issues around trainee attributes and the work environment. Trainee attributes include the trainees' ability, self-efficacy, and motivation to engage in the learnt behaviours. There was a significant increase in level of bystander efficacy post training (T2) (Banyard, 2008). However, the self-efficacy levels (Bystander Efficacy (Act and Speak)) at follow up (T3) had decreased from post training levels (T2) and there was no clear relationship between intention to intervene and higher level of predictor variables resulting in bystander intervention behaviours. A Lack of confidence to engage in bystander behaviours was alluded to in the qualitative feedback

given by employees, who requested follow up trainings and a key training point handout to take home with them. Both suggestions fall under the idea of behavioural practice, which is important for successful training transfer (Garavaglia, 1993). The lack of practice opportunities may in part be responsible for the minimal transfer found. Motivation was also not directly measured. Despite changes in intention to intervene and some increase in the belief of positive outcomes because of intervention behaviours, there were no reward systems put in place to reinforce that there are positive outcomes for engaging in post training behaviours (Janssen, 2000).

### ***Training Design***

Training design makes up the third section of training transfer (Baldwin, Ford, 1998). Based on the positive qualitative and quantitative feedback gathered, the bystander intervention training contained relevant information and was well delivered and structured. Therefore, it is unlikely that this branch is responsible for the lack of training transfer achieved.

### ***Work Environment***

This lack of reward systems ties into the third branch of the training transfer model: the work environment. Organisational structures and systems need to allow for and encourage training transfer if it is to occur (Baldwin, Ford, 1998). For this training, the organisational structures of note are the performance management system, which is closely tied to reward systems, managerial support systems, and organisational history. Managerial support is important to ensure that employees receive the opportunity to practice and perfect newly learnt behaviours, feel safe to do so, and have a good role model of the desired behaviour (Garavaglia, 1993). In this study, employees stated that they were not supported by managers, and that managers were not involved

in the training, and would therefore be unlikely to model the intervention strategies. These circumstances help to explain specific findings such as the decreases in feelings of psychological safety, the lack of a decrease in negative decisional balance scores, as well as the lack of findings suggesting that intention to behave resulted in behavioural change (bystander intervention using Direct, Delay, Distract, Delegate).

Finally, Training reactions provide important information pertaining to both training quality and applicability (Aguinis & Kraiger, 2009). These findings align closely with pre-existing training literature and provide both support for this bystander intervention training as a well-designed program as well as highlighting multiple explanations for the lack of long-term training transfer found. The initial analysis of quantitative data post training appears predictive of a successful training due to significant increases in the means of variables of interest in the expected direction. This data is further supported by the qualitative findings linked to short term training transfer; psychological safety (feeling safe to voice) relevance to the work and training delivery (Axtell, Maitlis, & Yearta, 1997). Employees felt that this training was relevant, delivered by a knowledgeable and capable trainer and that the training was conducted in a supportive manner. When examining the follow up data, which alludes to a lack of training transfer, the suggested improvements offer further insight. Long term training transfer is strongly linked to three factors in addition to those needed for short term training transfer. These include personal, peer and organisational factors (Axtell, Maitlis, & Yearta, 1997). For there to be a high chance of training transfer employees need to feel motivated to engage in the learned behaviours, supported to do so, and able to do so (Aguinis & Kraiger, 2009). Despite high feelings of psychological safety reported during the training and immediately afterwards (post training) the level of psychological safety was lower at follow up. Employees also commented on a lack of leadership involvement, which is

important for both the facilitation of training behaviours, feelings of support and self-efficacy. Finally, this training was not followed by other organisational changes such as incentive systems or practice further training, which decreases employee motivation and ability to produce training behaviours in the workplace.

### **Limitations and Future Directions**

This study is not without its limitations, which provide alternate explanations for the findings and areas for future research. Firstly, the high dropout rate between pre training and follow up surveys, although common for this type of study, has methodological drawbacks and could have been improved upon (Little, 1995). The low rate of employee participation (N=25) and a lack of robust behavioural measures for the follow up survey undermined statistical power and ability to analyse the relationship between the predictors and resulting bystander intervention behavioural changes and (Abraham, & Russell, 2008). The provision of incentives could have minimized the dropout rate to motivate employee participation. This was offered to the organisation during the planning stages but was declined. Future research should make organisations aware of the likelihood and implications of high dropout rates in time-lagged research, encourage the use of small incentive schemes, or improve communications around training evaluation processes (Hsieh, & Kocielnik, 2016).

Another limitation pertains to sampling. The training and respective evaluation surveys were only conducted within one department which could prove problematic if the individuals within this department are not representative of the organisation's total employee population (Petersen, Minkkinen, & Esbensen, 2005). Training transfer, (engaging in bystander behaviours) is also dependent on a context that enables the behaviour. The nature of this organisation means the trained employees work with individuals across multiple departments. Therefore, even if they

want to intervene, they may come across poor support and resistance from other organisational members who have not undergone the training (Baldwin, Ford, 1998). To remedy this sampling issue, it is suggested that the training is rolled out to multiple departments and individuals at differing levels of the organisation's hierarchy. Specifically, management should be the first to receive this training, as it would allow for spread across all departments and set the scene for effective role modelling of appropriate and desirable behaviours (Baldwin & Ford, 1988).

Adding to the low response rate, the binary response outcomes questioning opportunity to intervene, and actual intervention limit the study's validity and prevent any strong conclusions being drawn regarding behavioural change (Bajpai, & Bajpai, 2014). Moreover, the short timeframe between post training and follow up pose a limitation. On average, studies looking at behavioural change monitor behaviour over a 6–12 month period (Hill, Woodward, Woelfel, et al., 2016). Future studies should look at extending the period of behavioural change data collection and develop robust continuous bystander behaviour measures for organisational settings.

Self-report, as used in this study is often susceptible to common method variance bias and poor recall. Therefore, a multi method approach for data collection such as 360 reviews of behaviour is advised (Donaldson, & Grant-Vallone, 2002).

A related limitation is the lack of a social desirability measure. This was discussed with the organisation in the beginning but was not implemented due to concerns about survey fatigue and pre-existing low organisational trust. Without this data, the possibility of the changes in variables found post training being due to a newfound awareness of what a socially desirable answer looks like cannot be ruled out (Fischer, & Fick, 1993). Low organisational trust may also increase the likelihood of employees trying to answer in a desirable way to ensure that there are no negative consequences because of their answers (Lines, Selart, Espedal, & Johansen, 2005). Future studies

should take this into consideration and weigh up the cost benefit of more items against the information the Marlow Crowe social desirability scale might provide (Fischer, & Fick, 1993). An ineffective training with high scores on the social desirability scale would lead to data similar to that found in this study with low behavioural change overall, but high changes to intent and the precursory variable immediately after training.

