# Exploring the impact of remote working on Melbourne millennials during COVID-19

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# Abstract

The COVID-19 pandemic catalysed, for the first time, a forced global experiment in remote working with unprecedented volumes of employees working from home. Previously physically co-located teams became entirely virtual, having a significant impact on relationships between team members and leading to implications for workplace performance.

Millennials were among the most affected demographic groups in the COVID-19 pandemic, with increased vulnerability and lack of experience to similar hardship in the workplace. As the youngest cohort in the workforce, their limited experience had not enabled them to build the same resilience as their elders. Furthermore, a preference for working collaboratively and a desire for social interaction made them particularly vulnerable to social isolation while working from home.

My research explored the impacts of remote working on social cohesion from the perspective of millennials working in the most COVID-19 affected region in Australia: Melbourne, Victoria. There is a gap in the literature and an opportunity to further understand teams who have, like during the pandemic, been forced to work entirely virtually and the effect of this on their capability to form social bonds. Social cohesion has long been on the agenda of researchers due to its connection to workplace performance, organisational productivity, and employee happiness. This qualitative study utilised virtual semi-structured interviews and thematic analysis through an interpretive lens to better understand individual's perceptions and experiences of how remote working impacted social cohesion.

The findings from ten research interviews strongly indicated that the platform of communication, from face-to-face to virtual methods of interaction, significantly impacted the ability to develop and maintain social cohesion in work teams. There were both advantages and disadvantages to virtual communication in the context of social cohesion, ultimately determining that virtual relationships can be as fulfilling as those forged in person if given enough time to develop. However, the methods used to support social cohesion in face-to-face teams did not translate seamlessly to virtual communication, which was perceived as awkward and unnatural.

A theoretical pivot in the study saw an evolution of social capital and social identity theory, instrumental in developing an interview schedule, toward communication-based theories utilised in thematic analysis. The study furthers the application of media naturalness and social information processing theory to explain how virtual interaction has affected cohesion and highlight that these teams are still able to build strong relationships with time.

The contribution of my study to the research literature are four-fold; firstly, they further understanding of the importance of social connection in virtual teams. Secondly identifying the role of cohesion in the workplace for millennial employees. Thirdly, they extend knowledge on media naturalness theory in application to the current context and update the continuum of Kock's (2001) original theory. Finally, the findings develop social information processing theory in relation to understanding the relationships of virtual and hybrid teams.

My study emphasises that the world of work has changed irrevocably because of the pandemic. Future strategies to support engagement in millennial teams will need to shift to better support virtual relationships and social cohesion in the workplace.

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# Contents

## 1. Introduction

2020 marked a dramatic shift in the way we work, catalysed by the devastating events of the COVID-19 pandemic impacting billions globally; the largest worldwide pandemic in over 100 years (Pitlik, 2020). The impact of this was an unprecedented global shift toward working from home. Workplaces were disrupted and the future of work questioned by both academics and practitioners. Many workers who had little or no experience working from home spent the majority of 2020 working from their kitchen tables, forced to rapidly adapt to a new way of working (Dwivedi et al., 2020). These social changes proved to many organisations that working from home is possible on a global scale and has many ramifications for workers including social isolation, enhanced psychosocial risk from virtual working and widespread impacts on mental health (Safe Work Australia, 2020) and social connectivity (Markey, 2020). It will be many years before the implications are fully realised and yet, the way we work may have been forever changed.

Among the most vulnerable to the impacts of the pandemic were millennials workers, the most recent additions to the workforce yet to develop resilience to the financial and emotional hardships of the pandemic (Deloitte, 2020). Millennials have a penchant for working in group environments, with a preference for connection and collaboration in the workplace (Carter, 2019; van den Bergh & de Wulf, 2017), making them particularly susceptible to the impacts of remote working. They are known as one of the most misunderstood demographics in the workforce today (Jha et al., 2019), highlighting the importance of better comprehending this cohort to inform both academics and practitioners. While another pandemic in this form may not occur, the future of work has been irrevocably changed. It is critical for organisations to identify how millennials have been affected by virtual working to help them thrive in the future business environment, as forthcoming leaders of the workforce. My study leverages the unique context of the pandemic to better understand how a substantial shift in working and connecting with colleagues has impacted how millennials develop social bonds at work.

Social cohesion has been well canvassed in the research literature and is an important area of group work studies. It is associated with positive impacts including increased productivity, organisational loyalty, decreased turnover, improved overall job satisfaction and happiness at work (Advanced Workplace Associates, 2017; Amjad et al., 2015; Göritz & Rennung, 2019; Morrison, 2004; Mullen & Copper, 1994). Understanding how a change of work environment, or a shift in the way individuals connect and communicate, impacts social relationships in the workgroups of an inherently social demographic can inform future work strategies. This can assist human resource managers in improving employee engagement to better leverage the talents of millennials as they become

increasingly prominent in the workforce. Furthermore, virtual teams are disadvantaged in their ability to form strong relationships in comparison to physically co-located teams (Furumo & Pearson, 2006; Paul et al., 2016; Toler, 2015), revealing weaknesses in remote workers with their capability to form relationships and connect with their colleagues. The pandemic offers an opportunity to study workplace relationships in a unique circumstance yet to be explored in research literature. Investigating the impact of changing social bonds, particularly through the viewpoint of socially-oriented millennials, provides a vital area of research to progress social cohesion in virtual teams.

This qualitative study considers the recent developments in the workplace as an impact of the COVID-19 pandemic, exploring the change from physical co-location to virtual working and the consequences on social cohesion in workgroups as a result. My investigation is guided by a research question, aligned with an interpretivist paradigm seeking to understand individual experiences.

> ***How has a shift toward fully virtual teams affected the social cohesiveness and bonding of millennials in Australia within their workgroups?***

My research reflects an investigative journey initiated in the theoretical foundations of social capital and social identity theories, helping to identify the presence of social cohesion in teams. These concepts were instrumental in the development of a research schedule allowing for the collection of rich data. However, in my analysis, I found that a communication theory was required to better explain how a shift in communication platform affected cohesion and relationships. Media naturalness theory (Kock, 2001) and social information processing theory (Walther, 2016) were employed following thematic analysis, linking the communication platform to social cohesion.

This thesis is arranged into eight main parts, including this introduction. The second section, the literature review, provides an overview of the theoretical background and research context. Literature investigating and conceptualising social cohesion, virtual teams, media naturalness theory, millennials, and the COVID-19 pandemic response are highlighted and critically discussed to support the direction of this thesis. The third section gives an overview of the methodology including the qualitative research design, data analysis and thematic development, participants and ethical considerations. This is followed by the findings in Section 4, grouped under four key themes: the importance of social connections in the workplace, technology and social connection, spontaneous and natural communication, and building and maintaining virtual relationships. Section 5 is the discussion, explaining the findings in Section 4. The conclusion, Section 6 highlights theoretical contributions and practical applications for this research. Section 7 gives limitations and further research and Section 8 provides the concluding statement.

## 2. Literature review

This thesis uniquely brings together key areas of research literature to make sense of millennial experiences working remotely against the backdrop of the COVID-19 pandemic, highlighting its unique contribution to management literature. This literature review will uncover key findings and reflections from scholars on millennials in the workforce, social cohesion and the related theories of social capital and social identity, research on virtual teams, media naturalness theory and early investigation of the COVID-19 pandemic.

The definition of team adopted in this literature review is from Kozlowski & Ilgen (2006) and is defined as two or more individuals who socially interact either face-to-face (FTF) or virtually, have a common goal and perform organisational tasks in one organisation.

### 2.1. Social cohesion

The concept of team cohesion has popular on the research agenda of scholars investigating group dynamics for over half a century (Greer, 2012). A 2012 study found over 77 articles on cohesion in Small Group Research since its inception in 1970, the most prevalent topic in the journal (Greer, 2012). Throughout management research, cohesion has been shown to be beneficial to group and organisational performance, with a range of benefits including increased team learning (Dimas et al., 2020), productivity and performance (Dailey, 1977), job satisfaction and psychological wellbeing (McLeod & von Treuer, 2013) greater innovation within teams (Göritz & Rennung, 2019; Mutonyi et al., 2020) and lower levels of stress in the workplace (Salas et al., 2015).

Social cohesion is closely related to social capital and social identity theory, which will be further discussed in this literature review. The presence of social capital, evidenced through trust and social bonds, is evident in highly socially cohesive teams (Bye et al., 2020) and has been, like social cohesion, shown to influence team effectiveness (Han, 2018). Social identity theory is also apparent in socially cohesive teams, with well-bonded teams comprising members with a strong sense of belonging to the group (Liao et. al, 2020). These concepts will be addressed to better identify the outputs of social cohesion leading to the presence of social capital and the internal processes enabling cohesion through social identification.

### 2.1.1. Defining social cohesion

For a topic so well-researched, cohesion is relatively poorly defined throughout literature (Salas et al., 2015). Cohesion refers to attraction to the group overall, satisfaction within members and social interaction within the group (Han, 2018). It has been described as the shared attraction for team members to stay together (Salas et al., 2015), mutual attraction toward a group and the resulting forces encouraging group membership (Kozlowski & Ilgen, 2006) and the "gel that binds teams

together" (Bayraktar, 2017, p. 3). Festinger's (1950) definition of cohesion has been well-cited and is relevant today with academics still referencing this construct as "the result of all the forces acting on members to remain in the team" (Dimas et al., 2020, p. 2) (referenced also by Carless & De Paola, 2000; Castaño et al., 2013; McLeod & von Treuer, 2013; McPherson & Smith-Lovin, 2002). This definition is praised for acknowledging three factors of group cohesion including task cohesion, social cohesion and group pride (Castaño et al., 2013).

Understanding cohesion as a multidimensional construct acknowledges the attitudes and behaviours of teams, in addition to individual and team levels of the concept (Salas et al., 2015). It includes attraction to the group, commitment to task and pride in group membership (McLeod & von Treuer, 2013). This highlights an important distinction between task cohesion and social cohesion, the most popular concepts of cohesion identified by scholars. Task cohesion exists with relation to the task the team was organised to perform (Carron et al., 1985) and strongly correlates to positive team outcomes (Dimas et al., 2020; Forrester & Taschchian, 2004; Salas et al., 2015) and fulfilment of goals and objectives for the team (Bayraktar, 2017). Whereas, social cohesion is an interpersonal construct referring to the attraction between group members (McLeod & von Treuer, 2013).

Social cohesion is fundamental for a high-performing team and encourages the group to stay together, bonded by mutual affection (Lao, 2015). It may form the basis of commitment to task, or task-based cohesion and supports work-group effectiveness and is characterised as group progress through meaningful interaction (Altebarmakian & Alterman, 2019). The concept has also been referenced as the ability for a group to stick together (Tan et al., 2019), the perceptions of individuals to want to work for their group (Paul et al., 2016) and satisfaction of the affective needs of group members (Vanhove & Herian, 2015). It is particularly salient when studying the millennial generation, who identify as requiring high levels of social connection with their colleagues (Myers & Sadaghiani, 2010).

Carron et al.'s (1985) Group Environment Questionnaire is a respected measure of group attraction and has been widely referenced in studies on cohesion (McLeod & von Treuer, 2013). Carron et al.'s (1985) definition of group cohesion is a dynamic process binding a group together to achieve shared goals and objectives. This definition will inform my investigation, characterising social cohesion as the social bonds between team members, contributing to work performance and productivity of group members. It is noted for its credibility in research literature (McLeod & von Treuer, 2013) and applicability to both physically co-located and virtual teams with a focus on the team level construct rather than geographic proximity.

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Indicators of team cohesiveness include spending time together outside of work hours (Amjad et al., 2015; Forrester & Tashchian, 2004; Salas et al.,2015), team pride and team spirit (Castaño et al., 2013; Lao, 2015; McLeod & von Treuer, 2013; Salas et al., 2015). Additionally, high trust within teammates is often cited as another indicator (Bye et al., 2020; Lao, 2015; Xiang et al., 2013). The presence of trust in socially cohesive teams has also been linked to the possession of social capital, a concept that will be further explored in this literature review.

### 2.1.2. Social cohesion and performance

The relationship between cohesiveness and performance is mediated by the degree of interaction, the group's size and its reality, or context (Mullen & Copper, 1994). It has been shown that larger groups have lower levels of cohesiveness than smaller teams (Mullen & Copper, 1994). Understanding the context of organisational culture, team leadership and the wider organisation is also critical when exploring cohesiveness (Fiol & O'Connor, 2005). Additionally, team tenure is an important contributor to social cohesiveness (Castaño et al., 2013) and teams with a longer tenure tend to have higher levels of cohesiveness with more time to establish strong relationships.

### 2.1.3. Workplace friendships and social cohesion

Workplace friendships are linked to social cohesion as workgroups with strong levels of cohesion are likely to form friendships between colleagues who spend substantial amounts of time together (Fonseca et al., 2019). As such, researchers often investigate time spent with colleagues after work as an indicator of high levels of cohesion in a workgroup (see, for example, Amjad et al., 2015; Castaño et al., 2013; Forrester & Tashchian, 2004; Salas et al., 2015).

A positive association between workplace performance and social dynamics in the workplace has been established (Burkus, 2017). Additionally, these relationships promote positive workplace cultures (Amjad et al., 2015) which improve organisational employment branding and support employee experience. Friendships in the workplace also improve employee productivity (Burkus, 2017), further illustrating the importance of social cohesion to organisational performance. Workplace friendships and cohesiveness have also been related to increased job satisfaction (Morrison, 2004).

Workplace friendships are an outcome of a socially cohesive team with benefits including employee performance, increased organisational productivity and reduced threat of turnover (Amjad et al., 2015). Employee turnover is expensive to organisations, costing as much as 1.5 times the annual salary of an employee (Begley & Dunne, 2018). Teams with strong social cohesion experience higher levels of group commitment, translating to lower levels of organisational turnover (Ellemers & Rink, 2005). This relationship highlights an imperative for employers to consider ways to increase and

support cohesion to facilitate workplace friendships and minimise turnover by increasing organisational loyalty.

Multiple scholars have positively linked workplace friendships to performance but others give warning of the impact of teams that are too well bonded. Team cohesion has the potential to inhibit the exchange of ideas, creative strategy ideation, and decreased task focus (Dimas et al., 2020). Highly cohesive teams are also at risk of 'groupthink'; pressure to conform can encourage groupthink and negatively impact effective decision making (Manz & Neck, 1995). Team cohesion can also attract negative consequences when teams become too rigid and attached to their existing plans, unable to adapt to a changing work environment (Khoshsoroor et al., 2019). Cohesive teams can expend their time and energy on failing plans due to their mutual investment in a project. A team leader's challenge, therefore, lies in their ability to support cohesiveness to gain the benefits of productivity and performance, while limiting the threat of groupthink.

### 2.1.3.1. *Workplace friendships and social identity theory*
The concept of groupthink has been linked to social identity theory, explaining how individuals relate to socially cohesive workgroups (Turner et al., 1992). Groupthink is found to be present in highly cohesive teams and may come as a result of social identity maintenance to strengthen the group's sense of self (Turner et al., 1992). Members of a highly cohesive group may agree with a poor quality decision to ensure their social acceptance in their group is maintained. Social identity theory is an important concept in group studies, explaining how individuals make sense of themselves and their identities from the memberships they hold within their groups (Korte, 2007). Social identity is an individual's perception that they belong to a particular social group (Liao et al., 2020). The theory predicts that individuals will have many identities within an organisation (Hennessy & West, 1999). The strongest identification will be with the group they are the most bonded with, usually their organisational subunit (Ambrose et al., 2018). Another negative impact of highly cohesive teams is that they can detract from task focus due to the emphasis on social relationships over the objectives of the group and even lead to emotional exhaustion (Burkus, 2017).

### 2.1.4. Benefits of social cohesion in the workplace
### 2.1.4.1. *Organisational benefits*
Cohesion in work teams has been gaining prevalence in management research, with highly cohesive teams outperforming their less synergistic counterparts (Ellemers et al., 2004). Teamwork is vital for competitive advantage in organisations and performance can be contingent on successful teamwork (Korte, 2007).  Individuals are more committed to achieving team goals when they have high levels of cohesion with their workgroup (Liang et al., 2015). Cohesive teams perform better, are more innovative and develop faster solutions (Göritz & Rennung, 2019). They are additionally shown to

exert higher levels of individual innovation (Mutonyi et al., 2020). Cohesion is important for organisational performance, showing an imperative for researchers and management scholars to better understand the conditions contributing to cohesion to improve organisational performance.

### 2.1.4.2.    Individual benefits

Despite the potential for negative consequences in highly cohesive teams, the positive impacts are substantial and researchers seek to find ways to enhance these benefits for organisational performance. Team cohesion has been linked to individual wellbeing, with members of highly cohesive teams experiencing improved wellbeing (Vanhove & Herian, 2015). Mental wellbeing is critically important in the COVID-19 pandemic, with the increased isolation of workers in lockdown and threat of psychosocial risk (Safe Work Australia, 2020). Cohesive teams can provide their members psychological safety (Mutonyi et al., 2020) which can decrease workplace stress as employees feel safe to express themselves. Higher rates of cohesion have also been linked to lower levels of job stress (Steinhardt et al., 2003). This further demonstrates the salience of fostering cohesion to minimise other factors of job stress while employees manage the disruption in their work lives caused by the COVID-19 pandemic.

It is important to consider cohesion in relation to millennials for the context of this study. Millennials have been shown to require stronger motivating factors to perform in the workplace than previous generations (Mahmoud et al., 2020). This demographic group have also been highlighted as expressing a strong desire to form close relationships with their colleagues (Landrum, 2018). They are more motivated when working in a highly collaborative work environment (Mahmoud et al., 2020) conducive to positive social relationships. Determining a link between cohesion in the workplace, workplace friendships and motivation in millennials will be an important contribution of this study to existing research literature.

### 2.1.5.   Social identity theory and social cohesion

Social identity theory examines how individuals relate to a group and make sense of themselves and others in a social environment (Korte, 2007). The theory was originally developed by Tajfel (1978), based on the premise that individuals build their identity in relation to the group they are in. The theory describes how an individual identifies with their group (Hennessy & West, 1999) and highlights that people tend to perceive themselves with regard to their group memberships (Liao et al., 2020).

As demonstrated in the discussion on groupthink, social identity theory and social cohesion are tightly linked. A strong sense of social identity is associated with group pride (Korte, 2007), also known to be an indicator of social cohesion (McLeod & von Treuer, 2013). Strong identification with

the workgroup is also linked to other benefits of cohesion including organisational commitment (Ellemers & Rink, 2005), higher motivation, and synergy in teams leading to increased performance (Ellemers et al., 2004). Furthermore, socially cohesive teams create environments for better collaboration, positively associated with enhancing motivation (Mahmoud et al., 2020). Millennials require stronger motivation to commit their time and effort (Mahmoud et al., 2020) and social cohesion can be a contributing factor to influence motivation and performance.

Social identity theory further recognises that team processes are highly dynamic (Bruskin, 2019), as is the case with social cohesion (Bayraktar, 2017). Social identity is also shaped by context and affected by situational factors (Bruskin, 2019), highlighting the impact of COVID-19 on workgroup social identity and associated social cohesion as an important field to study.

### 2.1.6.   Social capital theory and social cohesion

While social identity theory relates to how an individual feels toward their team, social capital theory refers to how the team overall performs. Social capital theory is gaining prevalence in organisational studies due to its connection to career success, access to employment opportunities, supplier relations and reduced turnover rates in organisations (Adler & Kwon, 2002). Social capital is the capital stemming from social interaction and relationships (Bye et al., 2020) including information, influence, and emotional support (Han, 2018). It has been described also as the "goodwill available to individuals or groups" (Adler & Kwon, 2002, p.23) with strong links to trust and social connection in teams. It has benefits of information sharing, knowledge transfer and is evident in teams that are well bonded, or highly socially cohesive (Bye et al., 2020).

