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SENSE MAKING TO CRAFT NORMALCY: THE KEY TO COMMUNICATION AND PSYCHOLOGICAL RESILIENCE, ORGANISATIONAL CULTURE AND IDENTITY

A finding from a New Zealand General Practitioner Nurses Cohort Post-COVID-19

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ABSTRACT

The COVID-19 pandemic and the subsequent recovery period created a rich landscape for novel research opportunity. One such area offering an as-yet, undiscovered opportunity of novel research was the recovery period post-COVID-19 and the enactment of the communication resilience process during this time. As all behaviour is a product of the preceding psychological states that they are enacted from, enacted communication resilience is likely a product of the preceding psychological state and the available resources to construct it. The relationship between the process of enacted communication resilience and the precursor psychological resources, that then contribute towards psychological resilience, has yet not been studied. To date little empirical research, if any, has been done on either of these facets or on bridging these two resilience dimensions to explore predictability of psychological facets on the resulting enactment behaviour.

One heavily impacted industry, and its front-line workers, during and after the pandemic, on a global front, was healthcare. Primary care front-line workers in general are relatively under studied compared to their hospital-based counterparts. GP practice doctors and nurses alike deal with high workloads, rapidly changing conditions and increasingly strained staffing needs. These ongoing stressors place these front-line workers at increased risk of burnout, anxiety, PTSD, mental injury and at risk of leaving the profession amongst growing shortages. Culminating in significant harm to the individual, patient care and the profession.

To counter these detrimental outcome potentials, resilience in healthcare workers has gained increasing recognition as a desirable means and resource to build better capacity to withstand increasing crises and disease outbreaks, such as COVID-19. The relationship between the two fields of psychology and communication has not yet been explored to establish

how and what impact the former has on the latter towards resilience formation. This broader understanding of resilience could effectively allow better development of effective interventions and strategies to enhance a more holistic approach to building and supporting resilience within individuals to withstand inevitable crises and adversity in this industry, and with future studies more generally across industries and geographies.

As individuals narrate their lives' stories, they also narrate their identity and work as a member of their organisational membership. In this way building identity also enhances and supports developing organisational wide culture and cohesion, which together feedback towards further enhancing an individual's resilience when values align for congruence. Examining how communication, and communication resilience in particular, plays a part towards organisational identity formation may offer additional insight towards interventions and enhancements towards identity maintenance and formation to maintain organisational cohesion and individual resilience during times of crises, like COVID-19. During these times of mass disruption, organisational culture can disintegrate through disrupting and fragmenting organisational identity and so potentially eroding an individual's resilience in turn.

To date, there has been little empirical research integrating the theory of Communication and Organisational Culture. By analysing how communication resilience plays a part in influencing organisational culture, we may be better able to develop strategies and interventions to enhance and support cultural cohesion and success during times of adversity and challenge through enhancing organisational identity and resilience. The latter can be better supported in turn by gaining a broader more holistic understanding of the psychological resources required to construct psychological resilience and the resulting enacted communication resilience.

The aim of this study was to explore three key relationships i) To what extent does psychological resilience predict communication resilience? ii) To what extent are communication resilience processes associated with organisational identity? and iii) To what extent are communication resilience processes associated with organisational culture? The findings of the research were informed by surveys for quantitative analysis using correlation and regression confirmatory factor analysis to offer empirical insight of the relevant construct relationships and impacts and associations for significance. Quantitative data and findings offer empirical validation, reproducibility and generalisation across groups.

The findings revealed a common key pathway of sense making towards establishing normalcy for all constructs; psychological resilience, communication resilience, organisational identity and organisational culture. In addition the relationship and proposed theoretical pathway towards utilising psychological resilience resources to establish enacted communication resilience was also highlighted. In combination, this study reveals several novel findings and a salient and common point of intervention to maximise effectiveness from a common resilience, identity and culture precursor to reinforce and build both psychological and communication resilience whilst also strengthening organisational identity and culture.

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Every PhD researcher has a hard journey. Whether it is simply the duration. Or significant other factors. Ultimately making it through to graduation is a relished experience by all. My journey was one of the latter. Not only did I have to start from page 1 again after completing 80% of a previous PhD, due to no other factor than powers that be, but I had to master a new field within the same time most complete on an existing expertise. And take twice as long to complete a PhD than most by starting again. Along this journey there were multiple personal setbacks. And then I 'accidently' founded a SaaS start-up. That saw exponential growth in my final year whilst I should have been winding down to concentrate on submission. The fact that I was doing a PhD on first *Wellbeing* and then *Resilience* and Psychosocial factors is comical in irony. *Forged in fire* is a phrase I now know intimately.

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CHAPTER ONE

Research Introduction

1.1 Introduction

This chapter introduces the research areas and frames the research constructs within the landscape and the demographics studied. First the research is located within the field of study and a rationale given as to why and what gaps in the literature will be addressed by the research. Aims and research design are then discussed. The research novel contributions are identified, and finally the thesis structure is introduced.