It should also be noted that this training and its evaluation were conducted during a time of extreme uncertainty, and high stress globally due to the Covid- 19 pandemic. This was especially true for the healthcare industry. High stress is linked to higher levels of incivility and less organisational citizenship behaviours, which could lead to both lower levels of bystander intervention and study participation over time (Penney, & Spector, 2005). Both training engagement and transfer require a view of the training as relevant (Eid, & Quinn, 2017). Although some employees noted the training's relevance in their qualitative feedback, participation in the evaluation process may have been deemed a lower priority compared to the ongoing challenges brought about by the pandemic. The beginnings of cultural change, which this study was in part designed to capture, is also a long and ongoing process so a lengthier delay between data set collection, or data collection over an entire year could have shown a greater change trajectory and prediction for the future culture and climate of the organisation (Willis, Saul, Bevan, et al., 2016).

### **Contributions to Research and Practice**

Bystander Intervention trainings are historically successful and have been shown to produce long term results when used to address extreme forms of behavioural misconduct (Amar, Sutherland, & Kesler, 2012). This study adds to the current bystander literature as well as organisational literature by introducing the possibility of for this type of training being used for a wider variety of contexts and behaviours. To the researcher's knowledge, this is the first study to

approach organisational incivility in such a way. Despite the lack of significant training transfer achieved, this study demonstrates that bystander interventions can alter the bystander attitudes, beliefs, perceptions, and intentions of employees in an organisation short term. This study also provides suggestions for future research that could be conducted to further evaluate bystander intervention transfer in organisations long term. Bystander intervention training might offer an additional organisational tool to combat organisational incivility, provided further research can address the training transfer issues.

For this organisation, future attempts at change are likely to be met with resistance as each failed attempt is retained in organisational memory and lowers organisational trust further (Van der Bent, Paauwe, & Williams, 1999). Therefore, only well-established change programs and facilitators are recommended going forward to minimize the pre-existing distrust that quasi-experimental designs may perpetuate.

The next step for evaluating the potential of bystander training to combat incivility in addition to the changes outlined above would be to test its success as part of an ongoing and holistic change process in a different organisation. Provided enough participants can be recruited and robust behavioural measures designed the addition of regression analysis and mediation modelling may prove useful to further test the underlying factors of bystander intervention training transfer. Further research may show that bystander intervention trainings can effectively target organisational incivility in the short term, but to truly eradicate it, a cultural shift is required. This process cannot be achieved as the result of a singular training. Cultural change is an iterative and complex process that requires time, and alterations to the process's structures and deep-seated beliefs of an organisation (Willis et al., 2016).

## **Conclusion**

Organisational incivility is a costly and pervasive issue for organisations and individuals, which requires further research and continued focus to address. This study adds to the extant research in this area by building off long-standing behavioural change knowledge and bystander intervention programs. The lack conclusive findings and training transfer achieved by the bystander intervention training in this study, should not exclude this type of training from future organisational incivility research. Bystander intervention trainings are historically well received and able to alter behaviour long term. Although strong levels of behavioural change did not result from this training, there were changes to the precursory attitudes, beliefs, perceptions and intent. Civility Norms showed the most significant findings regarding its relationship with behavioural outcomes and should be examined further in this particular context. This training was also well received by participants, with feedback from this training highlighting few problems with the training content and relevance. Instead, it focussed in on the underlying structural issues within the organisation that are more likely to have led to the transfer failure found in this study. Therefore, future studies should consider addressing these underlying training transfer issues and run the evaluation study over a longer period to gather rich enough behavioural data for uncovering any potential mediating factors at play. Results from this study highlight the importance of holistic change programs that address a multitude of factors at all levels within an organisation and provide an introduction of alternative uses for the classical bystander training in the form of organisational incivility.

## References

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organisations, and society. *Annual Review of Psychology*, 60(1), 451-474. doi:10.1146/annurev.psych.60.110707.163505
- Abraham, W. T., & Russell, D. W. (2008). Statistical power analysis in psychological research. *Social and Personality Psychology Compass*, 2(1), 283-301.
- Albrecht, V. L. (2008). *Determining the role of transfer implementation intent in predicting training transfer* (Doctoral dissertation, Capella University).
- Alvesson, M., & Sveningsson, S. (2015). *Changing organisational culture: Cultural change work in progress*. Routledge.
- Amar, A. F., Sutherland, M., & Kesler, E. (2012). Evaluation of a bystander education program. *Issues in Mental Health Nursing*, 33(12), 851-857.
- Amin, Z., & Akbar, K. P. (2013). Analysis of psychological well-being and turnover intentions of hotel employees: An empirical study. *International Journal of Innovation and Applied Studies*, 3(3), 662-671.
- Ajzen, I. (1991). The theory of planned behaviour. *Organisational behaviour and human decision processes*, 50(2), 179-211.
- Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections.
- Axtell, C. M., Maitlis, S., & Yearta, S. K. (1997). Predicting immediate and longer-term transfer of training. *Personnel Review*.

- Bajpai, S., & Bajpai, R. (2014). Goodness of measurement: Reliability and validity. *International Journal of Medical Science and Public Health*, 3(2), 112-115.
- Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel psychology*, 41(1), 63-105.
- Banyard, V. L., Moynihan, M. M., & Plante, E. G. (2007). Sexual violence prevention through bystander education: An experimental evaluation. *Journal of Community Psychology*, 35(4), 463-481.
- Banyard, V. L. (2008). Measurement and correlates of prosocial bystander behaviour: The case of interpersonal violence. *Violence and victims*, 23(1), 83-97.
- Banyard, V. L., & Moynihan, M. M. (2011). Variation in bystander behaviour related to sexual and intimate partner violence prevention: Correlates in a sample of college students. *Psychology of Violence*, 1(4), 287.
- Baron, R. A. (1973). The "foot-in-the-door" phenomenon: Mediating effects of size of first request and sex of requester. *Bulletin of the Psychonomic Society*, 2(2), 113-114.
- Baron, R. S. (2005). So right it's wrong: Groupthink and the ubiquitous nature of polarized group decision making.
- Biel, A., & Thøgersen, J. (2007). Activation of social norms in social dilemmas: A review of the evidence and reflections on the implications for environmental behaviour. *Journal of economic psychology*, 28(1), 93-112.
- Bloor, G., & Dawson, P. (1994). Understanding professional culture in organisational context. *Organisation studies*, 15(2), 275-295.

- Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Transfer of training: A meta-analytic review. *Journal of management*, *36*(4), 1065-1105
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.
- Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human resource development review*, *6*(3), 263-296.
- Business NZ & Southern Cross Health Society. (2019). *Workplace wellness report*.
- Campbell, P. E., Crumbaugh, C. M., Knouse, S. B., & Snodgrass, M. E. (1970). A test of the “; ceiling effect”; hypothesis of positive contrast. *Psychonomic Science*, *20*(1), 17-18.
- Chen, S., Jiang, W., Zhang, G., & Chu, F. (2019). Spiritual leadership on proactive workplace behaviour: The role of organisational identification and psychological safety. *Frontiers in Psychology*, *10*, 1206-1206. doi:10.3389/fpsyg.2019.01206
- Choi, J., & Park, M. (2019). Effects of nursing organisational culture on face-to-face bullying and cyberbullying in the workplace. *Journal of Clinical Nursing*, *28*(13-14), 2577-2588.  
doi:10.1111/jocn.14843
- Coker, A. L., Cook-Craig, P. G., Williams, C. M., Fisher, B. S., Clear, E. R., Garcia, L. S., & Hegge, L. M. (2011). Evaluation of Green Dot: An active bystander intervention to reduce sexual violence on college campuses. *Violence against women*, *17*(6), 777-796.
- Costello, A., & Osborne, J. (2005, July). Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most From Your Analysis. *Practical Assessment, Research & Evaluation*., *10*(7).

- Coulson-Thomas, C. J. (2015). Learning and behaviour: addressing the culture change conundrum: part one. *Industrial and Commercial Training*.
- Cristobal, E., Flavián, C., & Guinalíu, M. (2007). Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality*, 17(3), 317-340. doi:10.1108/09604520710744326
- Dasborough, M., & Harvey, P. (2017). Schadenfreude: The (not so) secret joy of another's misfortune. *Journal of Business Ethics*, 141(4), 693-707. doi:10.1007/s10551-016-3060-7
- Dediu, A. (2015). Tall poppy syndrome and its effect on work performance: A dissertation submitted in partial fulfilment of the requirements for the degree of master of science in applied psychology at the university of canterbury
- Detert, J. R., & Treviño, L. K. (2010). Speaking up to higher-ups: How supervisors and skip-level leaders influence employee voice. *Organisation Science (Providence, R.I.)*, 21(1), 249-270. doi:10.1287/orsc.1080.0405
- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organisational behaviour research. *Journal of business and Psychology*, 17(2), 245-260.
- Durand, R., & Kremp, P. A. (2016). Classical deviation: Organisational and individual status as antecedents of conformity. *Academy of Management Journal*, 59(1), 65-89.
- Edmondson, A. C., Kramer, R. M., & Cook, K. S. (2004). Psychological safety, trust, and learning in organisations: A group-level lens. *Trust and distrust in organisations: Dilemmas and approaches*, 12, 239-272.

- Eid, A., & Quinn, D. (2017). Factors predicting training transfer in health professionals participating in quality improvement educational interventions. *BMC medical education*, 17(1), 26.
- Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised. *Work & stress*, 23(1), 24-44.
- Erat, S., & Gneezy, U. (2012). White lies. *Management Science*, 58(4), 723-733.
- Fink-Samnack, E. (2018). The new age of bullying and violence in health care: Part 4: Managing organisational cultures and beyond. *Professional Case Management*, 23(6), 294
- Fischer, D. G., & Fick, C. (1993). Measuring social desirability: Short forms of the Marlowe-Crowne social desirability scale. *Educational and Psychological Measurement*, 53(2), 417-424.
- Foxon, M. (1993). A process approach to the transfer of training. *Australasian Journal of Educational Technology*, 9(2).
- Freitas, A. C., Silva, S. A., & Marques Santos, C. (2019). Safety training transfer: The roles of coworkers, supervisors, safety professionals, and felt responsibility. *Journal of Occupational Health Psychology*, 24(1), 92- 107. doi:10.1037/ocp0000125
- Fischer, P., Krueger, J. I., Greitemeyer, T., Vogrincic, C., Kastenmüller, A., Frey, D., & Kainbacher, M. (2011). The bystander-effect: a meta-analytic review on bystander intervention in dangerous and non-dangerous emergencies. *Psychological bulletin*, 137(4), 517.
- Garavaglia, P. L. (1993). How to ensure transfer of training. *Training & Development*, 47(10), 63-69.
- Gibson, D. E., & Barsade, S. G. (2003). Managing organisational culture change: The case of long-term care. *Journal of Social Work in Long-Term Care*, 2(1-2), 11-34.

Gilpin-Jackson, Y., & Bushe, G. R. (2007). Leadership development training transfer: A case study of post- training determinants. *The Journal of Management Development*, 26(10), 980-1004.

doi:10.1108/02621710710833423

Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British journal of mathematical and statistical psychology*, 67(3), 451-470.

Hill, K. G., Woodward, D., Woelfel, T., Hawkins, J. D., & Green, S. (2016). Planning for long-term follow-up: Strategies learned from longitudinal studies. *Prevention Science*, 17(7), 806-818.

Hodgins, M., MacCurtain, S., & Mannix-McNamara, P. (2014). Workplace bullying and incivility: a systematic review of interventions. *International Journal of Workplace Health Management*.

Howard, M. C. (2016). A review of exploratory factor analysis decisions and overview of current practices: What we are doing and how can we improve? *International Journal of Human-Computer Interaction*, 32(1), 51- 62. doi:10.1080/10447318.2015.1087664

Hoxmeier, J. C. (2019). Revising existing instruments for measuring bystander intervention opportunity and frequency of prosocial response for the prevention of sexual violence. *Injury Prevention*, 25(3), 180-183. doi:10.1136/injuryprev-2017-042653

Hsieh, G., & Kocielnik, R. (2016, February). You get who you pay for: The impact of incentives on participation bias. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing* (pp. 823-835).

Jabr, M. M., Denke, G., Rawls, E., & Lamm, C. (2018). The roles of selective attention and desensitization in the association between video gameplay and aggression: An ERP investigation. *Neuropsychologia*, 112, 50-57.

- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and organisational psychology*, 73(3), 287-302.
- Kerr, J. H., & Vos, M. C. (1993). Employee fitness programmes, absenteeism and general well-being. *Work & Stress*, 7(2), 179-190.
- Keppel, J. J. (2012). *Re-Imaging the 'Kiwi Bloke': Low Places and Anxious Spaces in Aotearoa New Zealand* (Doctoral dissertation, University of Waikato).
- Kirkwood, J. (2006). Cutting down our tallest poppies. *Nzbusiness*, 20(3), 16
- Lane, D. (2016). The assumption of sphericity in repeated-measures designs: What it means and what to do when it is violated. *Quantitative Methods for Psychology*, 12, 114-122.
- Lamb, S., & Kwok, K. C. (2016). A longitudinal investigation of work environment stressors on the performance and wellbeing of office workers. *Applied Ergonomics*, 52, 104-111.
- Latane, B., & Darley, J. M. (1968). Group inhibition of bystander intervention in emergencies. *Journal of Personality and Social Psychology*, 10(3), 215-221. doi:10.1037/h0026570
- Levine, M., & Crowther, S. (2008). The responsive bystander: How social group membership and group size can encourage as well as inhibit bystander intervention. *Journal of Personality and Social Psychology*, 95(6), 1429-1439. doi:10.1037/a0012634
- Lines, R., Selart, M., Espedal, B., & Johansen, S. T. (2005). The production of trust during organisational change. *Journal of Change Management*, 5(2), 221-245.
- Little, R. J. (1995). Modeling the drop-out mechanism in repeated-measures studies. *Journal of the american statistical association*, 90(431), 1112-1121.

- Liu, C., Gao, G. & Agarwal, R. (2019). Unraveling the “Social” in social norms: The conditioning effect of user connectivity. *Information Systems Research*, 30(4), 1272-1295.  
doi:10.1287/isre.2019.0862
- Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the theory of planned behaviour and the theory of reasoned action. *Personality and social psychology Bulletin*, 18(1), 3-9.
- Manning, R., Levine, M., & Collins, A. (2007). The kitty genovese murder and the social psychology of helping: The parable of the 38 witnesses. *American Psychologist*, 62(6), 555-562.  
doi:10.1037/0003-066X.62.6.555
- Mansfield, E. R., & Helms, B. P. (1982). Detecting multicollinearity. *The American Statistician*, 36(3a), 158-160.  
doi:10.1080/00031305.1982.10482818
- Meyer, C. C., & Zelin, A. (2018). Sexual Harassment Bystander Intervention Program: Targeting Leaders to Enhance Organisational Culture.
- Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organisational Behaviour: The International Journal of Industrial, Occupational and Organisational Psychology and Behaviour*, 27(7), 941-966.
- Ortega, A., Van den Bossche, P., Sánchez-Manzanares, M., Rico, R., & Gil, F. (2014). The influence of change-oriented leadership and psychological safety on team learning in healthcare teams. *Journal of Business and Psychology*, 29(2), 311-321.
- Ostroff, C., Kinicki, A. J., & Muhammad, R. S. (2012). Organisational culture and climate. *Handbook of Psychology, Second Edition*, 12.

- Penney, L. M., & Spector, P. E. (2005). Job stress, incivility, and counterproductive work behaviour (CWB): The moderating role of negative affectivity. *Journal of Organisational Behaviour: The International Journal of Industrial, Occupational and Organisational Psychology and Behaviour*, 26(7), 777-796.
- Pearson, C. M., Andersson, L. M., & Porath, C. L. (2005). Workplace incivility.
- Petersen, L., Minkkinen, P., & Esbensen, K. H. (2005). Representative sampling for reliable data analysis: theory of sampling. *Chemometrics and intelligent laboratory systems*, 77(1-2), 261-277.
- Philippe, D., & Durand, R. (2011). The impact of norm-conforming behaviours on firm reputation. *Strategic Management Journal*, 32(9), 969-993. doi:10.1002/smj.919.
- Porter, L. W., & Steers, R. M. (1973). Organisational, work, and personal factors in employee turnover and absenteeism. *Psychological bulletin*, 80(2), 151.
- Rai, A., & Agarwal, U. A. (2017). Exploring nature of workplace bullying and psychometric properties of negative acts questionnaire-revised (NAQ-R) in Indian organisations. *Journal of Indian Business Research*.
- Schein, E. H. (1990). *Organisational culture* (Vol. 45, No. 2, p. 109). American Psychological Association.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organisational climate and culture. *Annual review of psychology*, 64, 361-388.

Schraeder, M., Tears, R.S., & Jordan, M.H. (2005) Organisational culture in public sector organisations: Promoting change through training and leading by example. *Leadership and Organisation Development Journal*, 26(6), 492-502.

Snyder, M., & Cunningham, M. R. (1975). To comply or not comply: testing the self-perception explanation of the "foot-in-the-door" phenomenon. *Journal of Personality and social Psychology*, 31(1), 64.

Stevens, J. A., & Slack, T. (1998). Integrating social action and structural constraints: Towards a more holistic explanation of organisational change. *International Review for the Sociology of Sport*, 33(2), 143-154.

Van der Bent, J., Paauwe, J., & Williams, R. (1999). Organisational learning: an exploration of organisational memory and its role in organisational change processes. *Journal of Organisational Change Management*.

Van Erp, K. J., Gevers, J. M., Rispens, S., & Demerouti, E. (2018). Empowering public service workers to face bystander conflict: Enhancing resources through a training intervention. *Journal of Occupational and Organisational Psychology*, 91(1), 84-109.

Walsh, B. M., Magley, V. J., Reeves, D. W., Davies-Schrils, K. A., Marmet, M. D., & Gallus, J. A. (2012). Assessing workgroup norms for civility: The development of the Civility Norms Questionnaire-Brief. *Journal of Business and Psychology*, 27(4), 407-420

Wang, P. S., Angermeyer, M., Borges, G., Bruffaerts, R., Chiu, W. T., De Girolamo, G., ... & Uestuen, T. B. (2007). Delay and failure in treatment seeking after first onset of mental disorders in the World Health Organisation's World Mental Health Survey Initiative. *World psychiatry*, 6(3), 177.

Willis, C. D., Saul, J., Bevan, H., Scheirer, M. A., Best, A., Greenhalgh, T., ... & Bitz, J. (2016).

Sustaining organisational culture change in health systems. *Journal of health organisation and management*.

## **Appendix A**

The organisation has partnered with the University of Canterbury to evaluate its bystander intervention training. The aim of this evaluation is to identify ways to improve training content and delivery, and to identify obstacles to applying skills developed in training. Your input is essential to the continual improvement of our developmental initiatives.

To that end, three twenty-minute surveys will be distributed to training attendees over a 4 -month period: baseline, after training, and about three months following the training. You will be asked to confidentially state your views of the work culture at ....., especially around civility, your own levels of comfort and efficacy to intervene as bystanders, and on the general effectiveness of the training.

Please find the link to the baseline survey below. You will receive an individualised email containing a link to the baseline survey. Thank you in advance for your time.