Teams with higher levels of social capital are typically homogenous (Bye et al., 2020), posing a threat of stifling creativity similar to groupthink. Conversely, it has been found that social capital can improve team creativity in project teams as these groups are more likely to share information (Xiang et al., 2013). Creativity has also been correlated to team cohesion (Dailey, 1977; Hahm, 2018), further interlinking the two constructs. Team social capital is different from group cohesion but can be an outcome of socially cohesive teams (Han, 2018), illustrating its relevance in understanding social cohesion in workgroups.

Social capital is linked to the development of a shared mental model or common thinking style that is related to cohesion in groups (Xiang et al., 2013). The positive impacts of a shared mental model include the creation of a friendly climate in a workgroup, collaborative problem solving and knowledge sharing (Xiang et al., 2013). Social capital is underpinned by social cohesion and relates to team effectiveness in the group as a whole (van Emmerik et al., 2010). Social capital theory should, therefore, be applied to better understand social cohesion in workgroups.

### 2.1.7. Social identity, social capital and social cohesion

Social identity theory refers to the individual's relationship with their team, likely to be stronger in cohesive teams. It helps to draw connections between highly cohesive teams and how individual team members relate to their workgroup. Social capital theory is an outcome of social cohesion; cohesive teams will have large amounts of social capital to utilise. These theories help identify high levels of cohesion and understand an individual's relationships with their team.

Figure 1 shows the relationship between social cohesion with social capital and social identity theories. Social capital can be seen as an outcome of a highly socially cohesive group. Social identity refers to the individuals within a socially cohesive group and their perception of self as a result of this membership.

*Figure 1: Linking social cohesion with social capital and social identity theory*

**Possession of high social capital in the group**
Trust, social connection, emotional support, information sharing, influence, knowledge transfer

**Group with strong social cohesion**

**Strong sense of individual social identity for group members**
Group pride, sense of belonging, organisational commitment, team synergy, collaboration
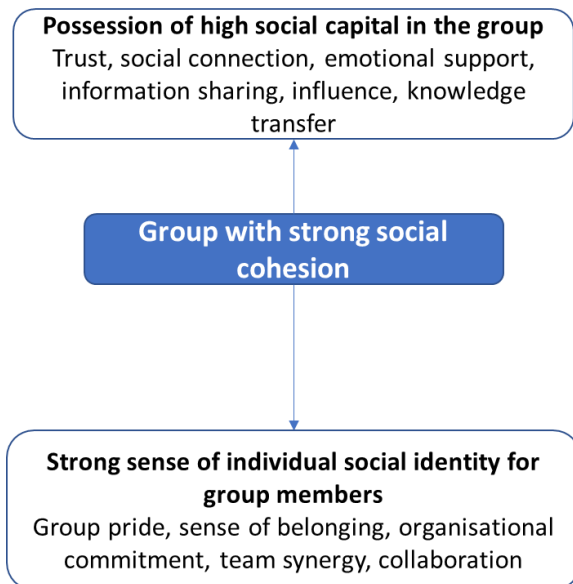
The next section will delve into virtual teams to better understand the workgroup context as it exists today and the impact of a virtual environment on the formation of group bonds and facilitation of communication contributing to the development of social cohesion.

## 2.2. Virtual teams

Global virtual teams are not a new phenomenon and have been cited as a way to increase competitive advantage (Hahm, 2018; Tan et al., 2019), harness global talent (Paul et al., 2016; Bourke, 2015) and empower organisations to thrive in a progressively complex business landscape. Working virtually has benefits appealing particularly to millennials who value the personalisation of their work schedules and flexibility, leading to improved work motivation and team empowerment (Morley et al., 2015). The COVID-19 pandemic has further exacerbated the need for organisations to support virtual team development with many businesses forced to transition to virtual work

structures and rapidly adopt new technology (Carroll & Conboy, 2020) to stay functional. These teams are typically depicted in the literature as inherently disadvantaged, compared to traditionally co-located teams (Toler, 2015).

### 2.2.1. Technology and virtual teams

The utilisation of technology to enable virtual teams to operate and thrive is key in understanding how remote workers connect, communicate and collaborate. Modern virtual teams use programmes such as video conferencing, Microsoft Teams and other information-sharing technologies (Morrison-Smith & Ruiz, 2020). Transformation from physically co-located to virtual teams in many workplaces has been fuelled by the rapid introduction of information and cloud-based technology which has made remote working possible with new norms of social distancing (Dwivedi et al., 2020). Textual communication has shown to be the least successful platform for developing trust in teams (Morrison-Smith & Ruiz, 2020), a vital component of social cohesion. Virtual teams typically spend more time communicating than traditionally co-located teams (Morrison-Smith & Ruiz, 2020), impacting workflow and productivity. The use of technology is particularly prevalent with millennial workers who utilise these platforms quite differently from their elders with increased connectivity through social media (Deal et al., 2010). Their social connectedness may therefore be less affected because of this technological reliance than older generations. This technology, while enabling virtual teams to operate, also threatens to tip the work/life balance millennials desire, blurring boundaries between home and work (Dwivedi, et al., 2020).

### 2.2.2. Defining virtual teams

Virtual, or remote teams are prevalent in organisations powered by rapid developments in information and communications technology facilitating connection between teammates who may never meet. These teams face challenges relating to trust, geographical distance, perceived distance to colleagues and motivation (Morrison-Smith & Ruiz, 2020). However, my study predominately seeks to observe teams that were previously physically co-located, still operating in the same time zone and reflecting a new context of investigation. Tan et al.'s (2019) definition includes working across different geographies and time zones, factors commonly mentioned with virtual teams (see, for example, Bourke, 2015; Frame, 2018; Hahm, 2018; Powell et al., 2004). This does not accurately capture the situation of this research where teams are working virtually due to a State mandate, often within a close geographic distance yet unable to physically connect. Virtual teams that have an opportunity to socially engage in their initiation are more likely to display higher levels of socialisation and communication (Powell et al., 2004), providing an interesting area of analysis for virtual team members who were established in physically co-located environments prior.

### 2.2.3. Social connection and virtual teams

Virtual teams have been repeatedly characterised as disadvantaged in their ability to form strong social bonds compared to co-located teams (Furumo & Pearson, 2006; Paul et al., 2016; Powell et al., 2004; Toler, 2015). Virtual teams have fewer direct social interactions than physically co-located teams, contributing to lower levels of rapport (Lao, 2015) and therefore, cohesion. Cohesion has been studied in virtual teams highlighting its contribution to group performance and the perception of cohesiveness to connect and identify an individual's relationship to their group (Salisbury et al., 2006). Measures of cohesion include belonging, enthusiasm, happiness with the group and pride (Salisbury et al., 2006). Social harmony is additionally important to group wellbeing and contributes to worker happiness in virtual teams (Salisbury et al., 2006; Vanhove & Herian, 2015). It is imperative to find ways to support mental wellbeing in the workplace as the pandemic threatens the mental health of workers through increased social isolation (Safe Work Australia, 2020).

#### 2.2.3.1. Social information processing theory

While the development of social cohesion in virtual teams has been shown to be more difficult in comparison to teams that are physically co-located, recent research highlights these teams can develop strong relationships with time. Social information processing theory stipulates that if teams are given sufficient time to establish social bonds, they can reach the same level of interpersonal relationships as in FTF teams if other variables are comparable (Walther, 2016). The tenure of the team is therefore especially important to consider, as virtual teams take longer to develop social bonds (Walther, 2016). Computer-mediated communications (CMC) take longer for individuals to amass interpersonal information about their colleagues critical for the development of intimate connections (Walther, 2016). This highlights that while it is not impossible for virtual teams to reach the same level of cohesiveness as FTF teams, it does take longer and may be more challenging.

#### 2.2.3.2. Non-verbal communication and social connection

Non-verbal communication comprises 93% of meaning in interactions (Smith, 2020), highlighting the disadvantage of virtual teams who miss cues conveyed FTF. This is evident even with video calls, which only capture the face of individuals, potentially concealing other body language cues evident in FTF communication. This increases the chance of miscommunication in virtual teams, who are also shown to be more susceptible to interpersonal and task-based conflict (Morrison-Smith & Ruiz, 2020). Conflict will be further exacerbated if the team has low levels of cohesion (Morley et al., 2015). The lack of FTF interaction inherent in virtual teams can result in a lack of trust (Furumo & Pearson, 2006) and may also hinder information sharing and conflict resolution (Toler, 2015).

Communication in virtual teams is a key predictor of team performance and commitment (Morrison-Smith & Ruiz, 2020), highlighting why virtual teams are traditionally more disadvantaged than those

that are physically co-located, with fewer communication media, like FTF available to them. Virtual teams have poorer task performance with a longer completion rate of projects and reportedly lower levels of group satisfaction (Lao, 2015). The physical distance between team members can also lead to a psychological or perceived distance precluding the development of cohesiveness (Salisbury et al., 2006). The proximity of team members is associated with visibility in their team membership (Fiol & O'Connor, 2005), challenging the social identity of team members who are no longer physically co-located. There are therefore strong drawbacks of virtual teams but it is not known how these barriers influence teams who were originally socialised in a physical context, which is examined in my research.

Recent research conducted with American library college staff reflects the desire to socially connect with colleagues as a key priority for remote workers (Rysavy & Michalak, 2020). It was shown that, although just under half of respondents felt as connected to their colleagues virtually as when they were on-site, remote workers found networking and collaboration more challenging overall than in FTF settings (Rysavy & Michalak, 2020). To mitigate this challenge, companies need to foster more of a community mindset (Rysavy & Michalak, 2020), aligned with the millennial preference for working (Landrum, 2018). Virtual team meetings can enhance interpersonal connection (Rysavy & Michalak, 2020), but do not replace FTF interactions, demonstrating the relevance of this study to better understand how working virtually may impact social cohesion.

### 2.2.4. Success in virtual teams

Critical success factors for virtual teams include organisational structure, team processes, virtual environment and individual team members (Morley et al., 2015). As with FTF teams, virtual team members who have longer team tenure typically have higher levels of cohesion (Tan et al., 2019). Organisational culture and structure are also highlighted as success factors for virtual teams (Morrison-Smith & Ruiz, 2020). It is important to understand the wider context around the team which has a transformative impact on how they socialise and communicate. Organisational factors should also be considered to better understand the cohesive environment in context. Leadership also contributes to the success of virtual teams (Hahm, 2018). Effective virtual team leadership facilitates the collaboration and the development of relationships (Morrison-Smith & Ruiz, 2020). Although interviewing organisational leaders is outside the realm of my research, it provides another opportunity to understand virtual teams from the perspective of those supporting them. Such research could inform leadership practices by understanding millennial engagement in virtual teams.

### 2.2.4.1. Trust in virtual teams

As with social cohesion, trust is easier to develop in smaller virtual teams (Kurtzberg, 2014), further necessitating the need to understand team size and whether larger teams formed in physically co-

located environments can maintain trust and cohesion when they adopt a virtual team structure. The topic of trust in virtual teams, which is a contributor to social capital (Bye et al., 2020; Xiang et al., 2013) is widely studied, with scholars identifying the impact of geographic separation on the formation of trust (Wise, 2016). Trust is also referenced as an indicator of performance; teams with greater levels of trust typically possess higher social cohesion, leading to improved performance (Lao, 2015), motivation (Morrison-Smith & Ruiz, 2020) and job satisfaction (Wise, 2016). Trust is the key variable driving collaboration, feedback and conflict resolution in virtual teams and is more fragile than in face-to-face teams (Morrison-Smith & Ruiz, 2020). Trust is more challenging to obtain in virtual teams, but once obtained, can drive positive group interaction, exchange information more freely and increase satisfaction with the team experience (Furumo & Pearson, 2006).

### 2.2.5. Virtual team research

Typical studies have investigated teams established in a virtual context for a specific project, with limited opportunity for FTF contact (Toler, 2015). The phenomenon of physical-turned-virtual teams relying solely on virtual communication in organisations is a unique occurrence observed by the COVID-19 response. Typical studies of teams have predominately been quantitative (Toler, 2015) with students often the focus of research (for example, Altebarmakian & Alterman, 2019; Furumo & Pearson, 2006; Khoshsoroor et al., 2019). Virtual team studies also typically explore global workgroups and an opportunity to better understand virtual teams in the context of how they exist today and may develop in the future is evident in this research study.

Teams work better when they are developed to have a meaningful social connection (Kurtzberg, 2014). Cohesion in virtual teams is a topic of interest to researchers such as Altebarmakian & Alterman (2019), Furumo & Pearson (2006), Paul et al. (2016), and Tan et al. (2019). Cohesion is related to team performance (Tan et al., 2019) and with the inherent disadvantages of virtual teams, there is a greater onus on organisations to find ways to enable these teams to succeed. While cohesion is a relevant topic to teams regardless of how they connect, low levels of social cohesion may be more detrimental to the performance of a virtual team than a physically co-located one. As Hahm (2018) argues, if cohesiveness is low, cooperation and team performance overall will also decrease as cohesion is related to information sharing between team members and organisational citizenship levels.

### 2.2.6. Virtual teams and COVID-19

Virtual teams are not by any means new to the business world (Hahm, 2018) but the scale of virtual teams witnessed during the COVID-19 pandemic with millions worldwide working from home presents an entirely new context of study. A 2020 Gartner survey found that 88% of Australian organisations required, or encouraged employees to work from home during the lockdown

(Mitchell, 2020). Early investigations of employees working from home indicate that there is a preference expressed by some for more flexibility in their future working arrangements (Braue, 2020), but a greater threat of psychosocial risk and mental health vulnerability with employees working from home during COVID-19 (Safe Work Australia, 2020). Supporting connectivity within teams has been linked to improved worker mental health (Vanhove & Herian, 2015), highlighting the need to consider social cohesiveness in virtual teams to support wellbeing amidst unprecedented social isolation.

One of the most notable differences between virtual and co-located teams is the lack of media richness in virtual communication (Liao et al., 2020; Furumo & Pearson, 2006), stemming from Daft and Lengel's (1986) media richness theory. This literature review will now investigate media naturalness theory, proposed by Kock (2001) as an extension of media richness and serves to address some of the shortcomings of applying the original theory to the current context.

## 2.3. Media naturalness theory

Media naturalness theory offers a lens to understand the impact of communicating through different platforms on the sender and the receiver of information. The characteristics of a platform that contribute to its perceived naturalness, or similarity to FTF, relate to the synchronicity of communication, co-location, ability to convey facial expressions, body language and sound through intonation and speech (Kock, 2005).

### 2.3.1. Origins of media naturalness theory

The theory was originally developed as an extension of media richness from Daft and Lengel (1986) in response to some of the limitations and inconsistent findings in the theory. Media richness was created to help managers understand the impact of selecting an appropriate communication platform in organisations to increase the clarity and understanding of the message for recipients (Daft & Lengel, 1986). The focus was on reducing uncertainty and ambiguity in information processing in an era where alternative communication formats to FTF were making an impact on organisational communication, particularly with the increasing popularity of email, viewed as a deeply impersonal medium (Daft & Lengel, 1986). The assertion was that FTF communication should be placed at the top of the hierarchy of richness, followed by telephone, personally addressed letters or memos, impersonal written documents (such as flyers) and lastly, numeric documents (Daft & Lengel, 1986). 'Lean', or media low in richness – richness equating to the full cues of FTF interaction - described methods of communication restricting cues and feedback enabling successful decoding and understanding of information. This makes them less appropriate to communicate sensitive or difficult to understand messages (Daft & Lengel, 1986). The hallmark of this theory

identifies direct contact, or FTF communication as the best medium to fully convey messages and reduce misunderstanding (Daft & Lengel, 1986).

Daft and Lengel's (1986) theory was adopted broadly outside of managerial communication and is one of the most widely cited theories in literature exploring electronic communication (DeRosa et al., 2004). Despite its popularity, it has received criticism for inconsistent empirical results when using the theory with an overly simplistic channel selection of communication media existing today (Ishii et al., 2019). Another limitation is that media richness has been considered too narrow in its application to recent research studies, unable to explain why individuals develop a learned preference for a communication platform (Kock, 2001). The theory is criticised for not considering organisational culture and preference for communication method (Kock, 2005). Media richness theory is critiqued as a technological theory limited in its ability to account for the unpredictability of human behaviour (Kock, 2001), reinforcing the need to re-evaluate this theory to apply to modern communication contexts.

Media richness theory does not consider the social behaviour of humans to develop a preference for a particular communication platform (outside of FTF) and a learned ability to cultivate strong relationships through specific platforms, despite their 'leanness', or lack of similarity to FTF (Kock, 2005). It instead presents a hierarchy of communication platforms, with FTF at the top and does not explain personal preference. A recent study has uncovered that leveraging 'lean' media to collaborate utilising channels such as Google Docs and Facebook enabled high interactivity and 'rehearsability' for communication, leading to more polished and clearer messages than in traditional, synchronous FTF communication (Ishii et al., 2019). This 'rehearsability' means individuals have greater control over their messaging than with FTF communication, mitigating the lack of nonverbal cues with carefully constructed message encoding (Cheshin et al., 2011).

Kock's (2001) media naturalness theory seeks to advance the media richness hypothesis identifying the richness of communication platforms in their similarity to FTF communication and addresses the drawbacks and inconsistencies found in the research as it applied to communication studies. The theory is neither social nor technological, as previous attempts to explain e-communication tend to be (Kock, 2001).

Figure 2 draws on Kock's (2005) article on media naturalness highlighting the key principles of this theory. The theory places communication on a continuum, opposing the hierarchy of media richness, with FTF as the most natural form of communication. The diagram encompasses the five attributes of FTF communication leading to its naturalness and refers to the efforts of unnatural communication.

*Figure 2: Principles of media naturalness theory*
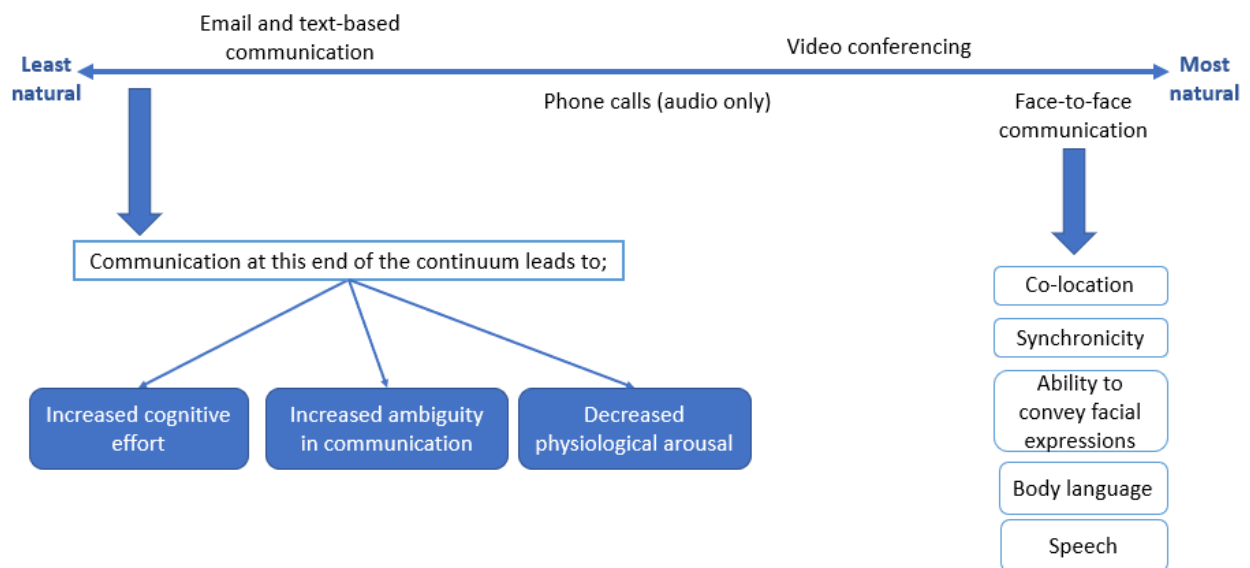


## 2.3.2. Defining naturalness

FTF communication is placed on a continuum as the most 'natural' form of communication, with text-based communication at the other end (Vlahovic et al., 2012). The reference to naturalness refers to the way humans are biologically wired to communicate, drawing on evolutionary psychology and social theories to better explain the differences in interaction between communication platforms (Kock, 2005). Media naturalness draws on Darwinian theory to bring an evolutionary lens to human preferences to communicate in the FTF medium (Kock, 2001).

Media naturalness advances media richness theory with three key principles as its main hypotheses. The first is that FTF is the most natural medium and media integrating elements of this platform will be perceived as more natural and require less cognitive effort to communicate (DeRosa et al., 2004). The less similar a communication platform is to FTF interaction, the greater the potential for miscommunication and effort to communicate, for a reduced physical reward. Platforms such as virtual text-based communication would be considered the least natural. They put a strain on both the encoding and decoding of the message to communicate meaning, with a minimised reward from the interaction with clarity and physical response.

The second, the innate schema principle, refers to the preference of humans to communicate FTF as a result of evolutionary biology; neural pathways have been cultivated in the brain throughout evolution that are hardwired for FTF communication (Kock, 2001). The innate schema principle highlights that despite different cultural backgrounds and learned behaviours, humans have an evolutionary preference for FTF communication, salient in the rise of e-communication bringing together talent globally in increasingly diverse teams. Recent developments in communication, such

as with Skype or Zoom, do not operate in the same neural pathways established for FTF communication and therefore require greater cognitive effort. The last principle considers more recent developments in communication research and is the learned schema diversity principle (Kock, 2001). This emphasises the importance of an acquired communication schema from environment and practice, and the salience of individual differences due to learned behaviour (DeRosa et al., 2004). The learned schema principle responds to some of the critiques of media richness theory which do not address why communication preferences evolve and acknowledges the unpredictability of human behaviour (Kock, 2001).

This theory has been applied to virtual teamwork and leadership (see, for example, DeRosa et al., 2004), using media naturalness theory to highlight how those who are experienced working in the virtual environment will adapt more quickly than those who are new to the medium. This is particularly relevant to my research which predominately analyses individuals who are new to the virtual environment, building and sustaining relationships with colleagues who are also still learning how to communicate virtually. This theory would suggest that as team members become more familiar with a platform considered 'lean', or lower in richness, their positive perception of this medium is increased and they become more comfortable communicating with less natural media (DeRosa et al., 2004). The application of social information processing theory proposes that given sufficient time for communication, virtual teams will experience the same level of interaction as FTF teams if other variables are comparable (Walther, 2016). This has relevance for this research on social cohesion in virtual teams and will be further explored in the discussion of this thesis.

The focus of this literature review will now turn towards millennials in the workforce, representing one of the largest future demographic groups (Haworth and Work Collectiv, 2017) and a cohort vulnerable to the impacts of the pandemic due to their inexperience in the workforce overall. Millennials, additionally, have been described as digitally savvy (Mahmoud et al., 2020), highlighting that their experience working in teams relying on digital communication may yield different perspectives from their elders. This literature review will uncover millennial preferences to set the context for a study into the experiences of this group working remotely.

## 2.4.    Millennials in the workforce

Millennials as a cohort have been a topic of interest on the research agenda of scholars and practitioners due to their unique characteristics defining them against the behavioural norm of previous generations in the workforce. They have been labelled as difficult to manage by human resource professionals (van den Bergh & de Wulf, 2017) and critiqued for being unengaged and lacking trust in their work (Carter, 2019; van den Bergh & de Wulf, 2017). This generation is not well

understood, with a Pricewaterhouse Cooper study of 1201 CEOs from 69 countries revealing that attracting, retaining, and engaging millennials is one of the biggest challenges for business leaders (Jha et al., 2019). This lack of understanding attracted the attention of researchers who have endeavoured to better understand how to engage this group in the workforce.

Millennials have been praised for transforming the business environment to become more employee-centric (Mahmoud et al., 2020), possessing positive traits including assertiveness and high self-esteem (Deal et al., 2020). They are described as having an affinity for technology and computer-mediated communication and a desire for flexible workplaces (Myers & Sadaghiani, 2010), particularly relevant for this study.

### 2.4.1. Defining characteristics of millennials

Millennials are predicted to be the largest percentage of the global workforce by 2025 and will comprise almost 75% of the Australian workforce (Haworth and Work Collectiv, 2017). Understanding the drivers of millennials is imperative for organisations wishing to better engage their employees, improve workplace satisfaction and ultimately, their overall performance.

There are mixed views on the value millennials bring to the workplace and further confusion from scholars on what exactly constitutes a millennial. This investigation will take the definition from an Australian report by the Haworth and Work Collectiv (2017) that millennials are individuals born between 1980 and 2000, with the oldest millennials aged 30 at the time of the study.

Millennials value their non-work time and strive to achieve a greater work/life balance than generations previously (Mahmoud et al., 2020; Haworth and Work Collectiv, 2017). This preference sets them apart from their elders (Myers & Sadaghiani, 2010) and highlights a yearning for creating a quality of life not solely revolving around work achievements. For the millennial generation, work provides a daily routine, an opportunity to socialise, a sense of purpose and societal status (Carter, 2019), reflecting complex relationships between millennials and their orientation toward work.

### 2.4.2. Motivating millennials

Millennials have complex motivators for workplace performance and are driven by more than remuneration (Mahmoud et al., 2020), searching for a sense of purpose and fulfilment in the work they perform (Carter, 2019; Haworth and Work Collectiv, 2017). They seek happiness and work to live, rather than live to work, as can be observed in previous generations (Wood, 2019). Millennials increasingly blur the boundaries between their personal and professional lives (Wood, 2019), expressing a desire for their work colleagues to function as a second family (Landrum, 2018). This shows a preference for work colleagues to perform a role beyond traditional workplace relationships and yearning for more intimate social connections. The distinction between personal and

professional relationships is no longer apparent to millennial workers (Wood, 2019), who prefer to work in a collaborative rather than a competitive culture (van den Bergh & de Wulf, 2017). This predisposition for greater collaboration and friendship in the workforce highlights the social nature and interconnectedness of the millennial cohort and vulnerability to the impacts of the social isolation experienced in COVID-19.

Millennials require stronger motivation to achieve high performance in their work (Mahmoud et al., 2020). One of the factors motivating this demographic is a collaborative work environment comprising challenging and meaningful work (Calk & Patrick, 2017). They are team-oriented and prefer to work in groups rather than individually (van den Bergh & de Wulf, 2017). Furthermore, they reject traditionally structured hierarchies evident in bureaucratic organisations, instead favouring "communities of mutual interest" (van den Bergh & de Wulf, 2017, p. 21).

Millennials not only prefer teamwork but believe they are more effective when working in a team (van den Bergh & de Wulf, 2017). Teamwork has become a cornerstone of the modern work environment, placing greater emphasis on teams for maintaining competitive advantage (Dimas et al., 2020). In addition to being more productive working in teams, millennials are happier in this environment (Landrum, 2018), accentuating the importance of a socially connected and cohesive workplace. Disconnected workplaces have higher rates of absenteeism, incidents, errors, and are generally less productive than those which are socially cohesive (Landrum, 2018). All these factors highlight the need to understand how virtual working impacts social cohesion and therefore, motivation in millennials.

### 2.4.3. Millennials and technology

Millennials are the first generation to be attributed the title of 'digital native', growing up surrounded by technology (Myers & Sadaghiani, 2010). They are characterised as technologically savvy, believing that technology helps utilise their time wisely (Mahmoud et al., 2020), fuelled by a desire for smarter ways of working (Haworth and Work Collectiv, 2017). They prefer computer-mediated communication (Myers & Sadaghiani, 2010), blurring boundaries between personal and work-based communication co-existing on similar platforms with work emails on mobiles, for example, potentially threatening work/life balance. Millennials are reported as using technology differently from previous generations and the rise in social networking platforms makes it easier to connect synchronously and asynchronously with peers (Deal et al., 2010) and this has implications for the way they work.

### 2.4.4. Millennials and COVID-19 in Australia

The Deloitte Global Millennial Survey (Deloitte, 2020) provides insight into how the pandemic has affected this generation, with widespread concern for the impact on long-term financial futures as a consequence of the recession induced by COVID-19. Millennials have been deeply affected by the pandemic, as one of the most impacted generations by the economic downturn (Deloitte, 2020). The long-term financial implications caused stress for millennials and 44% of those surveyed reported stress "most of the time" (Deloitte, 2020, p. 3).

The Haworth and Work Collectiv (2017) report gives context and another perspective of millennials, highlighting the position of Australian millennials, who grew up in a period of positive sustained economic growth. COVID-19's economic and social impacts are therefore heightened by its uniqueness and their inexperience, with a lack of resilience and ability to manage such hardship. The report highlights that Australian millennials are very peer-centred (Haworth and Work Collectiv, 2017), which has significant impacts on this generation thrust into full remote working. The Foundation for Young Australians' report (2020) also reinforces traits of Australian millennials, particularly in their desire for flexibility in the workplace. This is both heightened by the pandemic forcing employees to work from home and challenged with a lack of separation between work and home life.

However, the pandemic did bring some positive impacts for millennials. Two-thirds of survey respondents in Deloitte's study (Deloitte, 2020) reported improved work-life balance as a result of working remotely, particularly relevant given the concern for work-life balance in this generation (Mahmoud et al., 2020; Myers & Sadaghiani, 2010; Wood, 2019). The study also found a preference toward flexible working with remote working capability. 70% of respondents claimed working from home would relieve stress and 60% expressed a preference for teleconferencing instead of travelling to meetings (Deloitte, 2020). The pandemic offers an opportunity for organisations to reassess their policies and create a workplace closer to the millennial ideal.

The characteristics of millennials as the newest generation to the workforce with the least work experience and resilience to hardships such as the COVID-19 pandemic makes them an interesting generation to study. Their inherent predilection to socialise with colleagues makes them vulnerable to the social isolation enforced as part of the COVID-19 response strategy. This social isolation was emphasised by the lockdown with distancing from friends and family also significantly affecting wellbeing. Employers need to understand the impact of these working conditions on their millennial employees and provide an opportunity for virtual social connection. Understanding the impact of a move from co-located to fully virtual teams can offer valuable insights to help managers better engage and motivate their employees. It is necessary to better understand how millennials interact

in their workgroups to optimise their productivity, provide job satisfaction and appropriate support throughout uncertain times.

The next section will address the impact of COVID-19 on work more broadly and address how the pandemic has affected Australia's working patterns today and into the future.

## 2.5.    Impact of COVID-19 on work

There has been discourse around the concept of a 'new normal' (Dwivedi, et al., 2020) indicating that the world of work will be irreversibly changed due to the COVID-19 pandemic. As a result of a nationwide imperative to work from home, Australia witnessed the highest proportion of the workforce working virtually in its history (Mitchell, 2020). Although there is research on teleworking and the impact of working from home, the uniqueness of this situation cannot be explained with existing literature (Nolan et al., 2020).

### 2.5.1.  Pyschosocial risk and COVID-19

An important topic associated with the pandemic is psychosocial risk and the impact of social isolation. The effects on individuals include feelings of isolation and a reduction in commitment to work (Dwivedi, et al., 2020). There was also a decline in team synergy and trust as a result of widespread remote working (Dwivedi, et al., 2020). The threat of social isolation to the mental health of workers has also been noted (Markey, 2020), with much higher levels of depression and anxiety recorded globally than normal, similarly found in Australia (O'Sullivan et al., 2020). COVID-19 has been identified as a new workplace hazard that may be a source of anxiety and stress (Shaw et al., 2020). It has been noted that social cohesion reduces psychosocial risk and promotes wellbeing (McLeod & von Treuer, 2013; Vanhove & Herian, 2015), further illustrating the importance of understanding how social cohesion has been affected by working conditions in the pandemic.

Working from home has also resulted in a significant blurring of personal and work space, with many workers lacking a dedicated office in their home environment and a shift from comfortable working environments to working from the kitchen table (Dwivedi et al., 2020). Benefits of working from home include increased productivity, reclamation of commute time and better control over the hours of work (Markey, 2020). A decrease in the hours worked from home has also been noted with more time spent on leisure activities, although this has not necessarily equated to lower productivity (Restrepo & Zeballos, 2020).

### 2.5.2.  The future of work

The preference for working from home may continue post-COVID-19 when it is safe to return to the office (Markey, 2020). This sentiment is echoed in mainstream media with publications such as the Human Resources Director highlighting a worker preference for remote working and reporting that

58% of survey respondents would consider leaving their current role for a remote one (Hilton, 2020). While the future of remote working will be much more pervasive than predicted pre-pandemic, the future will not consist of a fully virtual workforce (Johnson & Suskewicz, 2020). Furthermore, there may be occupations that find, as a result of their experience working from home, they are better suited to remote working (Kramer & Kramer, 2020). This highlights the potential economic and social shock of the pandemic reshaping perceptions about work. It is clear there will be a strong element of virtual working in the future of work, necessitating the need to better understand how this shift impacts individual workers.

## 2.6. Conclusion

This literature review has highlighted the importance of social cohesion as a topic of study, contributing to organisational performance through the unification of teams and highlighting implications for decreased turnover and employee happiness. Research has shown that virtual teams are disadvantaged in their ability to develop cohesion due to decreased social interactions. Millennials are characterised by their desire for social connection in the workforce and digital reliance, making them an interesting area of study for those who were impacted by virtual working and unable to seek the same level of social connection as when they worked in physical proximity to colleagues. As such, my research will focus on how millennials perceive their social relationships in the workplace to be affected by their shift to virtual working.

This study brings together research on millennial workers in Australia, virtual teams, media naturalness theory, social cohesion, and the early impacts of COVID-19 on working patterns to better understand individual experiences working remotely with previously physically co-located teams. Media naturalness theory highlights the importance of platform in developing relationships and explaining participant experiences. This investigation highlights a better opportunity to understand virtual teams in their current form and millennial experiences of virtual working and connection. This research is unique, based in the context of a global pandemic, on a scale that has not been experienced in over 100 years of human history. The merging of social cohesion, virtual teams and millennial workers within this context provides an opportunity to further explore this unprecedented situation with newly combined areas of study proving significant for future research.

The overall research goal is to investigate individual experiences of millennial remote workers and their social connectedness to their teams. It saliently brings together social identity and social capital theory to explain the presence, development and maintenance of social cohesion in virtual teams. Research participants will be asked interview questions drawing on literature from social identity and social capital theory to ascertain the presence and strength of social cohesion in teams and how

these have been affected by remote working. Social capital is linked to social identity theory as teams that have a strong identification with their team are most likely to have high levels of social capital including trust. These two concepts support each other and develop an overall understanding of the parent concept of social cohesion, comprised of and interrelated to these theories.

These concepts feed into each other to guide understanding of cohesion as it applies to my research. Interview questions will help identify whether individuals feel they belong to their team, collaborate well and have pride in their group, determining whether there is a strong sense of social identity. Additionally, questions about trust, emotional support and connection will help determine the presence of social capital. This will help establish evidence of strong or weak social cohesion in the individual's perception and whether this has been affected by virtual working.

## 3. Methodology

### 3.1. The Australian context

Context plays an important part in interpretivist research, contributing to the construction of meaning (Willis, 2007). My research analyses the perception of research participants from Melbourne in Victoria, Australia. Australia's response to the COVID-19 pandemic has been praised as one of the most successful strategies to curbing cases with early physical distancing (O'Sullivan et al., 2020). The pandemic had a significant impact on the entire country and by March 2020, increasing cases lead to state mandates for non-essential workers to stay at home, many for the first time, and work fully remotely. The definition of 'essential worker' in the pandemic was broad and included hospital workers, teachers, doctors, supermarket workers and pharmacists (Dunn, 2020). The most affected state by the pandemic was Victoria, which saw the greatest prolonged number of COVID-19 cases and deaths in 2020. This led to tighter restrictions than elsewhere in the country, with a State of Emergency declared in March 2020 (State of Victoria, 2020). The impact of this led to the extended social isolation of Victorians, with many unable to visit friends and family for the majority of 2020. Table 1 provides an overview of the timeline of significant events as the COVID-19 pandemic evolved, focusing on Melbourne.

*Table 1: Lockdown dates in Melbourne, Victoria*

| 25 January 2020 | COVID-19 cases are reported in Melbourne |
|---|---|
| 27 February 2020 | Scott Morrison – Australian Prime Minister, initiates the Australian Health Sector Emergency Response Plan for COVID-19 |
| 1 March 2020 | First Australian death from COVID-19 |
| 15 March 2020 | State of Emergency declared by Victoria |
| 20 March 2020 | Australian borders close |
| 21 March 2020 | Social distancing is enforced in Australia |
| 29 June 2020 | Hotspot suburbs in Melbourne are placed into lockdown |
| 8 July 2020 | Melbourne is placed into lockdown lasting 112 days |
| 2 August 2020 | State of disaster is declared by Victorian Premier |
| 19 October 2020 | Significant easing of lockdown restrictions |

Timeline developed with information from Kelly (2021).

The total population of Melbourne, according to the last census in 2016 was close to 4.5million (Australian Bureau of Statistics, 2019), now estimated to be close to 5 million (City of Melbourne, 2020). The census data estimates that there were 700,000 millennials aged 20-29 in the region, with a median age of 36 (Australian Bureau of Statistics, 2019). This demographic represents 15.5% of the total population of the area, slightly higher than the national total of 14.4%. These statistics reflect an even spread of millennials living in Melbourne, compared to the total in Australia. Given the

similarity in demographics to the wider population, this study can provide inferences to better understand millennials in other Australian geographies.

The wider context of Australia's cultural identity is also important to inform my research. Hofstede's cultural dimensions (Hofstede Insights, 2020) are a useful and universally recognised framework to acknowledge the cultural environment. Australia has extremely high levels of individualism. This translates to a focus on the individual rather than the collective, highlighting the need to research individual perception relating to the workgroup collective. A low power distance is also noted. Colleagues are typically closer to their managers in a less hierarchal environment than in other countries and communication within these groups is informal, direct and participative (Hofstede Insights, 2020). This has ramifications to encourage better understanding of the relationships within teams and their managers, which would be more intimate than in countries with a higher power distance. Australia is also awarded a fairly high indulgence rating, indicating an impulsive and indulgent society prioritising the fulfilment of whims and impulses (Hofstede Insights, 2020). This can translate to the workplace in the form of social activities with colleagues and demonstrates a tendency for less formal social relationships. These traits are important to give context and recognise the impact of Australian culture on teams and cohesion in workgroups.

## 3.2.    Epistemology and research background

The research objective is based on a qualitative, interpretive perspective. This section will further explore the research design, my background as a researcher and the contextual factors relating to my research bias, in addition to the chosen methodology for research collection and analysis. My background in communications theory has led to my belief that meaning is contextual; language and communication contexts contribute to the understanding and formation of subjective realities. My academic investigations to date have explored how language and context contribute to the interpretation of meaning, helping individuals decode their experiences. Additionally, I have a blog, Culture Champs (culturechamps.wordpress.com) investigating people leaders and their contributions to organisational success.