## Appendix B

### Information and Consent to Participate in Research; Evaluation of a workplace Bystander Training Initiative

**Objective:** This research will evaluate the effectiveness of the . . . . . bystander training using pre, post and follow up surveys to identify changes in knowledge, psychological safety, civility and conflict management regarding bystander behaviours in the workplace.

**Research team:** is carried out by Freya as part of the MSc Applied Psychology program under the supervision of Dr. Joana Kuntz and, who can be contacted at joana.kuntz@canterbury.ac.nz. She will be pleased to discuss any concerns you may have about participation in the project.

**Time commitment:** If you choose to take part in this study, your involvement in this project will include the completion of 3 online surveys, one before training, one after training and one three months later. Each survey will take approximately 15-20 minutes.

**Participant rights and risks:** Participation is voluntary, and you have the right to withdraw at any stage without penalty. Some of the questions may concern sensitive issues, such as incivility, conflict and induce perspective taking. While it is unlikely that you will experience significant distress from answering these questions, if you do feel uncomfortable you are advised to withdraw from the study. If you require further assistance, you may contact any of the resources provided in the information sheet. Alternatively, you are advised to contact your local GP.

**Confidentiality:** The results of the project may be published, but you may be assured of complete confidentiality for all data gathered in this investigation: your identity and responses will not be shared with . . . . . Participants' confidentiality will be maintained through storing data on a password-protected computer located at UC. At the end of the research, the . . . . . will receive a report that will only include a generalized summary of findings and will not include individual identities. Only the named researchers will have access to data (on a password locked computer). A thesis is a public document and will be available through the UC Library.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch ([human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)).

- I understand what is required of me if I agree to take part in the research.

## Appendix C

### Survey Items

#### Pre-Training Survey

##### Psychological safety

1. If you make a mistake in this unit/ workgroup, it is often held against you **(R)**
2. Members of this unit/ workgroup can bring up problems and tough issues
3. People in this unit/ workgroup sometimes reject others for holding a different viewpoint **(R)**
4. It is safe to take a risk in this unit/workgroup.
5. It is difficult to ask other members of this unit/ workgroup for help. **(R)**
6. No one in this unit/ workgroup would deliberately act in a way that undermines my efforts.
7. Working with members of this unit/workgroup, my unique skills and talents are valued and utilized.

##### Bystander Decisional Balance

1. If I intervene regularly, I can prevent someone from experiencing harm (+) **(removed T2)**
2. It is important for all employees to play a role in keeping everyone safe (+)
3. Co-workers will look up to me and admire me if I intervene (+)
4. I will feel like a leader in my organisation if I intervene (+)
5. I like thinking of myself as someone who helps others when I can (+)
6. Intervening would make my co-workers angry with me (-)
7. Intervening might cost me relationships with my co-workers (-)
8. Intervening my negatively impact my career (-)
9. I could make the wrong decision and intervene when nothing was wrong and feel embarrassed (-)
10. People might think I am too sensitive and am overreacting to the situation (-)
11. I could get in trouble by making the wrong decision about how to intervene (-)

Civility norms brief

1. Rude behaviour is not accepted in our unit/workgroup.
2. Angry outbursts are not tolerated by anyone in our unit/workgroup.
3. Respectful treatment is the norm in our unit/workgroup
4. We make sure everyone in our unit/workgroup is treated with respect.

Negative Acts Questionnaire frequency

1. Had information withheld that affected your performance
2. Been exposed to an unmanageable workload (**removed T3**)
3. Ordered to do work below your level of competence
4. Given tasks with unreasonable/impossible targets/deadlines (**removed T2**) (**removed T3**)
5. Had your opinions and views ignored
6. Had your work excessively monitored
7. Reminded repeatedly of your errors or mistakes
8. Humiliated or ridiculed in connection with your work
9. Had gossip and rumours spread about you
10. Had insulting/offensive remarks made about you
11. Been ignored, excluded, or isolated from others
12. Received hints or signals from others that you should quit job
13. Been intimidated with threatening behaviour
14. Experienced persistent criticism of your work and effort
15. Been ignored or faced hostile reactions when you approached
16. Had key tasks removed, replaced w/ trivial unpleasant tasks
17. Had false allegations made against you
18. Subjected to excessive teasing and sarcasm
19. Been shouted at or targeted with spontaneous anger (or rage) (**removed T2**) (**removed T3**)
20. Been subjected to practical jokes (**removed T1**) (**removed T2**) (**removed T3**)
21. Experienced threats of violence or abused/attacked (**removed T1**) (**removed T2**) (**removed T3**)

Bystander efficacy (5 point strongly disagree to strongly agree). *I feel confident...*

1. Expressing my discomfort if someone makes an inappropriate joke about a co-worker
2. Expressing my discomfort if someone says that a co-worker is to blame for the harassment, they received
3. Calling for help if I hear someone in my workplace yelling “help.” **(removed T3)**
4. Talking to a co-worker who I suspect is being harassed/bullied
5. Getting help and resources for a co-worker who tells me they have been harassed or unfairly treated
6. Asking a stranger who looks upset at work if they are ok or need help **(removed T3)**
7. Asking a co-worker if they need a supportive presence during meetings
8. Doing something if I heard gossip or rumors spread about another co-worker
9. Speaking up at work if my supervisor is unfairly treating another co-worker.
10. Objecting when a colleague who tells me that they harassed another co-worker
11. Doing something if I see a co-worker surrounded by a group of people at a work and looking uncomfortable.
12. Doing something if a colleague tries to shift the blame onto another co-worker
13. Getting help if I hear harassment or bullying going on whilst I am working
14. Telling a manager about information I have that might help in a bullying or harassment situation even if pressured by my colleagues to stay silent.

Bystander training knowledge questions

1. If a manager were constantly interrupting a colleague, I would let them sort it out between themselves **(R)**
2. If a co-worker burst into tears after reading an email, I would approach them directly **(removed T3)**
3. If a co-worker burst into tears after reading an email, I would find someone to check on them
4. If a co-worker burst into tears after reading an email, I would pretend I had not noticed **(R)** **(removed T1)** **(removed T2)** **(removed T3)**
5. If I received a passive aggressive email, I would address it in a direct manner
6. If I received a passive aggressive email, I would ignore it **(R)**
7. If I received a passive aggressive email, I would tell a manger about it
8. If I overheard gossip about a coworker, I would pretend I had not heard it **(R)**

9. If I overheard gossip about a coworker, I would report it
10. If I overheard gossip about a coworker I would go and confront the people gossiping
11. I would distract manager if they were constantly interrupting a colleague

### **Post-Training Survey (additional items)**

#### Course Evaluation Questions

1. I would recommend this course to my colleagues.
2. This course was relevant to my job.
3. What was taught was valuable to create a safe and healthy workplace culture
4. I am confident in my ability to use what I learnt on the job.
5. I am looking forward to applying what I have learnt to my job.
6. Before the course I had a good idea of how it would contribute to my professional development.