I have applied this background in communications and human resources to interpret the research. The interpretivist paradigm stipulates that the researcher and their research are inseparable (Davies & Fisher, 2018), highlighting the importance of acknowledging my research background before undertaking study. The goal of the interpretivist researcher is to better understand different perspectives and circumstances, acknowledging the existence of multiple, shared realities in a nuanced and complex world (Willis, 2007). This research paradigm is inextricably associated with qualitative research methods (McChesney & Aldridge, 2019) and encourages the expression of

reflexivity (Carminati, 2018; Schwartz-Shea & Yanow, 2012). In my research proposal and ethical consideration, I identified my own bias and sought to create meaning acknowledging this need for reflexivity in my paradigm.

The research question guides the study but does not seek to create generalisable conclusions, nor gives a hypothesis to prove a singular truth. The acknowledgement of multiple, shared realities as a defining characteristic of my interpretivism (Willis, 2007) guides the nature of my study.

## 3.3. Research design

This research adopts a qualitative research design inextricably linked to interpretivism (Thanh & Thanh, 2015). Congruent with my research paradigm, the nature of this research study is qualitative, taking the approach that meaning is constructed through the experiences of the individuals in the study.

The foundation of interpretivism and qualitative design led to a decision to incorporate semi-structured interviews as the method for data collection. These interviews enable deep investigation into everyday phenomena, allowing the researcher to understand data through their closeness throughout the study (Roberts et al., 2019). This aligns well with my interpretivist paradigm aspiring to understand issues, rather than drawing definite conclusions through investigation. The results provide a snapshot of subjective truth captured at a specific time. They aim to contribute to the development of theory with social cohesion in virtual teams and test the application of existing theories to the current context.

## 3.4. Interviews

Interview questions were developed based on the literature review, including questions relating to trust, tenure and collaboration, informing links between prior research and this investigation. A full research schedule can be found in Appendix I. As the interview was 'semi-structured', I allowed research participants to feel comfortable telling their own experiences and used the schedule as a guide rather than an absolute list of questions. This approach helped build rapport and allowed for the development of the conversation contributing to findings that I had not envisaged in my initial question list and enabled a more organic conversation to take place.

The COVID-19 pandemic enforced social distancing which necessitated virtual interviews as the primary method of data gathering. As acknowledged by Bell et al. (2019), virtual research interviews have advantages including efficient use of time and resources and can encourage research participants to be more truthful. However, as is the case with virtual teams, non-verbal cues can be missed or misinterpreted through the virtual medium (Toler, 2015).

A full list of questions is available in the appendix. Table 2, however, highlights the relationship between the core research questions and their foundations from existing literature on social cohesion, social capital, social identity theory and virtual teams. The process of developing the interview schedule immediately followed the literature review and demonstrates the importance of existing theory in developing credible data as the foundation for my research. Questions such as age and gender as identifying features for research participants were excluded from this table, focusing on the key questions emerging from the research literature.

*Table 2: Research questions and theoretical background*

| Interview question | Literary references |
|---|---|
| How many team members do you work with in your direct working group? | Definition of team<br>Kozlowski & Ilgen, 2006<br><br>Group size and social cohesion<br>Mullen & Copper, 1994 |
| How long have you been working in your current organisation? | Tenure and social cohesion<br>Castaño et al., 2013; McPherson & Smith-Lovin, 2002; Morrison-Smith & Ruiz, 2020; Salas et al., 2015 |
| How long have you been working with your current team? | |
| How long have you been working remotely? | |
| Do you trust your teammates? | Trust and social capital theory<br>Adler & Kwon, 2002; Bye et al.,2020; Lao, 2015; Morrison-Smith & Ruiz, 2020; van Emmerik et al., 2010; Xiang et al., 2013 |
| Would you say you're proud to be part of your team? What makes you feel this way? | Team pride and social cohesion<br>Castaño et al., 2013; Lao, 2015; McLeod & von Treuer, 2013; Salas et al., 2015; Salisbury et al., 2006 |
| Would you say your teammates are similar to you, or different; in what ways? | Shared mental model and similarity<br>Xiang et al., 2013<br>Social identity theory and similarity<br>Fiol & O'Connor, 2005; Hennessy & West, 1999; van Emmerik et al., 2010<br>Similarity and cohesion<br>Carron et al., 1985; Kurtzberg, 2014; Lao, 2015; Liang et al., 2015 |
| What kinds of things do you do with your teammates outside of work, if anything? How has this changed from when you worked together in an office? | Friendship in the workplace<br>Amjad et al., 2015; Burkus, 2017; Castaño et al., 2013; Morrison, 2004 |
| How do you connect with your team socially? | |
| How does being part of your team make you feel? | Millennial happiness and connectivity to work<br>Jha et al., 2019; Landrum, 2018<br>Feelings of belonging and cohesion/social identity theory<br>Ellemers & Rink, 2005; Liao et al., 2020; Liang et al., 2015; Salisbury et al., 2016; Xiang et al., 2013 |
| What impact do you think having friends in the workplace has on your view of work and productivity? | Work friendships and productivity<br>Burkus, 2017; Morrison, 2004 |

## 3.5.    Participants

Ten participants were interviewed, chosen based on key selection criteria: millennials aged 20-30 living in Melbourne, Victoria and working remotely in virtual teams, where previously they had worked in physical proximity to others.

I used purposive sampling to ensure research participants fit the criteria set out in the research objective. The Information Sheet (Appendix II) was provided to all participants, in keeping with the ethical considerations for this project, to ensure interview participants were informed of the implications and context of the study beforehand.

I used my networks professionally and personally to help find appropriate candidates for the study. One of the ethical stipulations was that they were to be unknown to me, to minimise the potential for leading questions and bias. LinkedIn and Facebook Groups were utilised to recruit the ten candidates required for the investigation, in addition to a snowball approach from early research participants.

The research participants (see Table 3 for details) in this study were an even mix of gender, predominately in the upper range of the millennial demographic, with just one individual under the age of 26 in the study. The older median of this research group has impacted the results. One consideration is that these participants would have spent longer in the workforce than younger millennials. This adaptation to work more generally may impact how they operate remotely, which could be reflected differently in the experiences of younger millennials closer to 20. Another impact of this is that some of the research participants had spent a significant proportion of their working lives in one organisation, increasing their tenure with their teams, a factor of strong cohesion in the workplace (Castaño et al., 2013).

Another trend in the characteristics of the research participants was their industries, which predominately fell in the professional services. All but one research participant had a 'desk job', with Paul, being from the transportation industry, doing fieldwork in addition to standard administrative work. The importance of this focus on professional services is that all research participants fell under the categorisation of a 'non-essential' worker forced to work from home under the Victorian Government mandate. This supported a better understanding of the impact of working entirely remotely with no opportunities for colleagues to meet during the lockdown period, except for Paul who had occasional site visits with his colleagues.

The participants all met the research criteria of being based in Melbourne. They had little experience working virtually, excluding one individual, and were all working with their colleagues in a co-located

environment before the COVID-19 pandemic. They had all been working remotely with their colleagues for over six months by the time the study took place.

An overview of the research participants interviewed is below.

*Table 3: Overview of research participants*

| Pseudonym | Age | Gender | Industry | Job title | Direct Team Members | Tenure in current team | Tenure in company |
|-----------|-----|--------|----------|-----------|---------------------|------------------------|-------------------|
| Paul | 26 | Male | Rail | Systems Engineer | 13 | 3 months | 3 months |
| James | 28 | Male | Utilities | Finance Business Partner | 7 | 15 months | 3 years |
| Malcolm | 29 | Male | Financial Services | Specialist Service Consultant | 13 | 3 months | 3 years |
| Susan | 28 | Female | Technology | Account Manager | 18 | 2 years | 2 years |
| Jane | 28 | Female | Accounting | Finance Operations Advisor | 4 | 1 month | 1 month |
| Hannah | 29 | Female | Utilities | Business Delivery Lead | 6 | 14 months | 3.5 years |
| Vivian | 24 | Female | Financial Services | Customer Service Consultant | 10 | 11 months | 11 months |
| Peter | 28 | Male | Construction | Digital Engineering Manager | 12 | 5.5 years | 5.5 years |
| Jonathan | 29 | Male | Healthcare | Project Manager/Consultant | 3 | 3 years | 7 years |
| Ben | 26 | Male | Financial Services | Service Consultant | 15 | 1.5 years | 3.5 years |

All research participants had worked in physical proximity of their colleagues before the onset of the COVID-19 pandemic, except for one individual who had been working remotely with his team for 18 months but had been working with the same group of people prior. While some of the participants were project leads, none described their roles as people leading or managerial. Interviews took between 30-45 minutes in duration.

My research analyses the experiences of 5 males and 5 females and did not note significantly different experiences between them. No research participants were additionally executing a caring role at home. It has been acknowledged in existing studies that COVID-19 had a gendered impact disadvantaging women (Sarrasanti et al., 2020; Workplace Gender Equality Agency, 2020), which could be further explored in future studies, with a more gender-focused research sample.

## 3.6. Piloting

Before starting the formal data gathering process, I undertook two pilot interviews with friends who matched the research criteria as noted above. This enabled me to hone my research schedule,

develop my skills as an interviewer and gave me some initial data to inform topics for further literature analysis. I asked for feedback on my empathy as a researcher and the questions to ensure they were interpreted accurately from a non-academic audience. Furthermore, this allowed me to test the recording and transcription technologies, which worked well, before conducting formal research.

## 3.7. Data analysis

My research data were analysed using thematic analysis as a foundational method of qualitative study and supporting a content-driven inductive investigation associated with qualitative research (Guest, 2012). The analysis followed the framework proposed by Braun and Clark (2006) including familiarisation with data, development of initial codes, search for key themes and review, definition and naming of themes, then the creation of a thematic map to make sense of the data as a whole. Themes were extrapolated and coded from the interviews. Thematic analysis has been chosen for its popularity within the qualitative research paradigm (Braun & Clarke, 2006) and support of a developmental and exploratory approach to data analysis (Guest, 2012), an appropriate fit for an interpretivist study.

Interviews were recorded using Zoom to ensure full attention and respect was paid to the research participant, without taking notes during the interview. The audio files were then uploaded to the Otter.ai transcription platform to aid in the transcription process ahead of manual analysis. Files containing research participant names and identifying features, as well as the raw interview data, were encrypted. After each interview, I made notes in a research journal, reflecting on the process and key themes emerging with each research participant.

## 3.8. Development of key themes

My reflective journal throughout the research process assisted in the early identification of themes. I was sure the role of communication technology in enabling connection and the development of social cohesion would be an important topic to explore, due to its recurring prevalence in the interviews. This also allowed me to employ reflexivity critical to the interpretivist paradigm.

After going through each interview, I found recurring topic ideas and started to group them into sub-themes and looked for the overall connecting thread. I wrote down salient ideas repetitive in the research to explore further including 'Zoom fatigue', virtual platforms and connectivity and chat messaging. This early analysis shifted my focus from social capital and social identity theory and highlighted the need to investigate communication theory as an additional important component.

Table 4 summarises the key themes and was developed as part of the process of thematic analysis, indicating the relevance of the themes and their relationship to existing research literature. This

helped to determine the theoretical relevance of each theme and its contribution to existing research.

*Table 4: Theme summary*

| Theme name | Theme description | Relation to literature |
|---|---|---|
| The importance of social connections in the workplace | This theme encompasses relationships between colleagues and the impact on perceived job satisfaction, productivity and performance in the eyes of the research participants. This theme reflects how the millennial participants were valuing social connection in the workplace. | This theme reinforces existing literature highlighting the positive impacts of social connections in the workplace, particularly for the millennial cohort, accentuated during a pandemic. |
| Technology and social connection | The role of technology in facilitating social cohesion and connection with virtual workers is central to this study. The impact of different forms of technology and their ability to form strong social bonds was significant in this research. | The findings support the application of media naturalness theory and social information processing theory, particularly with the application of Kock's (2001) learned schema principle. |
| Spontaneous and natural communication | The reference to natural communication relates to participant's experiences in communicating virtually with the salient absence of spontaneous communication and the overall impact of a lack of spontaneity and naturalness in the development and sustenance of cohesion in the workplace. Spontaneous interaction refers to the lack of unplanned social interaction, for example at the 'water cooler', or in the corridor. Natural conversation describes the participant's comfort with the virtual platform of communication as feeling awkward. | Naturalness directly calls to media naturalness theory and reinforces its relevance to this study and investigation. |
| Building and maintaining virtual relationships | This theme addresses the impacts on workplace relationships as a result of purely virtual communication, through the experiences of those studied. The changing nature of relationships, shrinking social circles and also positive impacts of greater connectivity are investigated. | This theme, while underpinned by media naturalness theory, contributes new information to the research literature with its novel application to teams developing their roots in physically co-located environments and moved toward purely virtual relationships. |

I have summarised the process in the development of key themes in Figure 3.

*Figure 3: Process of theme development*

| Example quote | Example key topic (code) | Sub-theme | Theme |
|---|---|---|---|
| "Teams is very interactive compared to us when we used to use Skype for Business…it's a lot like Facebook, isn't it? It is, in a way." | The role of technology, e.g. Zoom and MS Teams in facilitating interaction and mimicking chat applications like Facebook to enable better interaction | Chat messaging in the workplace | Technology and social connection |
| "I enjoyed going to drinks and hanging out with people more in person. I'm not enjoying it as much over the screen, it's just a bit awkward." | Key differences between F2F and virtual communication in the workplace; impact of virtual communication on socialisation | Unravelling unnaturalness in virtual communication | Spontaneous and natural communication |
| "Your inner circle becomes tighter up but your your outer circle of all that, I used to interact with a lot of people in office because my role was talking to a lot of people in different areas of the business, that's just kind of a dried up…" | Disconnection from wider organisation's social circles and overall shrinking of social connections | Shrinking of social circles | Building and maintaining virtual relationships |
| "It's like [friendship] one of the three criterias I look for in a work. Just getting along with colleagues…it's essential, essential and crucial to me" | The importance of social connection to millennials in the workplace | Increased job commitment | The importance of social connections in the workplace |

## 3.9.    Theoretical pivot in analysis

The process of undertaking the literature analysis lead me to create a theoretical model underpinning the research and served as the foundation for the development of the research schedule, as shown in Table 2. The theories supporting this theoretical model are social identity theory, relating to group belonging and connectedness and social capital theory, referring to the traits a socially cohesive team possesses, as an outcome of social cohesion. However, in the process of the thematic analysis, it became evident that while these theories contributed to the collection of meaningful data, they were not sufficient in explaining the participant's perspectives and in particular, their adaptation to virtual working.

As my themes started to emerge in the process of thematic analysis, it was clear how participants communicated greatly impacted their ability to connect with their colleagues. I looked for an explanation of the colloquially termed 'Zoom fatigue' and arrived at Kock's (2001) media naturalness theory. This led to the investigation and application of media richness theory and its extension, media naturalness theory to my research. This informed my thematic analysis. At the end of this process, I ended up with five overall themes, which I then grouped under four headings, bringing two of the themes together where they naturally fit, to avoid repetition in the discussion.

This theory will be applied in further detail in the findings and discussion and serves as an extension of media richness theory, developed by Daft and Lengel (1986). Media naturalness helped to understand why different platforms of communication impacted the participants' perspectives of the quality of conversation and the ability to connect with their peers. The basic argument of the theory is that face-to-face communication is more fulfilling and impactful than other forms of communication and this sentiment was supported through the findings of my research.

Social capital and social identity theory were critical in leading to the development of my research schedule, but Kock's (2001) media naturalness theory was better suited to explain the perspectives of the millennials interviewed and results of my research and so this theoretical framework was used to facilitate my analysis of data. The themes emerged throughout my analysis and called for further theory to explain the experiences of participants feeling that virtual communication was unnatural, leading to my investigation of media naturalness and social identity theory.

## 3.10. Ethics

An assessment of the ethical risks was undertaken with my supervisors. The research was considered to have low risks, so in accordance with Massey University protocol, a low risk notification was submitted. Adhering to ethical procedures included steps to protect the identity of the participants so all raw data files were encrypted, and names were anonymised (pseudonym names are used in the presentation of findings). Identifying features were removed, including names of co-workers and company affiliations.

The key concern with this research was the relationship between the interviewer and research participant with potential vulnerability to sensitive topics including mental health in the workplace with working from home identified as increasing psychosocial risk for workers (Safe Work Australia, 2020). Best practice interpretivist interview technique shows an awareness of the impact of the interview process on the research participant (Löwstedt & Stjernberg, 2006). An ethical consideration was to conduct interviews with an understanding of this impact on participant's emotional wellbeing. The interview process sought to minimise emotional harm to interviewees, and they were given an opportunity to stop or pause the recording at any time, giving respect to their mental health throughout the interview process. No participants chose to do this, however. Interviews were additionally not be scheduled back-to-back to permit for them to go longer as necessary, with respect to the participant's time.

Furthermore, participants could schedule the interview at a time convenient for them, allowing them to find a space and time where they felt most comfortable to be interviewed.

I took particular care to avoid leading questions and did not interrupt the research participant, slightly more difficult without the nonverbal cues that would be communicated in a FTF research interview. I kept a journal throughout the research process encouraging reflexivity and reflection on how I could improve my interviewing techniques and questions, particularly in the way I approached interview questions and supported the research participants.

# 4. Findings

The findings of this research highlight the perceptions and experiences of working remotely and communicating virtually as found through interviews with millennials living and working in Melbourne, Victoria. This demographic group is known to place high importance on relationships in the workplace (Landrum, 2018). The findings of this investigation support better understanding of the impact of a shift from physical co-location to entirely virtual work demonstrated in these findings as affecting social cohesion and connectedness in the experience of research participants. It was clear that the way individuals communicated in the workplace was the most significant contributor to how they felt about their colleagues and the strength of cohesion in the experience of those studied. A change in communication platform from FTF to entirely virtual mediums was found to substantially impact the development and maintenance of relationships in the workplace enabling teams to become socially cohesive. Methods of interacting FTF did not translate well virtually, initially leading to awkwardness and disconnection in the perspective of research participants.

The findings emphasise one overarching theme highlighting that the virtual platform significantly impacted the ability of research participants to build and sustain relationships. While this inquiry did not set out to analyse data with a communication lens, the overwhelming impact of a change in communication platform was significant in this study, encouraging further investigation.

## 4.1. Overview of key themes

The results of my study were analysed using thematic analysis to find recurring themes in research data. Four key themes were identified as significant in aiding the understanding of social connection in virtual teams, through the perception of millennials based in Melbourne. These themes are:

- Social connections and workplace 'stickiness'
- Plugging into the workplace: Technology and social connection
- Death of the 'water cooler convo': Spontaneous and natural communication
- Solving social isolation: Building and maintaining virtual relationships

These themes reinforce the impact that a change in communication from FTF to virtual platforms can have on the social connectivity experienced in workplaces, through the perspective of workers previously in co-located team environments. Each of these themes will now be presented, supported by quotes and ideas from the participants, to demonstrate saliency and accuracy in terms of reporting on these analytically derived themes. In the discussion, I will demonstrate how these findings reinforce and extend the existing research literature to contribute to discourse on social cohesion, virtual teams, and millennial workers.

## 4.2. Social connections and workplace 'stickiness'

The first theme contextualises the importance of social relationships in the workplace, in the experience of the millennials studied. The research literature emphasised the importance of relationships and strong social cohesion in work teams, however, it was critical to establish whether research participants placed the same salience on relationships in the workplace.

All research participants emphasised the importance of workplace relationships to improve their perception of work more generally. They associated relationships with a positive view of the workplace more broadly, emphasising existing findings of the importance of building cohesion in the workplace. Workplace friendships were highlighted as important to millennials, even while working remotely and unable to see colleagues daily.

### 4.2.1. Increased job commitment

A common sentiment expressed by research participants was an improved perception of their work environment because of their interactions and relationships in the workplace. Two of the research participants had a particularly long tenure with their organisation; Peter with seven years and Jonathan with five. Both mentioned that their relationships with their colleagues, and strong connections to their work teams, had been motivating factors to continue working for their current company. Peter moved to Australia and continued to work for the same company, in part, due to the relationships he built with his work team increasing his commitment to the company. He exclaimed: "Ah it's good. Yeah, that's what I've been here for this long". Jonathan gave a similar response: "I love the people I work with. So maybe that's played a part in me staying around."

Millennials in this study indicated that social connections in the workplace motivated them not only to stay in their job, but an absence of meaningful connections would be a strong push factor to move roles, as was the experience of Jane. "I did miss being social. My last company was not like this at all…I was missing that aspect, which is one of the reasons why I joined, why I changed jobs."

Another research participant, James, emphasised that friendships in the workplace were a key selection criterion in a job; "It's [friendship] one of the three criteria I look for in work. Just getting along with colleagues…it's essential, essential and crucial to me". Job commitment is, therefore, in the views of the millennials in this study, inextricably linked to the positive relationships they hold within their organisation.

### 4.2.2. Workplace friendships and motivation

Another benefit, in the perception of those studied, was that workplace friendships improved their overall motivation to go into the workplace, whether it be the physical workplace pre-COVID or the virtual workplace of their current situation. As Jonathan explained:

"You have friends in the workplace who you always just want to have a bit of a chat with at the start of the day or go for coffee, or, you know, you meet each other in the kitchen, and you end up spending 15 minutes there. But it also, I think, makes going to work every morning a more enjoyable experience and something you look forward to that slightly bit more".

Ben also commented on how he perceived connection with his colleagues to be important as a motivating factor to help him survive his workday in isolation, "Having that interaction over Teams and stuff, helps me get through the day."

Closely related to friendships in the workplace supporting motivation in the perception of research participants is the perspective that these friendships support the ability to work through long periods during the day and sustain momentum. Ultimately, research participants felt motivated to keep working for longer because of their emotional connection with their colleagues. Hannah aptly captured this with her comment.

"In terms of overall performance, I think in the beginning it [remote working] helped a lot of things because it does cut out that what you could call waste time, which is not waste time, but you know, chatting to people etc…But I am starting to see people getting a little burnt out because they're not giving themselves those natural breaks."

Susan also commented on the importance of connections, through the ritual of going for coffee to support her through her working day, when she was working with her colleagues in the office, pre-COVID; "People would be like, 'it's the three o'clock slump'. I want to go get coffee, who's down to get coffee?".

The findings support the notion that friendships in the workplace were important to research participants to help them get through the working day and avoid burnout. The frequency of these social interactions, without the opportunity to spontaneously go for coffee with colleagues had declined, which, as expressed through Hannah's comment, lead to burnout with workers unable to sustain themselves for the same duration virtually without natural social breaks.

### 4.2.3. Cohesion and job performance

Individuals in this study indicated that positive relationships in the workplace inspired them to work harder on work-related tasks and put greater effort into their roles to support their team. When their cohesion with their team was positive, they felt more strongly driven to contribute to group tasks.

Jonathan, who had a long tenure with his organisation commented on the impact of his relationship with his team on his performance. "You want to put in the hard yards and, you know, do your best to help them out and elevate the team".

This sentiment was echoed by Hannah when she said: "The team makes me want to do a really good job." Jane also felt that her performance in her role was improved because of positive interactions with her colleagues. "I wouldn't say that having no friends would, would be good. I think if anything, it helps being at work rather... It helps, you know, stay focused to talk to someone you're friendly with."

However, not all associations between workplace relationships and job performance were positive. Susan commented: "Sometimes I'll have on-on-ones...and 95%, well 60% of the time we're talking about work stuff...In some instances that makes me unproductive". This sentiment was not echoed by other research participants who acknowledged that although they were having fewer interactions with colleagues, improving productivity, they preferred the opportunity to have the natural social break from work, as evidenced in the previous section.

Susan acknowledged this potential downside but also highlighted that the connection to her team made her feel important at work, improving her overall job perception.

> "I love our team... I'm really looked to as the person that kind of orchestrates all the social stuff. So that's been nice, that makes me feel good because that's kind of how I find my validation".

The participants in this study reinforced a link between commitment to their job through cohesion with their colleagues; being part of a team they were bonded to made them want to turn up to work and do a good job. Positive relationships with colleagues, an outcome of strong social cohesion, also improved the overall perception of the role, which, as expressed through Jonathan's sentiment, led to longer tenure with the organisation.

### 4.2.4. Social connection, support, and mental wellbeing

Another important factor for research participants in this study was the importance of 'being seen', albeit through a screen, to feel connected to others in the workplace for mental wellbeing and to simply be encouraged to log on without the accountability of a physically co-located office.

Participants felt more motivated to log on to their virtual workspaces when they had positive social relationships, as these appeared to make them feel more accountable.

> "I think instead they help me by having people just to check up every morning…Because I feel like oh there's actually someone there who's noticed that you've actually logged on today… It definitely helps with my productivity". (Vivian)

The significance of having 'check ins' with a colleague was emphasised by other participants who reported that they had meetings set up with their teams to build social connection and support with mental wellbeing checks. These wellbeing checks were presented in the form of social work meetings and comments from colleagues asking how they were. Malcolm was on Teams daily; "You still have that platform [Teams] to sort of check in to see 'how are you and going okay'." He also commented on his team's balance between business meetings and catch-ups that serve to create a space to discuss any personal issues, particularly with the impact of social isolation and remote working affecting Melbourne workers. "One [meeting] will be business-related and then the other will be an informal catch-up to see how we're all going."

Susan's team did something similar, creating a space for social connection that helped support mental wellbeing virtually.

> "Monday, Wednesday, Friday, we do a 30-minute coffee chat at 9am. And that's typically like, people just hop on and talk about random stuff. I think the social norm is not to talk about work stuff…We would never do anything like that in the office because we all see each other."

This theme encapsulates the important role social connection plays in the workplace, through the perspective of the millennials interviewed in this study, which will be further explored in the discussion. Participants emphasised the importance of making sure social interactions still occurred, even if they were less spontaneous than when physically co-located with colleagues, highlighting that these interactions improved their perception of working virtually.

## 4.3. Plugging into the workplace: Technology and social connection

The transition to virtual working has placed greater reliance on communication technology to an extent not previously experienced. Every participant reflected on the impact of technology on their social relationships and cohesion with their team members. The dependence on this technology to communicate, with no option to simply ask a question FTF was a struggle felt by many research participants who experienced both advantages and disadvantages of this new way of working.

### 4.3.1. Adapting to new forms of technology

Most of the research participants were not familiar with working entirely remotely and experienced an adjustment period as their organisations introduced new forms of technology to communicate. This adaptation was felt differently by the participants in this study.

One participant noted a change in communication style:

> "Maybe my interaction skills are not as alert, I don't think I'm just as bubbly. In terms of when a meeting happens… I just don't really want to speak; I just don't know what to say." (Vivian).

Jane experienced a similar occurrence with virtual interaction, finding that her 'on-screen self' was less outgoing than her in-person self; "I'm definitely more reserved online than I am in person".

Another impact of adapting to new technology, for many research participants, was their variety of interaction with colleagues decreased significantly, particularly with those they did not work on projects with directly. Individuals felt their interactions became more focused on work-related issues and the more socially focused exchanges they enjoyed in the office had been discontinued as a result of relying on virtual communication.

> "There's a lot of people who I don't really interact with anymore. So, unless they're reaching out to me to ask a specific question, I wouldn't really have a chat with them about something that's not work-related". (Hannah)

Susan had a similar experience where she felt her work meetings had become more focused on the project her colleague shared with her, decreasing the volume of personal conversations she experienced.

> "If I booked in a 30-minute slot with Sarah, we're only going to work and talk about work stuff for that 30-minute slot. And there's less blending of work-life because you don't really know. I feel like you've got 30 minutes and it is allotted to just tackle a specific goal".

Other research participants experienced a feeling of being 'out of touch' and disconnected from the everyday lives of colleagues without the opportunity to connect with them with the same quantity and intimacy virtually as they would have while physically co-located.

> "I've caught up with a mate of mine - he's a designer, but he's been out of touch, even just the last month or so. And he's got a son now. So, things happen. Between that, we do things important to them and we don't we don't know what's happening. So, it will take a bit of time to catch up, definitely". (Paul)

It was clear, through the perspective of research participants, that the quality and quantity of connection with colleagues were affected by the reliance on virtual communication platforms. Overall research participants communicated with colleagues less frequently online and for many, predominately to discuss work projects. This inhibited the sharing of intimate details critical in the development of interpersonal relationships.

### 4.3.2.   Not all communication technology is equal

It is important to acknowledge that even within virtual platforms, there are discrepancies in the quality of communication taking place. Research participants discussed their experiences working with different communication platforms and the impact this had on how they felt toward their colleagues. The sections below summarise the main responses to the key communication platforms utilised in the remote working organisational context.

#### 4.3.2.1.     *Video conferencing technology*

Video conferencing technology was one of the main tools utilised by research participants in this study, with Teams, Slack, and Zoom the most frequently mentioned. These platforms were used for events traditionally taking place in person, such as meetings and social drinks. The success of these events was varied, and research participants commented on the difference between the video call versus an in-person interaction, feeling they were more awkward and less successful than those occurring in the office.

> "I think that especially the first one [virtual drinks session] was awkward…eventually you kind of run, run out of things to stimulate conversation. We tried a couple of times, but it wasn't as successful as we hoped it would be." (Paul)

Jane expressed similar views that virtual drinks were awkward and less pleasurable than FTF; "I enjoyed going to drinks and hanging out with people more in person. I'm not enjoying it as much over the screen, it's just a bit awkward". She felt the absence of social cues and the inability to naturally break off into smaller groups to socialise stifled the ability of virtual social drinks to achieve their purpose of relaxing and connecting colleagues. She elaborated:

> "For me, personally, it's more awkward. There are fewer social cues and… you can't break away and having conversations is always one main conversation that you're forced to be a part of. Yeah and just be like, not organic, not natural".

Vivian commented; "Definitely it [work drinks] was not as favourable as if we were in the office". Many research participants mentioned that their virtual drinks sessions had been discontinued because they were not popular with their colleagues through the video conferencing platform.

The feeling of awkwardness was not limited to virtual drinks; the millennials in this study felt virtual team meetings were less comfortable and successful than when they were FTF. Some people coped better than others with virtual communication.

> "Some people struggle virtually. A lot of people take social cues like physical social cues. And so, some people struggle with that. For those people, it's hard for me to communicate, just because sometimes you feel it's not genuine or whatever it is". (Peter)

This finding highlights that research participants favoured FTF communication in comparison to video conferencing. The dominant sentiment was that this method of communicating was awkward and unnatural, without full nonverbal cues to support understanding. The attempt to recreate social interactions virtually, such as work social drinks, was unsuccessful due to this perception of unnatural communication in the perspective of those studied.

### 4.3.2.2. Phone calls without video

Video conferencing was the most popular way to communicate with colleagues in this study, but a couple of research participants did not have access to webcams, which considerably impacted their communication experience and ability to connect with colleagues. Video conferencing was described as not as fulfilling as FTF communication and phone calls without video were viewed as more challenging to participate in fully than a Zoom call.

The absence of visual cues created an additional obstacle to facilitating connection, as it was difficult to know if the other person was paying attention and listening to the conversation.

> "The general trend, whenever we have a meeting is it's just voice, there's no video. You can't really see anyone when they're not speaking… you don't get a sense of how people are feeling during the conversation if they're not speaking. You know, you can't tell if they're paying attention or not. Or get any of those visual cues as to a reaction to something you might say". (Jonathan)

Sometimes the lack of video had the effect of highlighting the sense of loneliness. Talking about his interactions with his team members, Ben comments:

> "I think not seeing them and just having a conversation over Teams, or even, we'll have a phone call, but not see each other visually. I think that's the new norm now. And I've gotten used to that. It was a bit strange first coming into working from home. It felt a little bit lonely. But then, it became a norm".

While only two of those studied were unable to use a webcam to support communication with their colleagues, it presents an important consideration in the role of visual cues to build relationships virtually, with video playing a key role in relaying cues and simulating FTF conversations.

### 4.3.2.3.    Chat messaging

One of the most interesting findings in this study was the prevalence and role of chat messaging to communicate in organisations. Teams and Slack were most prominent and played a significant role in internal communication. The response toward the platform was largely positive, with millennials in the study praising its ability to connect them efficiently with their colleagues.

> "Teams has been like a huge life changer… it's been a way to communicate with managers, with other Service Centre consultants. And it's actually a lot more efficient; rather than having to get off my desk and go speak to someone about it, I can just quickly message them and know that they're going to be available directly in Teams." (Ben)

Many participants were already familiar with Facebook Messenger and Teams was viewed as a natural development to this, with a similar communication style. Malcolm comments: "Teams is very interactive compared to when we used to use Skype for Business…it's a lot like Facebook, isn't it? It is, in a way." His role involved shift work and he was often unable to connect with his entire team, with colleagues coming into the office and taking breaks at different times in the pre-COVID co-located environment. He felt that the use of a singular chat platform brought his team together; "You've got that close connection with individuals…we do have the team chat; you can just have a chat about anything."

James also felt that chat messaging enabled him to continue connecting with his colleagues, messaging them when necessary; "I've been able to message people and chat with them as needed. So, it doesn't change the relationship too much…So it's been okay".

However, the disadvantages of the pervasive chat platform were also expressed by participants, feeling that their work communication was becoming dominated by chat conversations creating an overwhelming volume of communication not experienced in the office.

> "A lot more communication is done via things like chat. I was never someone who would chat with someone, I would always just walk over the corridor and talk to someone, I would never 'chat them'. Now I have like 30 chat windows open at once… I think there's so much more reading involved than actually speaking to people". (Hannah)

Another disadvantage of the escalated utilisation of these platforms was the expectation of an immediate response. The function showing the online or 'available' status on chat channels create

pressure to respond quickly to colleagues, identified as contributing an additional stressor of virtual communication.

> "I like to get stuff done. I'm very conscious about being online and I want to be seen as very helpful to my co-workers. So, for me, COVID has been working from home has been really interesting in that I felt increased pressure to constantly be online and constantly be accessible." (Susan)

Chat messaging, a popular and pervasive form of organisational communication is shown in this study to be both a connector of individuals and a potential stressor for others, adding additional pressure and effort into the communication process. It was a prevalent form of communication connecting individuals despite its reliance on reading large amounts of text and was shown to be popular with the millennials studied.

### 4.3.2.4.    Email communication

In the original hierarchy of communication platforms developed by Daft and Lengel (1986), email is rated as one of the least rich mediums and was shown to also be one of the least popular with research participants. It was not heavily commented on, valuable insight in itself; millennials do not see email as a way to interact and build social relationships. Email was expressed as a burdensome platform requiring substantial reading and amassing in volume because of working virtually.

> "I also get so many more emails; I will get hundreds of emails a day now. Because people have discovered that they email me and I don't respond so they ping me on Teams, and then I've now stopped responding to all of the Teams messages because there's too many".
> (Hannah)

The volume of communication experienced as a consequence of not being able to have a FTF conversation was felt across all platforms of communication with participants commenting on the multiple chat groups, masses of emails and phone calls they received. Peter expressed his frustration: "There are points where I hated my phone…when things get heated...you get 30 calls at the same time, it's just not helpful". A recurring feeling of research participants was that although the quantity of communication had increased, the quality had decreased, significantly impacting their feelings toward workplace interactions.

## 4.4.    Death of the 'water cooler convo': Spontaneous and natural communication

Many research participants commented that virtual interactions did not feel 'natural' and associated the feeling of natural communication with FTF interaction. Research participants commented also on a lack of spontaneous communication, a feature of 'natural' FTF co-located office environments, impacting their ability to connect organically with colleagues. This also contributed to a weakening

of relationships and lack of communication with colleagues, particularly those outside the immediate workgroup.

### 4.4.1. Unravelling unnaturalness

The section investigates the impact of video conferencing technology on the connection between virtual communicators, highlighting the feeling of awkwardness experienced by those in the study. The awkwardness of this communication was coupled with the feeling of unnaturalness, emphasising the feeling that virtual interaction is a medium that humans are not as familiar and comfortable with. Virtual drinks, mentioned in the video conferencing section, was a common occurrence in participants' organisations, introduced as a way to connect. The unnaturalness of this style of socialisation was felt by many individuals.

> "We also tried doing monthly drinks…but it's been awkward… there's 30 people in a session and only one person can chat one at a time, or you're trying to not talk over someone else. It doesn't really flow." (Jonathan)

> "We tried to do virtual drinks when working from home… And we found that it didn't really work. Not a lot of people were engaged that much in the virtual drinks. And I think that it may be just that more human interaction is needed." (Ben)

Jane additionally commented that virtual drinks felt "not organic, not natural" and as highlighted in an earlier finding, Peter commented on the awkwardness and "different dynamic" of virtual social connection sessions such as drinks.

Research participants commented on the lack of cues impacting how they felt about virtual communication, contributing to its unnaturalness and feeling of dissatisfaction.

> "I just feel I get so much more out of that face to face interaction. Whether it's in meetings and being able to look across the room and have those visual cues, or just that, you know, daily morning chat or banter when you get in". (Jonathan)

Jane reflected that she enjoyed FTF interactions better than virtual communications; "I don't know socialising, the cues and stuff… everything's easier in person. So, I enjoyed it better."

The absence of cues and nonverbal communication was observed by many research participants who craved easier and more natural communication, which is the experience FTF. They also had more fulfilling conversations with in-person interactions. FTF communication occurrences cannot simply be made virtual and a different approach is required to facilitate the same social connection virtually, such as with meetings, or social drinks.

### 4.4.2. Spontaneous communication

Another consequence of unnatural virtual communication platforms was a lack of spontaneity in the ability of colleagues to connect and communicate online versus FTF. Many workplace 'water cooler' conversations building cohesion in teams and rapport, do not occur without a physical meeting place and no effective simulated alternative exists. A decline in water cooler conversations, for many research participants, created a disconnection to their organisation outside of their workgroup, with 'kitchen friends' fading away through lack of connection.

#### *4.4.2.1. Social circles*

Social circles in the workplace became much smaller due to the inability to interact spontaneously in the office, with a greater focus on just the project team. Communal work projects were shown to be the primary facilitator of communication, narrowing social occurrences outside of this team.

> "Whereas the kind of people who I would be more social with at work, chatting to people in the corridor…all that kind of chat that just stopped because people I used to chat with in the kitchen… I've made endeavours to keep up with and stay in touch with and make sure that the conversation's still flowing. But the broader team, you know, if I don't have a direct one-on-one meeting with them, I'll have no interaction with them. Whereas in the office, I chat to them in the kitchen or in the corridor as I was passing them, when the opportunity presented itself." (Hannah)

> "I don't go out of my way to have as many casual conversations now during COVID times as I would have." (James)

> "You'd come in in the morning, and you have a catch-up with those that sort of started at the same time as you, you know, you'd either go off and get a coffee together or sort of set up the day with each other and things like that. And then yeah, depending on sort of when lunch breaks fell, and team breaks and things and sometimes we'd go off and get fresh air together or things like that. So, you obviously have a group of individuals that you sort of talk to on a daily basis." (Malcolm)

Casual catch-ups were not continued to the same extent virtually, where chat messaging became the default way for teams like Malcolm's to communicate with each other. The spontaneity of office outings was not carried into the virtual realm, hindering the development of relationships from the perspective of research participants. Participants noted that virtual communication was much more deliberate and required additional effort to maintain relationships without the opportunity to connect with people in proximity, ultimately leading to the discontinuation of some workplace relationships.