Please use the space below to outline **three positive aspects** of the training

Please use the space below to outline **three ways** you think the training could be **improved**

### **Follow -Up Survey (additional items)**

*Since the bystander training two months ago...*

1. I have discussed bystander intervention with my managers
2. I have discussed bystander intervention with my peers
3. I have challenged others to think about how their actions affect others' wellbeing
4. I have tried to change or address some of the beliefs that have previously prevented me from intervening. This may include but is not limited to:
  - believing that others will make negative judgements of me if I intervene
  - believing that I might become the target of the incivility if I intervene
  - believing that a marginal behaviour is acceptable because I may be missing some of the context.

**Table 9**

*Since the bystander training two months ago...*

Item	I have had the opportunity to intervene in this way (Y/N)	I have intervened in this way (Y/N)
I have behaved as an active bystander by using the delay intervention strategy I have behaved as an active bystander by using the distract intervention strategy		
I have behaved as an active bystander by using the delegate intervention strategy		
I have behaved as an active bystander by using the direct intervention strategy		

Please use the space below to elaborate on one or more of the situations in which you intervened (Who, What, Why, How)

## Appendix D

### Exploratory Factor Analysis Composite Loadings

**Table 10**

*Civility Norms Pre Training (time 1), Post Training (time 2) and Follow Up (time 3) Factors*

	Factor 1 Time1	Factor 1 Time 2	Factor 1 Time 3
Civility Norms 1	.91	.92	.92
Civility Norms 2	.83	.89	.91
Civility Norms 3	.88	.93	.90
Civility Norms 4	.91	.90	.94

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 11**

*Psychological Safety Pre-Training (time 1), Post Training (time 2) and Follow Up (time 3) Factors*

	Factor 1 Time 1	Factor 1 Time 2	Factor 1 Time 3
Psychological Safety 1(R)	.66	.72	.78
Psychological Safety 2(R)	.81	.79	.87
Psychological Safety 3	.76	.78	.77
Psychological Safety 4	.75	.75	.88
Psychological Safety 5(R)	.65	.85	.74
Psychological Safety 6	.77	.76	.56
Psychological Safety 7	.80	.83	.38

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 12**

*Negative Acts Pre-Training (time 1), Post Training (time 2) and Follow Up (time 3) Factors*

	Factor 1	Factor2	Factor1	Factor 2	Factor 1	Factor 2
	Time1	Time1	Time 2	Time 2	Time 3	Time 3
Negative Acts 1		.67		.78		.63
Negative Acts 2		.70		.50		
Negative Acts 3				.67		.87
Negative Acts 5	.47	0.66	.4	.86	.57	.84
Negative Acts 6	.44	0.48	.54	.60	.56	.77
Negative Acts 7	.59	0.50	.84	.50	.70	.50
Negative Acts 8	.73		.93		.73	
Negative Acts 9		.82		.84		.74
Negative Acts 10	.70		.72		.84	
Negative Acts 11	.69		.76		.86	
Negative Acts 12	.75		.74		.79	
Negative Acts 13	.68		.77		.84	
Negative Acts 14	.85		.86		.89	
Negative Acts 15	.62		.61		.80	
Negative Acts 16	.51	.63	.52	.70	.48	.63
Negative Acts 17	.84		.74		.76	
Negative Acts 18	.80		.70		.78	
Negative Acts 19	.72					

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 13**

*Bystander Efficacy Pre-Training (time 1), Post Training (time 2) and Follow Up (time 3) Factors*

	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
	Time 1	Time 1	Time 2	Time 2	Time 3	Time 3
Bystander Efficacy 1	.70		.72		.72	
Bystander Efficacy 2	.68	.44	.75	.43	.65	.43
Bystander Efficacy 3	.69		.54			
Bystander Efficacy 4	.82		.75		.75	
Bystander Efficacy 5	.70		.64	.45	.65	.44

Bystander Efficacy 6	.78		.76			
Bystander Efficacy 7	.70		.78		.78	
Bystander Efficacy 8		.83	.40	.86	.60	.85
Bystander Efficacy 9	.50	.57	.53	.75	.50	.72
Bystander Efficacy 10	.65	.48	.74	.42	.73	.40
Bystander Efficacy 11	.42	.74	.63	.76	.60	.70
Bystander Efficacy 12	.51	.68	.60	.72	.60	.81
Bystander Efficacy 13		.71		.84	.63	.84

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 14**

*Decisional Balance Pre-Training (time 1), Post Training (time 2) and Follow Up (time 3) Factors*

	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
	Time 1	Time1	Time 2	Time 2	Time 3	Time 3
Decisional Balance 1		.71		.70		.63
Decisional Balance 2	.41	.62		.73		.82
Decisional Balance 3		.65		.67		.70
Decisional Balance 4		.70		.70		.85
Decisional Balance 5		.67		.80		.76
Decisional Balance 6	.62		.74		.83	
Decisional Balance 7	.78		.67		.72	
Decisional Balance 8	.44		.78		.60	
Decisional Balance 9	.77		.83		.84	
Decisional Balance 10	.87		.76		.87	
Decisional Balance 11	.86		.65		.88	

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 15**

*Training Intention Pre-Training (time 1) Factors*

	Factor 1 Time 1	Factor 2 Time 1	Factor 3 Time 1	Factor 4 Time 1
Training Intention1		.79		
Training Intention 2		.78		
Training Intention 3(R)		.64		
Training Intention 4			.86	
Training intention 6(R)			.86	
Training Intention 7				.63
Training Intention 8 (R)				.86
Training Intention 9				.60
Training Intention10 (R)	.68			
Training Intention 11	.76			
Training Intention 12	.78			

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 16**

*Training Intention Post -Training (time 2) Factors*

	Factor 1 Time 2	Factor 2 Time 2	Factor 3 Time 2	Factor 4 Time 2
Training Intention1		.87		
Training Intention 2		.56		
Training Intention 3(R)		.74		
Training Intention 4			.82	

	Factor 1 Time 2	Factor 2 Time 2	Factor 3 Time 2	Factor 4 Time 2
Training intention 6(R)			.87	
Training Intention 7				.82
Training Intention 8 (R)				.78
Training Intention 9				.70
Training Intention10 (R)	.90			
Training Intention 11	.51			
Training Intention 12	.74			