### 4.4.2.2.    Social rituals

Social rituals also played an important part in facilitating spontaneous communication, with the 'coffee catch-up' frequently mentioned as a popular activity for the Melbournians studied. The coffee catch-up provided a daily ritual creating an opportunity for individuals in the office to connect with others outside their immediate project teams.

> "On Fridays, I would usually kind of go and get people. So, I'd walk up to some people who I knew didn't usually go for coffee with; 'we're all going for coffee, who wants to go for coffee?'" (Hannah)

Susan also commented on the importance of ritualistic communication coupled with the spontaneity of convenience with whoever was in the office; "We were quite social, pre-COVID; we'd all go to lunch together every day…So there was all that stuff obviously happening quite naturally."

These social rituals were discontinued virtually, further narrowing opportunities for individuals to connect beyond their immediate workgroup and served to shrink their social circles.

### 4.4.2.3.    Support and information gathering

Another benefit of FTF communication highlighted by research participants was the ability to spontaneously ask questions of colleagues and get an immediate response. Many research participants highlighted their preference to ask questions and garner support from colleagues through the FTF medium. 'Quick questions', easily resolved in person, were not as quickly remedied virtually. Malcolm highlights this experience; "You obviously can't literally turn to someone to say, hey, I've got a question for you, so it makes it a little bit longer to get an answer on something."

Vivian, who was new to her organisation, felt it was easier to learn when she was in the proximity of her colleagues.

> "If we had any questions, we could just jump up and run up and ask them… Questions are not being answered, the support system is a bit poor at the moment. Maybe because you know, people might not be at their desk 24/7, we can't just walk up to them and ask them."

Furthermore, the decline in spontaneous discussions meant that conversations traditionally taking place at the 'water cooler' had discontinued, leaving some participants feeling disconnected from organisational decision making.

> "In person, you could overhear things you could kind of question, you can kind of question why decisions are made. Whereas in virtual worlds, they kind of just get made, and you get told that they're made because I can't just pop into a Zoom meeting." (Susan)

This had consequences for the research participants, who felt less supported in their roles with a lack of exposure to the decision-making process and fewer opportunities to connect with colleagues.

### 4.4.2.4.    New starters

The experience of those relatively new to their organisations, forced into working with their colleagues entirely virtually highlighted the impact of computer-mediated communication on the ability to connect with the organisation. The ability to spontaneously meet members of the wider team and organisation facilitates connection not only to the workgroup but to the company itself and was absent from virtual interactions.

> "I was definitely reaching out and sending emails and just trying to introduce myself to people because I wouldn't have the chance normally. Normally I would just walk around the office and see… Yeah you definitely have to be more proactive." (James)

> "You still have the opportunity by reaching out and meeting new people…If you're willing to do the work to, you know, reach out to those others and other teams or people." (Malcolm)

Jane mentioned she felt overwhelmed as a new starter meeting all her colleagues virtually; "Just meeting everyone on screen and so it's a lot to take in sometimes… It's quite hard to meet a bunch of people who know each other quite well, virtually."

Virtual communication was particularly challenging for those who did not have the opportunity to develop bonds initially FTF, impacting the ability to form strong social connections with colleagues.

### 4.4.3.  Overcoming challenges of unnatural communication

While research participants initially observed a stark contrast in their ability to connect and converse with their colleagues, they also reflected on their adaptation to the new way of working. Research participants were asked to predict how they would feel about returning to working while physically co-located with their colleagues with some surprising results. As they adapted to working in less natural environments, depriving them of feedback and placing greater cognitive effort on the sender, their sense of comfort with this more ambiguous medium increased. More than one research participant noted that their virtual self as expressed through CMC had become normal to them after months of working remotely and they were not sure how they would interact in a FTF setting after this adjustment.

Ben, who initially felt lonely and distanced from his colleagues, as quoted above, commented on his adaptation to connecting to his colleagues via Teams. He predicts his future work communications will have been irrevocably changed as a consequence of prolonged working from home, with chat

playing a more centralised role in these interactions; "I feel like people will be more inclined to continue using the Teams chat".

Malcolm expressed a surprising sentiment that he was better connected to his colleagues because of virtual working with everyone on the same platform and hoped this would continue when they were back working in a co-located space. "I find it's like, better now that we've got this sort of team interaction happening, versus just one on one when it was back in the office".

Vivian was so used to communicating virtually that she was unsure of how she would adapt back to FTF communications with her colleagues, expressing discomfort at the thought of in-person interactions. "I'm so used to just virtually speaking to them… When you see them face to face, the way you speak to somebody, I guess, I don't think I'll be as comfortable".

She further highlights the change in the way she works and the uncertainty of working in a co-located environment with her colleagues in the future.

> "Virtually, you can just hang up and then just do whatever. But then it's like, once you finish the conversation, you still have to socialise with other people around you. You're not just by yourself in your room anymore, where you just speak to the member and you're done. And you do your own thing and unlike how it is now, you have to constantly be sociable."

While the impacts of moving to entirely virtual communication are yet to be fully realised as the COVID-19 pandemic continues to unfold, it is clear that, through the experiences of the millennials in this study, there has been a substantial impact of remote working on the ability to form and sustain relationships without the opportunity to naturally and spontaneously interact FTF. Millennials' adaptation to virtual technology has shown favourable outcomes to support connection in a new way of working.

## 4.5. Solving social isolation: Building and maintaining virtual relationships

One significant consequence of organisations moving toward virtual communication in the era of remote working is the reduction in the number of relationships an individual can maintain. Additional effort is required in virtual communication to encode and decode meaning and develop intimacy vital for building and maintaining social connection. As explored in the theme of adapting to new, unnatural forms of communication, a consequence of individuals communicating through video conferencing and chat-based mediums is that fewer relationships, particularly those with the depth required to form meaningful friendships, are sustainable.

### 4.5.1. Shrinking social circles

The topic of shrinking social circles was explored through the lens of spontaneity and naturalness in communication and offers further opportunity for analysis through the perspective of sustaining relationships virtually. A consequence of a lack of connection with the wider social group, or work team was a shrinking social circle of many research participants. Coupled with a decrease in relationships outside of the direct working group was, for some research participants, development of closer bonds with those they worked with more often. The experience of sharing the challenges of remote working brought participants closer to some of their colleagues while distancing them from others.

> "I feel like I've become closer to a few additional people since lockdown because you talk to them all the time, and you're not talking to people outside of work. So, you know, they become a much more constant presence in your life… I've become closer to those people because it was a shared experience". (Hannah)

While Hannah felt closer to a limited number of people in her social circle, she felt disconnected from what was happening in the wider organisation. "I have no idea what's happening in digital or what's happening in the product team or whatever that kind of stuff, you don't hear about it anymore".

Other research participants commented that they were able to maintain the close relationships with colleagues they had previously established relationships with, but experienced hesitation in forming relationships with new members they were only able to meet virtually, without FTF interaction.

> "A lot of the people who I was friends with before, we would travel together a lot, for work, and you lose all of that. So that's been weirder. But I will say with people who are newer to the team, folks who have joined, post-COVID… There tends to be a bit of hesitation." (Susan)

Vivian also felt disconnected from colleagues she had previously associated with at the office.

> "In terms of like other colleagues who you just really speak to when you're in the office, then no, I don't really know what's happening in their life or on a daily basis, because I don't actually get to speak to them".

The overall result for many of the individuals interviewed is, with the effort and difficulty of communicating virtually, the number of connections with colleagues decreased. For some, this was coupled with a tightening of relationships with their existing friendships but for others, increased isolation, and loneliness with feelings of disconnection to the organisation and wider workgroup.

## 4.5.2. Building virtual relationships

The experience of working virtually was particularly challenging for those in my research who were new to their organisation, as highlighted previously, without an opportunity to establish strong connections through FTF communication. This was felt through the experiences of the new starters in the study and those who were struggling to build relationships with additional team members onboarded during the COVID-19 virtual working period. The experience of the research participants trying to forge relationships with their colleagues they had not met was perceived as challenging and not as fulfilling as FTF relationship building. Relating to the unnaturalness previously discussed, the building of virtual relationships was referred to as 'not the same' by research participants.

Jane felt her virtual onboarding experience was substantially different to what it would have been in the office: "It's not the same as meeting them in person I would say". She commented that the virtual world was not as real to her, affecting how she related to her colleagues. "It doesn't feel like real life when they're on a screen".

Vivian also felt disadvantaged in her ability to form strong relationships with her colleagues without time in the co-located environment to develop them. "I only joined in December, and then like, a few months in, we had to work from home. So, I didn't really get to build that sort of connection with some of them". She felt the people she was meeting on the screen were not as real as they would have been in person and this experience impacted the building of strong relationships:

> "When I do virtual, I feel like you don't need to build that sort of connection or that rapport right away. I feel like it's just a barrier there for some reason… Over the camera that you're just seeing them, they're not actually there. You don't really get to know who they really are."

During the study, some of the restrictions in Melbourne started to ease, allowing some individuals the opportunity to meet their colleagues, some for the first time, in person. This experience of meeting colleagues FTF allowed them to deepen the relationship which started virtually. Susan commented: "It was so refreshing to see someone in person and be like, this is the person I've been seeing on the screen and just having some sort of context, I guess to who they are".

New starters were particularly disadvantaged in their ability to learn their role and build relationships with their colleagues, without the frequency of communication offered through proximity and FTF communication, noted in this study. The lack of context and nonverbal cues contributed to the feeling that virtual communication was 'less real' than FTF, impacting the ability to build intimate connections with colleagues. Overall, research participants noted a preference for forming relationships FTF.

### 4.5.3. Maintaining virtual relationships

Some of the research participants in this study had been in their organisations for several years, with an opportunity to form strong relationships through the FTF medium. The ability to maintain these relationships virtually provides an interesting area of study and highlights the link between the length of the relationship with its strength and ability to sustain challenges such as remote working. The predominant sentiment from most research participants was that while they were able to maintain the level of connection with their colleagues, they were unable to grow that connection to the same extent they would have if co-located.

James, who had a long tenure with his company of five years, felt his relationship with his colleagues had stagnated without the opportunity to connect FTF. "I'd say we've maintained it [the relationship], it definitely hasn't grown without any opportunities to do so."

Paul, who was newer to his organisation, expressed similar levels of dissatisfaction with growing his relationship with his colleagues virtually. "We wouldn't have progressed as much as friends, as it would be if we weren't in this situation. And I guess general friendship is there, is obviously tainted now".

The ability to maintain these relationships was impacted by both the quality and the quantity of conversation, conveyed through James' experience.

> "Some people, I talk to them a lot more in person. But then in Teams, I don't do it as much so yeah, it's probably not as effective as obviously being in person, or not the same amount, or the same quality".

It was clear through the experiences of research participants that a decline in the quantity and quality of communication with colleagues had impacted their ability to increase cohesion, even with those whom they had worked with for many years prior.

### 4.5.4. Positive impacts of virtual relationship building

Not all experiences of virtual relationship development in the views of research participants were negative. Some participants felt they were better connected to their teams and benefitted from having their colleagues share the same communication platform, giving them opportunities to socialise with those they did not have a chance to talk to in the office, due to differing schedules.

> "I find it's better now that we've got this sort of team interaction happening, versus just one-on-one when it was back in the office… I'm just wanting to make sure that we're sort of just continuing to do the same sort of team meetings and have the team activities and making sure we still have our weekly team huddles." (Malcolm)

Ben also expressed positivity about the ability to connect with his colleagues instantly which he saw as a great benefit.

> "Even though we haven't had that face-to-face interaction with each other, we've still been able to keep in contact with each other, which is the main thing. And yeah, being able to contact each other almost instantly, which has been a huge, huge help as well."

Another advantage of connecting virtually was the chance for colleagues to see each other in their 'authentic' home environments, creating an opportunity to strengthen relationships.

> "I actually think it's been a welcome transition; people are just a lot more vulnerable... I get to see more about a person's personality, like somebody's personality outside of just what they bring to work... This has been a much better blend... his [my manager's] kids will come jump on the Zoom and be silly. And it's just really cool to see that humanity from somebody right?". (Susan)

Another research participant expressed an improvement in their social connections with their colleagues due to their COVID-19 remote working experience. Peter represents a unique viewpoint in this study as he was working virtually in Melbourne before the pandemic.

> "COVID did two things; it made sure we were aware that everyone in the company could work remotely, which was cool. But then it also brought the Auckland team closer to the Australian team...that kind of helped that connection".

The views of these research participants highlight there are both benefits and consequences of relying on virtual communication to facilitate strong relationships in the workplace. As expressed above, there is an opportunity to leverage communication platforms to build deeper, more intimate relationships with colleagues with a more authentic connection to their work and personal selves.

## 4.6.    Summary of findings

Thematic analysis led to the emergence of four strong themes in this investigation, relating to communication between individuals in the workplace and the impact of the platform on social connection and the development of relationships. These findings reveal both positive and negative impacts due to workplaces moving toward virtual work structures. These findings highlight that social cohesion, still a priority to the millennials studied while working from home, was substantially impacted by the change to remote working. A shift toward entirely virtual platforms of communicating impacted the perceived quality and quantity for connecting with colleagues. While the millennials studied were still able to form meaningful relationships virtually, they took longer to

adapt to the platform and develop these relationships. They expressed a preference for FTF communication.

The individual experiences of research participants emphasise the importance of personal circumstance and context in understanding the data. What is novel about these findings is the way participants utilised the technology. The chat platform, which could be perceived as less natural to participants, was a popular way to connect. The initial transition toward virtual communication and development of a virtual self in this realm was salient, as was some of the perceived hesitancy in returning to work in an in-person context.

The next section, the discussion, will delve deeper into these results, furthering existing theory to better understand the relationship between communication platform and cohesion in the workplace. The theories discussed in the literature review will be applied to the findings to demonstrate how they strengthen and extend existing research.

# 5. Discussion

My study set out to determine if virtual working impacted cohesion in millennials, the research question was: *How has a shift toward fully virtual teams affected the social cohesiveness and bonding of millennials in Australia within their workgroups?*

My findings show strong evidence that a shift toward working in virtual teams has significantly impacted social cohesion and bonding in the perception of the millennials studied. Although participants found the virtual platform to be awkward and unnatural, initially feeling isolated and lonely with remote working, they adapted to virtual communication. My results reflect a preference for chat communication and highlight that, with time, meaningful relationships can be established virtually and for some, the shift toward virtual communication platforms even brought them closer to their colleagues.

What is salient and unique to the situational context of my study is that workers had no choice in their working arrangements and in this study, most research participants had little experience working remotely. My investigation examines research literature on millennials, virtual teams, and social cohesion. This discussion utilises the theories of social capital, social identity and media naturalness and extends them to show the relevance of my findings to management research on teams.

## 5.1. Social connections and workplace 'stickiness'

A requirement of my study was to determine the perceived importance of social relationships from the perspective of the millennials studied against the backdrop of the COVID-19 pandemic. This informs understanding of how their lives have been impacted by an inability to connect with colleagues in a FTF environment and the perceived impact on the depth of relationships. Social cohesiveness is an important area of study and research literature has previously identified connections between workplace friendships and productivity improvements (Burkus, 2017). Studies have also shown links between social cohesion in workgroups and increased job satisfaction, organisational commitment and decreased turnover (Morrison, 2004). My study has emphasised that while virtually working, it is important and valuable for social connections to be facilitated in the workplace from the viewpoint of the millennials studied. While navigating new ways of working, it was important for this cohort to continue to connect with colleagues. This reinforces a strong link between social connections, perception of work, productivity, and organisational loyalty while furthering knowledge of how these areas have been impacted through a shift to remote working.

The benefits of social cohesion in the workplace amidst the COVID-19 pandemic have reinforced by my findings. Participants reported that their perception of work improved due to their social

connections with colleagues, supported by other group research literature on cohesion (see, for example, Amjad et al., 2015; Burkus, 2017; Morrison, 2004). They also found that while experiencing the positive impacts of social connections, their ability to connect with colleagues deeply was hindered by the lack of physical co-location and reliance on virtual communication. The presence of social connection, however, helped individuals feel more positive about their virtual work experience with the opportunity to 'check in' with their colleagues when they logged on. This highlights the significance of social bonds when working virtually, particularly during a prolonged period of social isolation, further magnified by the preferences of an innately social cohort (Landrum, 2018), who highlighted in this study a prioritisation of workplace friendships and connections when deciding whether to stay in a role.

The millennials in my study reflected that their perception of their work environment was improved due to positive relationships and interactions with colleagues. The desire for a proxy second family in the workforce (Landrum, 2018) contributes to the knowledge that millennials enjoy going to work more when able to connect with colleagues and develop a familial style bond. Social identity theory reinforces the importance of an individual to feel connected to their group, which is impacted by situational factors (Bruskin, 2019). Research participants reported a shrinking social circle and disconnection to their wider organisation, impacting their social identity beyond their direct working group. This is a salient finding for organisations because previous research indicates strong identification with workgroups links to organisational commitment (Ellemers et al., 2004). Millennials are often referred to as the job-hopping generation (Gallup, 2016), more likely to switch roles than other demographic groups due to their disengagement in work. The millennials in my study emphasised they would leave a company they did not feel connected to, highlighting the importance of social connections to minimise organisational turnover and foster loyalty. This has been similarly found in other studies identifying lower turnover in individuals who had friendships in their organisation (Amjad et al., 2015; Morrison, 2004). My findings highlight that millennials will not stay in roles with little opportunity for social engagement and supports the imperative to better understand the impact of moving toward virtual working to help millennials optimise their relationships and improve their perception of work to achieve both personal and organisational benefits

Research participants commented that they felt more motivated to turn up to work when given an opportunity to socially connect with colleagues, showing the connection between minimising absenteeism and social cohesion. Disconnected workplaces have been shown to have high rates of absenteeism (Landrum, 2018). This is particularly significant with COVID-19 having a drastic impact on workplace levels of absenteeism in Australia, with virtual absenteeism rates increasing at the

onset of working from home (Direct Health Solutions, 2020). It was forecasted that with working from home, organisational disconnectedness would increase absenteeism (Direct Health Solutions, 2020) and while respondents did not specifically mention work absences, the theme of disconnection as a result of working from home was evident. Finding ways to combat absenteeism through greater connection to the organisation should therefore be on the agenda of Australian organisations, with its threat to productivity and worker happiness.

Work friends for those studied were particularly important due to their social isolation and inability to see friends and family, spending a majority of their time communicating with colleagues virtually. The importance of social interaction to provide work/life balance is key to supporting millennials in the workplace, with literature on the demographic emphasising a desire for this balance (Cattermole, 2018; Myers & Sadaghiani, 2010; Skinner & Pocock, 2010). Friendships in the workplace can be construed as distracting, but the overall positive impacts of regular social breaks offering the ability to refresh and refocus on work were revealed as salient to the millennials studied. This further supports the notion that workplace friendships should be on the agenda for organisations looking to support their employees and encourage productivity.