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 17**

*Training Intention Follow Up (time 3) Factors*

	Factor 1 Time 3	Factor 2 Time 3	Factor 3 Time 3	Factor 4 Time 3
Training Intention1		.89		
Training Intention 2		.52		
Training Intention 4			.84	
Training intention 6(R)			.87	
Training Intention 7				.84
Training Intention 8 (R)				.79
Training Intention10 (R)	.63			
Training Intention 11	.91			
Training Intention 12	.69			

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 18**

*Training Evaluation at Post Training (time 2) factors*

	Factor1 Time 2	Factor 2 Time 2
Training Evaluation 1	.73	.46
Training Evaluation 2	.76	
Training Evaluation 3	.61	
Training Evaluation 4	.82	
Training Evaluation 5	.83	
Training Evaluation 6		.92

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

**Table 19**

*Behaviour at follow up (time 3) factors*

	Factor 1 Time 3	Factor 2 Time 3
Behave1	.84	
Behave2	.68	
Behave3		.90
Behave4	.75	-.42

Note. Eigenvalues > 1. principal axis factoring – oblique rotation

## Appendix E

### Pre Training, Post Training and Follow Up Correlation Matrices

**Table 20**

*Correlation Matrix Pre -Training (Time 1)*

	Civility Norms	Psychological Safety	Negative Acts (Personal)	Negative Acts (work)	Bystander Efficacy (speak)	Bystander Efficacy (Act)	Decisional Balance (+)	Decisional Balance (-)	Training Intention Manager	Training Intention Personal	Training Intention Co Worker	Training Intention Hearsay
Civility Norms	—											
Psychological Safety	.72*	—										
Negative Acts (Personal)	-.67	-.63	—									
Negative Acts (work)	-.66	-.69	.74*	—								
Bystander Efficacy (speak)	.30	.33	-.30	-.30	—							
Bystander Efficacy (Act)	.48	.52	-.50	-.46	.76	—						
Decisional Balance (+)	.16	.16	-.22	-.12	.43	.37	—					
Decisional Balance (-)	-.40	-.37	.44	.46	-.52	-.53	-.30	—				
Training Intention Manager	-.04	.01	-.06	-.05	.36	.32	.33	-.38	—			
Training Intention Personal	.16	.15	-.22	-.20	.22	.32	.18	-.25	.15	—		
Training Intention Co Worker	-0.03	.00	-.07	-.00	.41	.23	.30	-.22	.10	.22	—	

Running Head: Organisational Bystander Intervention Training Evaluation

Correlation Matrix Pre -Training (Time 1)

	Civility Norms	Psychological Safety	Negative Acts (Personal)	Negative Acts (work)	Bystander Efficacy (speak)	Bystander Efficacy (Act)	Decisional Balance (+)	Decisional Balance (-)	Training Intention Manager	Training Intention Personal	Training Intention Co Worker	Training Intention Hearsay
Training Intention Hearsay	.06	.08	-.13	-.10	.56	.51	.35	-.41	.47	.26	.32	—

Note: \* highlights possible multicollinearity

**Table 21**  
Correlation Matrix Post -Training (Time 2)

	Civility Norms	Psychological Safety	Negative Acts (Personal)	Negative Acts (work)	Bystander Efficacy (speak)	Bystander Efficacy (Act)	Decisional Balance (+)	Decisional Balance (-)	Training Intention Manager	Training Intention Personal	Training Intention Co Worker	Training Intention Hearsay
Civility Norms	—											
Psychological Safety	.80*	—										
Negative Acts (Personal)	-.57	-.60	—									
Negative Acts (work)	-.65	-.65	.74*	—								
Bystander Efficacy (speak)	.27	.27	-.15	-.22	—							
Bystander Efficacy (Act)	.53	.48	-.34	-.33	.72*	—						
Decisional Balance (+)	.28	.20	-.22	-.13	.43	.72*	—					

Running Head: Organisational Bystander Intervention Training Evaluation

**Table 21**  
Correlation Matrix Post -Training (Time 2)

	Civility Norms	Psychological Safety	Negative Acts (Personal)	Negative Acts (work)	Bystander Efficacy (speak)	Bystander Efficacy (Act)	Decisional Balance (+)	Decisional Balance (-)	Training Intention Manager	Training Intention Personal	Training Intention Co Worker	Training Intention Hearsay
Decisional Balance (-)	-.41	-.50	.08	.41	-.52	-.61	-.60	—				
Training Intention Manager	-.34	.28	-.06	-.32	.36	.40	.42	-.16	—			
Training Intention Personal	.06	.19	-.10	-.12	.22	.50	.50	-.48	.47	—		
Training Intention Co Worker	-.14	.25	-.16	-.00	.41	.15	.26	-.15	.20	.33	—	
Training Intention Hearsay	.33	.18	-.12	-.10	.56	.50	.30	-.45	.49	.12	.20	—

Note: \* highlights possible multicollinearity

Running Head: Organisational Bystander Intervention Training Evaluation

**Table 22**

*Correlation Matrix follow Up (Time 3)*

	Civility Norms	Psychological Safety	Negative Acts (Personal)	Negative Acts (work)	Bystander Efficacy (speak)	Bystander Efficacy (Act)	Decisional Balance (+)	Decisional Balance (-)	Training Intention Manager	Training Intention Personal	Training Intention Co Worker	Training Intention Hearsay
Civility Norms	—											
Psychological Safety	.62	—										
Negative Acts (Personal)	-.77*	-.60	—									
Negative Acts (work)	-.75*	-.61	.81*	—								
Bystander Efficacy (speak)	.28	.48	-.30	-.41	—							
Bystander Efficacy (Act)	.41	.40	-.38	-.60	.78*	—						
Decisional Balance (+)	.22	.41	-.15	-.66	.31	.33	—					
Decisional Balance (-)	-.71*	-.54	.16	.31	-.50	-.48	-.34	—				
Training Intention Manager	-.34	.45	-.38	-.46	.41	.40	.30	-.28	—			
Training Intention Personal	.13	.01	-.06	-.01	.57	.50	.05	.21	.10	—		
Training Intention Co Worker	-.24	.15	-.21	-.31	.20	.44	.24	-.26	.22	.28	—	
Training Intention Hearsay	.45	.40	-.30	-.33	.47	.50	.26	-.41	.32	.40	.28	—

Note: \* highlights possible multicollinearity

### Appendix F

#### Repeated Measures ANOVA and Post Hoc Analysis

**Table 23**

*Within Subject Effects Psychological Safety*

	Sum of Squares	df	Mean Square	F	P	$\eta^2$
Psychological Safety	0.32	2	0.16	0.58	.56	0.01
Residual	13.33	48	0.28			