My study found that social connection in the workplace can support mental wellbeing. Many research participants reflected on their experiences with social activities facilitated by their organisations which provided mental wellbeing check-ins, referred to as a 'keeping yourself sane' session by one participant. The need to check in with colleagues has been highlighted as an important method of developing connection in the workplace and improving employee experience (Twaronite, 2019). Social cohesion has links to positive wellbeing (Vanhove & Herian, 2015) and lower levels of job stress (Steinhardt et al., 2003). This highlights connection between social cohesion and improved mental health outcomes, particularly relevant in the current workplace environment. The impact of the lockdown leading to feelings of social isolation and increasing the threat to wellbeing was noted as a risk to Australian workers (Safe Work Australia, 2020).

Research participants new to their organisations reflected they were able to develop relationships with colleagues, albeit not as deeply as in FTF, utilising the virtual medium. Teams relying on CMC can develop the same level of interpersonal relationships as physically co-located teams, when other variables are comparable, as highlighted by social information processing theory (DeRosa et al., 2004; Walther, 2016). The variable of time is an important mediator of virtual relationships, which can still achieve the intimacy as FTF relationships, but require longer to get to this level. Virtual teams may therefore require a greater emphasis on social bonding in their initiation to support the

development of these relationships and this should be a focus for organisations wishing to support these teams.

This theme identifying social connection as important to workplaces demonstrates the importance of social cohesion to millennials and its prioritisation amidst the backdrop of a pandemic socially isolating individuals. It is important to better understand how to create positive social relationships in the virtual workplace for both individual employee happiness and overall organisational performance. The social identity of individuals in this study was impacted by the shift toward a virtual platform, leading to feelings of disconnection to the organisation with implications for turnover.

The findings of my study are supported by those in the research literature connecting positive workplace relationships to an improved perception of work, organisational loyalty, reduced turnover and lower levels of absenteeism as workers are encouraged to check in online with their colleagues. These impacts are critical in an era of a disrupted workforce affected by COVID-19 and should be further explored by organisations to improve performance in their teams.

## 5.2. Plugging into the workplace: Technology and social connection

Throughout the COVID-19 pandemic, communication technology has played a critical role in enabling business functionality, cohesion, and collaboration between teams. The importance of different forms of communication technology is prevalent in the way we understand team cohesion and explore virtual relationships. The unique contribution of my study to research literature is demonstrated through the findings revealing how research participants have utilised technology to support social cohesion in their workgroups, furthering understanding of virtual communication, virtual teams, and social cohesion more broadly.

My study's findings highlighted that participants found the virtual context to be 'not as real', awkward and unnatural in comparison to FTF communication. They support the application of Kock's (2001) media naturalness theory in the current environment, showing its relevance to the communication landscape experienced today. A surprising finding was in the prioritisation of chat messaging as a platform for communication, despite its lack of naturalness. There are five ways my research supports or extends the theory linking communication technologies to social connection.

Firstly, my research found that the more closely the communication platform imitated FTF interaction, the more fulfilling it was perceived to be and the greater the level of cohesion developed. FTF interaction is asserted to be the most natural and easy way for humans to communicate (Kock, 2001) and research participants commented on the unnaturalness and awkwardness of virtual communication. The dominant feedback from research participants

highlighted a preference for FTF communication, reflecting the natural tendency for humans to be hardwired for in-person interaction (Kock, 2005). The more similar the platform was to FTF, the more positively it was received by participants as a way to connect with colleagues. However, social interactions mimicking the FTF environment were not as effective as they were in person, as exemplified by virtual drinks. A different strategy is therefore required to support the development of social cohesion in virtual teams, acknowledging the perceived difference.

Secondly, it took time for participants to adapt to new ways of connecting with colleagues through virtual communication platforms. While participants reflected that some technologies such as Teams messaging had brought their teams closer together, the initial adjustment highlighted the loneliness some felt because of being socially isolated. This adaptation required participants to cope with much higher volumes of communication with exacerbated effort due to the reliance on text-based mediums. Participants particularly struggled without the support of cues, feedback and the biological responses offered through FTF interactions. The learned schema principle (Kock, 2001) acknowledges an initial period of discomfort with a new medium as neural pathways are developed to eventually enable a platform to feel more natural to its users. The need for more time to build virtual relationships also shows the relevance of social information processing theory (Walther, 2016) in its application to virtual teams operating in the socially isolated pandemic. The ability to connect virtually is evident, as shown with research participants, but requires more time to get to the same level of depth that a FTF relationship would reach in a shorter time.

Thirdly, research participants, consistent with media naturalness theory (Kock, 2001), place video conferencing at the top of their preferred communication platforms. It was the most popular and frequently mentioned method of interacting with colleagues. Video conferencing, however, was noted as being awkward and missing valuable cues FTF interaction offers in aiding understanding. Video conferencing is like FTF communication in its synchronicity and with the assistance of some visual cues but precludes the transmission of other nonverbal cues, noted by the participants in this study. The ultimate effect of this was to create increased cognitive effort as participants struggled to decode messages through this platform without the same physiological response they would have received through FTF interactions (Kock, 2001).

The fourth contribution notes the absence of video on conference calls, reducing its naturalness and decreasing its similarity to FTF interactions. This is particularly relevant to millennials who are known for multi-tasking (Haworth and Work Collectiv, 2017) and quite possibly doing something else at the same time. Furthermore, research participants commented they felt they did not have the full attention of their colleagues without the verbal cues of video conferencing. The lack of visibility to

the conversation partner can hinder relationship development, particularly without any nonverbal feedback to encourage communication to continue. While phone calls between those with well-developed relationships may lead to fulfilling conversations with colleagues who had more time to establish this connection (Walther, 2016), they were expressed as an inadequate platform, in the perception of those studied, to connect with newer colleagues. The onset of virtual working in the pandemic has had a significant impact on new starter employees interviewed who were greatly disadvantaged in their ability to form deep relationships in their organisations. They felt disconnected without the context inherent in FTF communication, perceiving the virtual world as 'not as real', hindering the development of intimate relationships and thus, social cohesion with colleagues.

The fifth contribution relates to the role of chat messaging in facilitating social cohesion, one of the most interesting findings in this study. Chat messaging, with its reliance on textual communication, should be one of the less favourable platforms of interaction given its dissimilarity to FTF, absence of nonverbal cues and asynchronous nature (Kock, 2005), but was instead found to be one of the most popular with participants. It was favoured for its ease by many participants, who also noted significant disadvantages. These included an increased workload for communication with substantial amounts of reading and amplified pressure for respondents to be seen as constantly online and available to communicate with colleagues. The volume of communication experienced through the chat platform was far greater than with FTF and involved additional cognitive effort due to communicating virtually (Kock, 2001). From the perspective of participants, chat messaging is likely to continue as a way to connect teams and this study offers new insights as to how it can be utilised to support cohesion.

Research participants commented on the similarity of Teams to Facebook Messenger, highlighting a preference for this method of communication, allowing it to feel more natural. While chat may be viewed as an 'unnatural' medium (Kock, 2005), millennials, in particular, have adapted to the platform as a preferred method of communication. Messaging applications such as Facebook, WhatsApp and Instagram are widely used by the millennial cohort, who are the most active demographic of the Facebook platform (Hughes, 2020). The inclusion of images and videos on chat platforms also contribute to the development of this method of communication as a richer medium than first identified (Ishii et al., 2019). The treatment of the platform as a form of instant messaging adds to its synchronicity and thus similarity to FTF communication (Ishii et al., 2019), while also contributing to one of the significant downsides of chat messaging, viewed as demanding by research participants.

Email communication was viewed also as requiring great cognitive effort by research participants and is referred to as one of the least rich and natural mediums (Daft and Lengel, 1986; Kock, 2001), highlighting its lack of popularity with the millennials studied.

Overall, communication platforms such as Slack and Teams have become ubiquitous in millennial's work lives, in a way unimagined before the COVID-19 pandemic. My research participants expressed a preference for platforms that can be considered more 'natural' and similar to FTF to enable the facilitation of cohesion between colleagues. The unexpected increase in chat messaging to form social connections in the workplace reflects an adaptation to the platform in a way that enables it to feel more natural to those using it, particularly prevalent in the millennial cohort. The advantages and disadvantages found for CMC in this study contribute to the understanding of the role communication platforms play in enabling the development of social cohesion and the importance of understanding millennial's orientation to interaction. This links to the next section exploring the theme of natural, or spontaneous communication typically absent in computer-mediated platforms.

## 5.3. Death of the 'water cooler convo': Spontaneous and natural communication

The term 'natural' was widely used by research participants, referring to CMC as an unnatural and less satisfying form of communication, utilising the terminology of media naturalness theory. The predominant sentiment in this study highlighted that the natural mediums lent themselves better to developing social cohesion and strong social bonds in the workplace. The perception of research participants toward virtual platforms of communication highlights that innately, virtual mediums do not feel as natural as the FTF method of interaction (Kock, 2001). This reinforces that naturalness is important to the development of connections, linking the constructs of media naturalness theory and social cohesion.

Alongside frequent references to 'unnatural' communication, were statements about the awkwardness of virtual engagement. Humans are biologically hardwired for in-person communication (Kock, 2001), explaining the awkwardness felt by research participants, who had not developed neural pathways to the same extent as for FTF, enabling communications to feel natural. The feeling of awkwardness through lack of physical co-location was noted by research participants and discouraged participation in conversations, particularly in a group setting. Many research participants highlighted the awkwardness of participating in large group calls, prohibiting the development of social cohesion in this environment. Zoom offers breakout rooms, simulating the FTF experience of separating from the larger group, but this lacks the convenience and spontaneity offered in person. Communicating in a group setting is particularly challenging and means that activities such as social drinks, popular in a FTF setting, become cumbersome and awkward to

simulate online. The result of this is that group activities such as this were discontinued in many virtual workplaces, contributing to the shrinking of social circles keenly felt by research participants. This finding concludes that individuals are not well placed to develop strong relationships in virtual group settings due to the unnaturalness of the platform.

A strong sentiment from the millennials studied was that the unnaturalness of communication was caused, in part, by a lack of verbal and nonverbal cues to accompany the conversation and convey meaning. The less natural the platform, translating to a lack of cues like in FTF interactions (Kock, 2001), the more challenging communication was in the view of the research participants. Video conferencing offers some verbal and nonverbal feedback through the video medium, accompanied with synchronicity characteristic of FTF (Kock, 2005), although it fails to emulate the true experience of in-person communication. Recognising that misunderstandings were apparent with this medium, it was still the most popular way to communicate with those studied. The overall impact of this communication, however, was that it became less enjoyable than FTF and encouraged fewer communication occurrences with colleagues. This led to reduced opportunities to maintain and develop friendships virtually and a feeling of disconnection. Through the perceptions of those studied, a lack of naturalness in virtual communication hindered the development of social cohesion in their workgroups. This unites the concepts of naturalness and cohesion against the backdrop of the COVID-19 pandemic, furthering understanding of connection in virtual teams.

The lack of spontaneity evident in virtual communication was another significant research finding. Many research participants highlighted the additional effort required to communicate with their colleagues with whom they were no longer physically co-located. The consequence of this was many workplace conversations building rapport and deep connection do not occur, threatening the ability of colleagues to build emotional depth in their friendships and shrinking social circles.

The importance of spontaneous 'water cooler' conversations to facilitate workplace connections and disseminate organisational information is noted in research literature (Blithe, 2014; Lin & Kwantes, 2015; Waring & Bishop, 2010). Although there were communication platforms developed to virtually simulate these conversations (DeRosa et al., 2004), they have not been widely adopted by organisations and were not mentioned in this study. Water cooler conversations facilitate a connection between colleagues reliant on their co-location to interact. They may not always take the form of communication at an actual water cooler but represent a spontaneous engagement encouraging connection between individuals who may not work or sit together at their office. Research participants referred to the act of going for coffee with 'whoever is around' to engage and make friends with individuals beyond their immediate workgroup. A decline in these types of

conversations resulted in, for many research participants, disconnection from the organisation without opportunities to hear about decisions and projects beyond their immediate workgroup. These wider organisational friendships also discontinued as participants no longer 'went out of their way' to talk to individuals outside of their teams and workgroups. An additional workload for virtual communication (Kock, 2001) has translated to the ability to maintain fewer friendships with the convenience of physical co-location absent in virtual interactions.

Naturalness and spontaneity were perceived as almost synonymous with FTF communication. For many research participants, it was natural to spontaneously grab a coffee with colleagues, or 'call out over the desk' to engage. These traits of FTF interaction do not translate to the virtual world, where communication tends to be more deliberate and purpose-driven. Participants had little experience working virtually, impacting their ability to successfully communicate. This was noted by research participants who felt their virtual interactions with colleagues were much more focused on work projects. This was evident in those who were newer to the organisation, who were less inclined to talk socially and develop friendships. Virtual platforms such as email and chat messaging are attributed to high levels of 'rehearsability' (Ishii et al., 2019). Conversations taking place over these media are therefore much less natural as respondents have more time to encode their messages and greater control over their communication in a way not possible FTF. Individuals communicating virtually may be more guarded (Ishii et al., 2019) and less likely to inadvertently reveal personal information than in a FTF context. This has the potential to constrain the development of relationships strengthened through the sharing of intimate revelations leading to the development of trust which is evident in socially cohesive teams.

Another benefit of spontaneous communication is its ability to swiftly resolve issues. It has long been asserted that difficult and sensitive issues are easier to resolve with FTF interaction (Daft & Lengel, 1986). The richest and most natural way to communicate allows for immediate feedback (Kock, 2001). Participants noted they did not receive the same level of support they would have had they been physically co-located with their colleagues. This perceived lack of support impacted how participants felt toward their colleagues and organisation overall, feeling disconnected and frustrated at the delay in response to queries important to complete their role. In virtual communication, there is a much greater likelihood also for missed cues and a longer resolution time for conflict (Toler, 2015), impacting the ability of individuals to work productively and may impact their organisational loyalty as a result of poor perception with response to conflict resolution.

Overall, the transition to virtual working limited spontaneous interaction outside the immediate workgroup, which had the effect to shrink social circles and foster a feeling of disconnection to the

wider organisation. Additionally, the feeling that virtual communication was unnatural, hindered the development of virtual relationships which, to participants, did not feel real in the virtual realm. This has significant impacts on the ability of research participants to develop and maintain relationships, further explored in the next section of this discussion.

## 5.4.    Solving social isolation: Building and maintaining virtual relationships

As explored in the previous theme, virtual communication requires greater effort to maintain connections with increased cognitive workload (Kock, 2001) impacting the number of relationships an individual can successfully maintain while completing their work. This has translated, in the experience of the research participants, to significantly fewer connections and a smaller social circle with, overall, fewer deep and intimate friendships. The millennials in this study acknowledged a feeling of disconnection from their colleagues outside their workgroups and organisations more generally, with a greater focus on their project teams.

One of the ramifications of decreased social connections in the workplace is expressed through the lens of employee mental health, already exacerbated by the stressors of COVID-19 (Safe Work Australia, 2020). Social relationships provide positive relief from isolation, identified as lacking from the workdays of research participants who mentioned an overall reduction in social connectivity with their teammates. Coupled with this, they noted a development of closer social bonds with a select few colleagues who worked with them on projects, brought together through their shared experiences. Many of their relationships with the wider organisation, predominately maintained through incidental communication in the FTF environment faded away without the ability to maintain them virtually. This has the dual impact of isolating colleagues from their organisations while facilitating stronger bonds with the colleagues they talk with often, highlighting that as with many of the aspects of supporting social cohesion in a virtual world, there are both advantages and disadvantages.

The potential impact of disconnection to the broader workplace is significant; if individuals do not feel connected to their organisation, they are less likely to be engaged in their work and exhibit organisational loyalty. Millennials already have higher levels of disengagement in their work (Gallup, 2016) and are less loyal to their companies than is observed in previous generations (Myers & Sadaghiani, 2010). This can lead to higher turnover rates and threaten organisational productivity. Not knowing what is going on in the company, as was felt by individuals in this study, caused by a lack of connection with and proximity to colleagues, can also influence decision-making in teams units, unaware of other activity in the organisation. The impacts of a disconnected workforce with weakened social bonds because of a shift to virtual working has significant repercussions for

organisations which must be addressed to optimise a future way of working allowing for hybrid teams. This also led to a weakened social identity for individuals relating to their organisation and workgroups.

The experiences of those who were virtually onboarded into their organisations has also highlighted the challenges of building relationships in the virtual realm. In the experience of research participants, those with longer team tenure were able to maintain their relationships with their colleagues, albeit while experiencing a lack of development. However, new starters struggled to form strong bonds with their teams, without the opportunity to meet them FTF. They also felt disadvantaged in their onboarding by a lack of accessibility to team members to ask questions and learn their roles quickly. Team tenure is particularly relevant in this research and has been shown to have strong links between trust and relationship development in workgroups (Castaño et al., 2013; McPherson & Smith-Lovin, 2002; Morrison-Smith & Ruiz, 2020; Salas et al., 2015). CMC platforms significantly impact the development of trust (Morrison-Smith & Ruiz, 2020) and virtual teams are additionally disadvantaged in their ability to develop trustworthy relationships (Adler & Kwon, 2002), a vital component of social cohesion. Trust is an outcome of social capital in strongly socially bonded teams (Bye et al., 2020) and is affected by reliance on virtual platforms to facilitate relationships. Social capital has implications for organisational performance and contributes to lower turnover in organisations (Adler & Kwon, 2002). This application of social capital theory to virtual teams highlights a further disadvantage of the move towards hybrid team working that must be considered by organisations looking to thrive in a new world of work.

It was commonly noted by research participants that the experience of building relationships virtually was challenging and not as fulfilling as in FTF environments. This feeling that meeting someone virtually is 'not the same' and lacks context highlights that virtual communication is perceived as unnatural and humans are hardwired to develop relationships in a FTF context (Kock, 2001). While it is possible to develop meaningful relationships without having any FTF interaction, as stipulated in social information processing theory (Walther, 2016), the experiences of research participants reflect that it is more challenging and requires greater effort and time. This finding has significant repercussions for hybrid teams, with the future of work potentially increasing the number of team members who do not meet FTF. As shown in this study, relationships developed purely virtually lack the same depth of relationship as in a co-located setting and take significantly longer for cohesion to develop. There is a need, therefore, for organisations to develop strategies to support new starters who are onboarded virtually.

Participants reflected on the challenge of building relationships virtually and also highlighted positive impacts including better interaction with colleagues as a result of being able to connect on the same platform. This finding contributes knowledge to the facilitation of connection in virtual teams. It highlights an advantage of virtual communication placing all individuals in a company on the same platform, all accessible on this technology. Group chats encourage discussion within workgroups that may not otherwise occur due to a lack of schedule coordination and proximity in an office environment. The accessibility of connecting to people in different locations is an additional positive and was highlighted in the experiences of research participants. Communication technologies such as email and chat are not new to most organisations, although the way they are now used, in a far more ubiquitous and consistent manner, may have irrevocably changed workplace communication. The key difference between the COVID-19 situation and previous remote working experiences is that, for the first time, entire organisations were all working virtually, placing a greater emphasis on connectivity and offering an opportunity to better maximise this technology to support social cohesion in workers. This study highlights how virtual communication can be utilised to better connect individuals in teams and encourage greater cohesion through the use of group chats and consistent communication.

Another positive of virtual communication is the contribution to the development of a more authentic self in the workplace. Research participants commented on the ability to get to know colleagues better with the blurring of the work and personal selves as individuals logged onto Zoom from home. This contributes to the development of more fulfilling relationships, acknowledging that humans have lives outside of work contributing to who they are in a professional setting. It was identified earlier in this discussion that virtual teams experienced reduced social capital due to the lack of trust in relationships. The perception of authenticity in virtual relationships counteracts this and may foster social capital through the development of stronger cohesion.

The findings of this study show that there are significant downsides to working virtually in terms of building and maintaining social cohesion in teams, but there are also positives if the virtual platforms facilitating social connection are used effectively. The implication is that organisational communication must be designed specifically for the virtual context to facilitate social cohesion in workgroups.

## 6. Conclusion

This study, unique in its investigation of millennial perceptions of virtual team engagement during the 2020 COVID-19 pandemic response, paves the way for further research to better understand how changing work patterns impact social cohesion. Social cohesion in the workplace is vital for organisational performance and productivity (Forrester & Tashchian, 2004) and the millennial cohort is particularly vulnerable to the impacts of social isolation with their inherent preference for social connection in their workplace (Landrum, 2018). My research has brought literature on social cohesion, social capital, social identity, and media naturalness to explain a new phenomenon of teams working entirely virtually for the first time.

The goal of this research was to better understand the experience of millennials living in Melbourne as they navigated a shift from physically co-located team membership to fully virtual working and the perceived impact on social cohesion with their colleagues as a result. The findings highlight there are both advantages and disadvantages to working virtually, with some surprising benefits of increased connectivity in workgroups. Key findings demonstrated that virtual working felt awkward and unnatural in the perception of research participants, impacting their ability to form deep connections with colleagues. A surprising finding challenged Kock's (2001) media naturalness theory emphasising the importance of chat messaging in the workplace and placing it further along the continuum as a communication platform capable of facilitating workplace relationships.

My findings highlight the impact of remote working on the millennial cohort and emphasise the importance of facilitating social cohesion in workgroups to motivate this demographic and support organisational performance. They highlight that virtual platforms do not simulate FTF communication seamlessly, with participants reflecting on the awkward and uncomfortable nature of virtual communication such as workplace drinks. It was found, however, that when given time, platforms such as chat messaging can facilitate strong social connection.

My research reinforces the importance of social cohesion in workgroups, with the millennials studied emphasising their preference to work in organisations with colleagues with whom they have a good relationship. Research literature supports this notion that those who have strong relationships in the workplace perform better (Bayraktar, 2017; Ellemers et al., 2004). Millennials represent the future workforce and creating an employee engagement strategy empowering and motivating this demographic can have long-lasting organisational benefits including increased productivity, loyalty, and reduced turnover, future-proofing a talent strategy for tomorrow's leaders.

This study highlights the need to consider organisational interaction, as simply emulating the employee engagement strategies of FTF interaction is not effective for virtual communication. There

is a business imperative to better support employees, encouraging the development of policies supporting well-balanced interaction and the wellbeing of staff, applying knowledge of the impact of virtual platforms on their wellbeing and cognitive workload. These findings offer critical learnings for the development of employee engagement, reflecting new understanding of the role that chat messaging, for example, can play in organisational communication. COVID-19 has had a significant impact on the way we think about work and my research findings contribute insights to knowledge for practitioners and academics on how it has shifted relationships in workgroups.

## 6.1.    Theoretical contributions

My study brings together unique circumstances, contributing insights which further the existing literature in an entirely new context, against the backdrop of a pandemic. It unites the concepts of social cohesion, virtual teams, and Australian millennials, advancing understanding of these topics. There are four key contributions my research makes including furthering understanding of virtual and hybrid teams, combining research on social cohesion with that of millennials, the application of media naturalness theory and social identity theory to the current environment.

The first major contribution is toward the development of research on virtual teams. As discussed in the literature review, the existing research predominately explores virtual teams within a specific context, investigating teams, often comprising of students, existing entirely virtually. My study comprised a majority of participants who shifted from physically co-located teams to entirely virtual, highlighting an opportunity to better understand the impact of the platform, whether FTF or CMC, on the development and maintenance of team cohesion and connectivity. My research reinforces existing literature identifying that virtual teams are disadvantaged by their lack of FTF communication and extends the extant knowledge to reveal that team members were able to form and strengthen bonds with their colleagues. Some were strengthened virtually because of a unified communication platform such as Teams, evidenced by research participants engaged in shift work. Virtual teams require longer to build cohesion, as acknowledged in existing literature (Walther, 2016) and this research reinforces that these teams are still able to build cohesion virtually if given time to adapt. The future of teamwork may exist as a hybrid team model, as early research indicates individuals may not want to return to their offices full time (Markey, 2020).

Secondly, my findings extend existing assertions of the importance of social cohesion in the workplace and its relevance to the millennial cohort, who are acknowledged for their social orientation toward the workplace (Landrum, 2018). Research participants highlighted the positive role of social cohesion and its salience as a topic of discourse for academics and practitioners. Social cohesion is particularly important in a pandemic, where work relationships supplement the lack of

external interaction. Of relevance is the role social cohesion plays in supporting mental wellbeing, creating connectivity in a world characterised by social isolation and distancing. This contributes to theory on the link between cohesion and wellbeing at a time when mental health concerns are paramount. Research participants highlighted their experience valuing social cohesion and connecting with their colleagues and emphasised the importance of friendships at work.

A third contribution shows the relevance of applying media naturalness theory to the current context. The application of media naturalness theory to virtual teams is not new, but its relevance to the current situation is significant. Kock's (2001) theory was developed twenty years ago as an extension of Daft and Lengel's (1986) media richness theory in an entirely different communication environment. My research demonstrates the significance of media naturalness theory to the current communication landscape. When the theory was developed, video conferencing was still in an elementary phase and chat messaging in the workplace was non-existent. My findings give evidence that media naturalness explains the contrast between virtual and FTF interaction in supporting cohesion. They reinforce Kock's (2001) original assertion that FTF communication is the most natural and fulfilling platform of communication and his explanation of the evolutionary development of neural pathways for communication highlights why research participants today struggle to connect with the same depth as FTF, at least initially, virtually.

The learned schema principle is also salient in its application to physically co-located-turned virtual teams as felt through the experiences of research participants. The acknowledgement that individuals can still develop bonds virtually, with time, is critical in understanding employee engagement in a world of virtual working. The adaptation to new forms of communication to build and strengthen the connection in teams shows Kock's (2001) theory can be applied to teams today to help academics and practitioners better understand the current landscape of virtual and hybrid teams.

The extension of social information processing theory (Walther, 2016), particularly in the context of understanding how chat messaging in the workplace facilitates cohesion is an important contribution of this study to the research literature. My findings show that, with time, chat messaging can positively support the development of social cohesion, in the perception of millennial workers. The individuals studied showed a preference for chat as a primary method of communication and were able to develop relationships with their colleagues almost exclusively through this medium, albeit not to the extent of those forged through in-person communications.

Finally, my study also contributes to the field of research decoding the preferences and increasing knowledge of millennials in the workplace. It gives an understanding of how millennials were

affected at work by the COVID-19 pandemic and reinforces prior research highlighting a preference for connection and socialisation with a prioritisation on friendships evident in research participants. The findings related to improved perception of work, greater engagement with work and enhanced mental wellbeing align with research showing the importance of social connection to this cohort.

Figure 4 is an original figure highlighting how my research extends Kock's (2005) media naturalness theory, developing the concepts proposed in Figure 2. The original theory placed chat messaging after phone calls on the continuum, whereas my research found that chat messaging was more natural for millennials than expected.

*Figure 4: Furthering media naturalness theory*
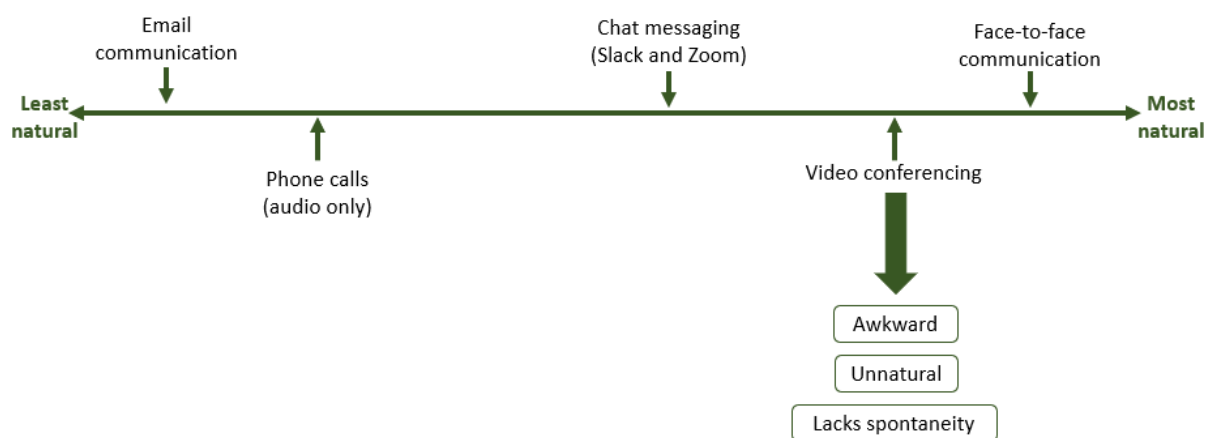


Ultimately, the findings of my research reinforce and extend academic literature on millennials, teamwork, social cohesion, and virtual teams, providing an opportunity to delve deeper into how to optimise millennial relationships within and to their workplace. The COVID-19 pandemic has accelerated the uptake of virtual communication and calls for further research into the impacts on the disruption of work and how individuals have adapted to a new way of communicating, collaborating, and connecting to their workplaces and colleagues.

## 6.2.    Recommendations for workplaces

My findings highlight how different virtual communication platforms are perceived and the need to develop strategies specifically to support cohesion in remote workers. Organisations are undoubtedly aware the way they work has irrevocably changed, but many companies focused on the introduction of new communications platforms without true consideration for how they might change relationships between colleagues and the wider organisation.

The implications of my research are that virtual communication strategies, vitally supporting social cohesion, must be reconsidered, and redesigned for the virtual realm. One of these implications is for organisations to be careful in the way they use virtual communication, avoiding overwhelming

individuals with excessive reading in the form of emails, intranet, and chat messaging. This has been shown to create an unsustainable cognitive workload due to the effort in decoding messages, as stipulated by media naturalness theory (Kock, 2001). This was supported through my findings as participants noted feelings of burnout in their virtual work realms and discontinued interactions like virtual drinks. It is also important to create opportunities for virtual communication to mimic in-person interactions where possible. Video conferencing is, therefore, preferable over phone calls without video. As this study shows, there is no substitute for FTF interaction and where possible, organisations should prioritise in-person interactions to build social cohesion in teams.

The findings of my investigation also highlight the opportunity that chat messaging offers to support social cohesion, particularly with the millennial cohort. Normalising the use of chat to communicate may offer this demographic another way to engage with their colleagues and can be an important tool for new starters to connect with members of their team.

The COVID-19 pandemic highlighted for many organisations that a virtual working strategy was no longer optional, but critical to enable business-as-usual functions to continue. Many workers were thrust into ways of working virtually with which they had no prior experience. My study hopes to help organisations tweak these strategies with a focus on how millennials have perceived the changes in their virtual connection. It does not provide the answers for a best-case scenario of working virtually but offers consideration for how work relationships may change as the pandemic continues to unfold and impact working environments. Greater consideration of the impact on employees can enable workplaces to focus more completely on how this shift has impacted their teams.

# 7. Limitations and further research

An obvious limitation of this study is the scope of the research able to be undertaken. The goal of interpretivist research is not to provide generalisable findings, but offer an understanding of a situation with acknowledgement of its context (Willis, 2007). This investigation applies theories such as media naturalness, social capital, and social identity to a new context, serving to reinforce and extend the existing research on these topics. This study delivers findings aiding the development of further research and can only provide conclusions related to the perceptions of those studied at the time. This investigation interviewed ten research participants and drew conclusions based on a thematic analysis. Future studies should consider a larger research group to test the theoretical contributions suggested by this research, from varied backgrounds of work.

Further research may extend the contributions of this study to the wider Australian context, acknowledging the contribution to understanding millennials and virtual teams. Different demographic groups may also be considered in future research.

The limitation of conducting research exclusively through video conferencing is also noteworthy. As acknowledged through my research, the communication platform utilised for interaction has a great impact on the nature of the relationship and reception of information. While the social distancing protocol in place due to COVID-19 prohibited FTF interviews, the method of data collection, virtual interviews, may have impacted the data obtained and the strength of the relationship with research participants. Media naturalness highlights that FTF interaction is the most effective form of communication with the lowest chance of miscommunication (Kock, 2005). Participants may have disclosed more information FTF, altering the findings of the study, a consideration for future research. However, utilising virtual technology to conduct the research interviews helped situate the research in its true context, with participants operating in entirely virtual realms of communication.

An important factor in the development of team cohesion is time and a limitation of this study was its inability to capture the long-term impacts and perceptions of research participants. A longitudinal study would provide deeper insight into how relationships with colleagues evolved through the virtual platform, with the development of the learned schema principle and social information processing theory lens. At the time this section was being written, Melbourne is amid another lockdown, with all non-essential workers again working from home. Anecdotal evidence from millennials still living there, suggests that the impact of repeated experience in lockdown has significant impacts on their mental health. The long-term psychosocial risks of continual periods of working from home is another avenue for further research.

## 8. Concluding statement

My study set out to gain an early understanding of how millennials living in Melbourne, one of the most greatly impacted regions with the tightest COVID-19 restrictions in Australia, perceived the impacts of working remotely on their social cohesiveness with their colleagues. My findings support a better understanding of the millennial perception of changing work patterns on their social relationships and perception of work. The future of work forecasted is already here, accelerated by the onset of COVID-19, confining billions of workers worldwide to their homes while they navigate a new normal of virtual working and fully remote, or hybrid team working situations.

My research highlights how a change in communication platform not only changed how participants communicate but what they communicate about and the perceived quality of interaction. Findings show that virtual interactions were less 'real' and fulfilling. Building relationships in the workplace is critical to the development of competitive advantage and a healthy culture contributing to organisational performance. While the full impacts of how the COVID-19 pandemic changed ways of working are yet to be fully realised, this research highlights that work relationships have definitely been impacted. Moving to virtual ways of working has substantial impacts on how cohesion is developed and maintained. The imperative to understand the variables leading to social cohesion in work teams is critical.

As organisational environments continue to evolve in a business context commonly referred to as volatile and ever-changing, better understanding how individuals cope with change is critical to developing resilience. My study supports an imperative for future research into the impact of the COVID-19 which changed the world of work, encouraging organisations to rethink the way they support and facilitate the development of social cohesion in their employees.

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# Appendix I: Research Interview Schedule

Eligibility criteria (included in information sheet)

- Are you aged between 20-30?
    - How old are you currently?
- Do you live and work in the Melbourne region?
- What gender do you affiliate with?
- Are you currently employed?
- What industry do you most align with?
- What job title do you perform?
- How many team members do you work with in your direct working group?
    - For the purposes of this question, A team can be defined as two or more individuals who socially interact either face-to-face or virtually, have a common goal, perform organisational task and work together in one organisation (Kozlowski & Ilgen, 2006)
    - Are you currently working remotely?

Research participant information

- How long have you been working in your current organisation?
- How long have you been working with your current team?
- How long have you been working remotely?

Organisational culture

- How many times do you have whole staff vs team meetings?
- Are there opportunities to connect socially with your entire organisation, or just your team? Has this changed now you're working virtually?

Team-based questions

- Pre-COVID – what did your day look like? How many meetings would you have with your team – were they social or formal? did you have coffee breaks together? Would you eat lunch together?
    - How do you work together now? What does a typical day look like now?
    - How much do you collaborate?
- How often do you see your team members when you're working virtually vs in the office?
- What was your relationship with your team members like when you were working together in the office?
- How would you describe your current relationship with your team-mates?
    - Would you consider your work mates to be friends?
- Do you trust your team-mates? To what level?
- Would you say that your teammates are similar to you or different? In what ways?

Social cohesion

- What kinds of things do you do with your team mates outside of work if anything? How has this changed from when you worked together in an office?
    - Is it with the entire workgroup, or some members?
- How do you connect with your team socially? How is this different to when you were working together in the office?

- How does being part of your team make you feel?
  - Would you say you're proud to be part of your team? What makes you feel this way?
- How well would you say your team works together virtually vs when you were in the office?
- Does working in your team improve how you view and feel about your work?
- Do you think being in your team makes you work more effectively? How so?
- What impact do you think having friends in the workplace has on your view of work and productivity?
- How do you think returning to the office will impact your social relationships?
  - What do you think your personal future view of work looks like?
  - Will you attend social functions?
- Overall, what impact do you think COVID has had on your social relationships with your colleagues?
- Any other comments?

# Appendix II: Information Sheet

Massey School of Management
Massey University East Precinct
Dairy Flat Highway (SH17)
0632, New Zealand


Social cohesion in virtual teams

INFORMATION SHEET


**Researcher Introduction**

This research will be conducted by Sara Ellis-Jack for the purpose of a 90-credit Master of Business Studies thesis majoring in Management. Although this is a New Zealand-based university, Sara has been living and working in Australia for the past two years and has chosen to study Melbourne-based research participants. The purpose of this study is to gain a better understanding of social cohesiveness, or social connection in virtual teams that were previously working together in a co-located physical environment. Sara has an interest in people, culture and human resources and ultimately wishes to provide research to help millennials and young workers find a greater connection to their workplaces through social relationships.

The project will specifically interview millennials who are based in Melbourne and working from home. The research aims to investigate the impact of working virtually on social connection in workgroups, which originally developed relationships in an office or a physically co-located environment. The goal of the research is to better understand how current working conditions have changed the experience of social connection in millennials during the COVID-19 pandemic.

I would love for you to take part in my project if you fit the selection criteria below. The project is not only vital for the fulfilment of my thesis but will help further research to understand virtual teams, millennial workers and the importance of creating social connections in the workplace. The 'new normal' will likely feature a greater reliance on virtual teams in the workplace, making it increasingly important to understand how individuals interact in this environment. I hope this research can set a foundation to help other researchers and managers better understand the importance of creating social connections and how this may occur in a virtual workplace. Your participation in this research can help better understand how millennials think, feel and operate in the COVID-19 working environment and initiate further research.

Interview participants will be invited to join the study through LinkedIn and Facebook, through the interviewer's network. They will then be asked to fill out a short eligibility study through Survey Monkey, **submission of this survey indicates consent to take part in the project**. The project aims to interview 10 participants of mixed gender and occupation, aligned with the scope of a 90-credit thesis project.


Selection criteria

- Aged 20-30 at the time of undertaking the study
- Living in Melbourne, Australia
- Employed in a workgroup at the time of undertaking the study
- Currently working remotely/virtually


There is no financial incentive to undertake this project.

The interviews will take place through Zoom and will be recorded, then transcribed for data analysis. The interview should take no longer than an hour and will be undertaken at a time of the participant's

choosing. This project has been assessed as Low Risk under the Massey University Code of Ethical Conduct. If you feel uncomfortable at any time throughout the interview, please let the interviewer know.

The transcripts for the interviews will be for the researcher's private analysis only. Transcribed data will be kept in an encrypted file for the researcher's use only, with your name saved under a pseudonym only and destroyed after a year. Any interview data that is uploaded to a public database for other researchers will be anonymised, including only the gender, location, occupation and team size of the research participants.

If you would like a transcript from the interview, please email sellisjack@gmail.com. You may be contacted by the researcher after the interview to confirm the interpretation of your interview for use in the research analysis.

You are under no obligation to accept this invitation. If you decide to participate, you have the right to;

- decline to answer any particular question;
- withdraw from the study within a month of completing the interview;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded
- ask for the recording to be turned off at any time during the interview

**Project Contacts**

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Please feel free to contact the researcher, or either of the supervisors if you have questions or concerns about this project.

**LOW RISK NOTIFICATIONS**

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher named in this document is responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director (Research Ethics), email humanethics@massey.ac.nz.