**Table 24**

*Post Hoc Comparisons of Psychological Safety*

psychological safety	Time	Mean Difference	SE	df	t	$p_{\text{bonferroni}}$
pre	- post	-0.16	0.15	48.00	-1.07	.87
	- follow up	-0.10	0.15	48.00	-0.65	1.00
post	- follow up	0.06	0.15	48.00	0.42	1.00

**Table 25**

*Within Subject Effects Decisional Balance (+)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
decisional balance positive	1.95	2	0.98	6.36	.00	0.06
Residual	7.36	48	0.15			

**Table 26**

*Post Hoc Comparisons - Decisional Balance (+)*

Decisional Balance +	Time	Mean Difference	SE	df	t	$p_{\text{bonferroni}}$
pre	- post	-0.39	0.11	48.00	-3.49	.00**
	- follow up	-0.12	0.11	48.00	-1.08	0.85
post	- follow up	0.27	0.11	48.00	2.40	.06*

**Table 27**

*Within Subject Effects Decisional Balance (-)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
decisional balance negative	0.22	2	0.11	0.43	.66	0.01
Residual	12.57	48	0.26			

**Table 28**

*Post Hoc Comparisons - Decisional Balance (-)*

Decisional Balance -	Time	Mean Difference	SE	df	t	pbonferroni
pre	- post	0.07	0.14	48.00	0.51	1.00
	- follow up	0.13	0.14	48.00	0.92	1.00
post	- follow up	0.06	0.14	48.00	0.41	1.00

**Table 29**

*Within Subject Effects Civility Norms*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
Civility Norms	0.90	2	0.45	1.10	.34	0.01
Residual	19.68	48	0.41			

**Table 30**  
*Post Hoc Comparisons - Civility Norms*

Civility Norms	Time	Mean Difference	SE	df	t	p <sub>bonferroni</sub>
Pre	- post	-0.25	0.18	48.00	-1.38	.52
	- follow up	-0.04	0.18	48.00	-0.22	1.00
Post	- follow up	0.21	0.18	48.00	1.16	.76

**Table 31**  
*Within Subject Effects Negative Acts (NAQ Personal)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
Negative Acts (personal)	0.07	2	0.03	0.14	.87	0.00
Residual	11.08	48	0.23			

**Table 32**  
*Post Hoc Comparisons – Negative Acts (NAQ personal)*

NAQpersonal	Time	Mean Difference	SE	df	t	pbonferroni
pre	- post	0.07	0.14	48.00	0.48	1.00
	- follow up	0.01	0.14	48.00	0.04	1.00
post	- follow up	-0.06	0.14	48.00	0.45	1.00

**Table 33**  
*Within Subject Effects Negative Acts (NAQ Work)*

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	$\eta^2$
Negative Acts (work)	Huynh-Feldt	0.85	2.00	0.42	1.74	.19	0.01
Residual	Huynh-Feldt	11.73	48.00	0.24			

**Table 34**  
*Post Hoc Comparison Negative Acts (NAQ Work)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
Negative Acts (personal)	0.07	2	0.03	0.14	0.87	0.00
Residual	11.08	48	0.23			

		Sum of Squares	df	Mean Square	F	p	$\eta^2$
<b>Table 35</b>							
<i>Within Subject Effects Bystander Efficacy (Speak)</i>							
	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	$\eta^2$
Bystander Efficacy (speak)	Greenhouse-Geisser	6.65	1.54	4.31	12.94	.00**	0.15
Residual	Greenhouse-Geisser	12.34	37.03	0.33			

**Table 36**

*Post Hoc Comparisons – Bystander Efficacy (speak)*

Bystander Efficacy speak	Time	Mean Difference	SE	df	t	$p_{\text{bonferroni}}$
pre	- post	-0.72	0.14	48.00	-4.99	.00**
	- follow up	-0.48	0.14	48.00	-3.37	.00**
post	- follow up	0.23	0.14	48.00	1.62	.34

**Table 37**

*Post Hoc Comparisons – Bystander Efficacy (Act)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
bystander efficacy act	4.76	2	2.38	9.92	.00**	0.09
Residual	11.53	48	0.24			

**Table 38**

*Post Hoc Comparisons - Bystander Efficacy (act)*

Bystander Efficacy Act	Time	Mean Difference	SE	df	t	pbonferroni
pre	post	-0.62	0.14	48.00	-4.44	.00**
	follow up	-0.34	0.14	48.00	-2.48	.05
post	follow up	0.27	0.14	48.00	1.96	.17

**Table 39**

*Within Subjects Effects Intention (manager)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
intention (manager)	0.76	2	0.38	0.85	.43*	.02
Residual	21.26	48	0.44			

**Table 40**

*Post Hoc Comparisons - Intention (manager)*

Intention - manager	Time	Mean Difference	SE	df	t	p <sub>bonferroni</sub>
pre	- post	-0.24	0.19	48.00	-1.27	.62
	- follow up	-0.17	0.19	48.00	-0.89	1.00
post	- follow up	0.07	0.19	48.00	0.39	1.00

**Table 41**

*Within Subjects Effects Intention (Co-Worker)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
intention (co- worker)	0.53	2	0.26	1.29	.28	0.01
Residual	9.81	48	0.20			

**Table 42**

*Post Hoc Comparisons - Intention (co-worker)*

Intention - co-worker	Time	Mean Difference	SE	df	t	p <sub>bonferroni</sub>
pre	- post	-0.20	0.13	48.00	-1.56	.37
	- follow up	-0.14	0.13	48.00	-1.10	.84
post	- follow up	0.06	0.13	48.00	0.47	1.00

**Table 43**

*Within Subjects Effects Intention (personal)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
intention (personal)	0.18	2	0.09	0.34	.71	0.00
Residual	12.58	48	0.26			

**Table 44**

Post Hoc Comparisons - Intention (personal)

Intention - personal	Time	Mean Difference	SE	df	t	pbonferroni
pre	- post	-0.12	0.14	48.00	-0.83	1.00
	- follow up	-0.06	0.14	48.00	-0.41	1.00
post	- follow up	0.06	0.14	48.00	0.41	1.00

**Table 45**

*Within Subjects Effects Intention (hearsay)*

	Sum of Squares	df	Mean Square	F	p	$\eta^2$
intention (hear)	2.32	2	1.16	3.46	.04	0.05
Residual	16.12	48	0.34			

**Table 46**

*Post Hoc Comparisons - Intention (hearsay)*

Intention - hear	Time	Mean Difference	SE	df	t	p <sub>bonferroni</sub>
pre	- post	-0.43	0.16	48.00	-2.60	.04*
	- follow up	-0.27	0.16	48.00	-1.63	.33
post	- follow up	0.16	0.16	48.00	0.98	1.00