1.2 Locating the research

The COVID-19 pandemic and the subsequent recovery created intensive and novel research opportunities in a multitude of areas, from clinical immunology of the disease and effects (Aquilia et al., 2020; Chowdhury et al., 2020) to broader healthcare pressures (Chatterjee et al., 2020; Moynihan et al., 2021) to global financial impacts (Kaye et al., 2021; Khan et al., 2021). This novel disease offered a rich landscape to be studied and discovered across disciplines, geographies, demographics, industries and impacts on each other. One such area offering an as-yet undiscovered opportunity of novel research was the recovery period post-COVID-19 and the enactment of the communication resilience process during this time. Enacted communication resilience, by definition, is a behaviour, requiring prior mental characteristics, functions and or attitudes, i.e. psychological states, needed prior to being able to action it, as all behaviour is result of the preceding psychological states (Doliński, 2018). To better understand, and support, more effective processes towards establishing communication

resilience, the preceding psychological state should be explored as it directly relates to resilience and its enactment. More specifically, the relationship between the process of enacted communication resilience and the precursor resource that contribute towards establishing psychological resilience would offer a more holistic understanding from which to offer a stronger understanding and practical implementation in supporting towards more comprehensive individual resilience overall. This integration towards a more holistic understanding of psychological resilience and communicative resilience has yet to be studied. To date little, if any, empirical research has been done on bridging these two dimensions of resilience which currently reside across two different fields, psychology and communication.

It was during my early career working in the hospital healthcare environment that the first brewings for the need for resilience within the industry became salient. Working a 36-hour shift as a norm for healthcare professionals, during normative times, was a frequent part and parcel of the profession. All whilst the critical need to be mentally in top form with a zero tolerance for errors, understandably, at all times within the work environment was a given and an expectation one had for their colleagues as well as themselves. The need for resilience in this environment cannot be exaggerated, even under normative conditions. But equally given that long and often intense hours are a norm, workers seldom have the desire, or time, to additionally attend non continual professional development clinical training sessions, such as building personal resilience. In addition, given the fast paced, high-risk environment, with an ever short, staffed workforce, healthcare seldom has the availability for the down time needed to digress towards the need for building its workforce's resilience. Any intervention or support towards resilience maintenance and building within this industry would then need to be time effective as well as optimised in a targeted focal point to maximise impact and sustainability

of results. The more upstream in resilience genesis this intervention can be targeted, the more likely it can fulfil these former criteria in practical application and feasibility.

The cohesion of organisational culture and organisational and professional identity in this highly regulated industry however is often strong compared to other industries. This is likely supported and enhanced by the accompanying highly regulated standard operating procedures that are tightly established for all processes that entail communicating culture requirements; with standardised frameworks, meeting requirements, frequency, agendas and involvement, all the dimensions of organisational culture (Glaser et al., 1987), scheduled and established beforehand, with strict supervisory requirements, support and records required at all times, information sharing requirements to what, where, when, how often regulated, the professional critical need to work as team at all times. In combination these highly regulated organisational culture facets essentially establish high cohesion towards organisational culture components. Those that cannot or do not suit this highly regulated process and procedural compliance towards the dimensions of organisational culture; teamwork, morale, information sharing, involvement, supervisions and meetings effectiveness, likely do not make it through into the profession past the final years of training and placement in this environment.

Similarly organisational identity established through the identity requiring loyalty, membership and similarity (Cheney, 1983a) are likely more cohesively established through this professional need to work cohesively with all wider healthcare professions for lengthy hours and likewise those that do not assimilate likely do not make it through training into the profession.

According to social identity theory (Tajfel, 1974) an individual’s self-identity is derived in part from their organisational identity, and when a strong congruence between the two is

established, in addition to self-identity, psychological resilience is also in turn enhanced and reinforced via a sense of belonging and purpose (Dutton et al., 1994). This enhanced organisational identity also likely leads to increased coping, job satisfaction and further increased resilience, and elevates psychological capital (PsyCap), in the face of adversity (Luthans et al., 2007). Organisational culture also shapes how members perceive their organisation's identity and the level of identity that occurs. A strong, cohesive culture then can enhance both an individual's identity as well as their resilience (Schein, 2010). Given these dynamics feedback and reinforce each other, or erode when dysfunctional, exploring how the psychological state of resilience as the predecessor to the enacted behaviour of communication of resilience interacts, and in turn the association of this enacted resilience on organisational identity and culture, may offer a more holistic and effective implementation strategy for building, supporting and enhancing a more robust resilience strategy, as adversity and challenge will undoubtably be a reoccurring phenomenon, both for the individual as well as the organisation.

In particular, the recent novel global crises, in the form of the COVID-19 pandemic, disrupted all three facets of the healthcare professionals' dimensions: resilience, organisational culture and organisational identity, through fragmented and incomplete information, uncertainty on multiple levels, clinical overburdening of demand, social isolation, physical pressures, psychological distress and extremely intense working conditions like never before on a global scale.

Although I had left the hospital healthcare industry by this stage, I still had several close family members that served as front-line workers during the whole pandemic, including within the general practitioner practice. Multiple physician family members themselves got infected with the virus due to high viral loads from multiple patient contacts and high professional

burden during this time, like many of their colleagues, both within the hospital and GP settings. Like most people, also forced to be isolated from close family members, adding further psychological distress for all. It was at this peak that I found myself having just embarked on a PhD, and the need to research, towards a better understanding but also practical applications, for a wider more holistic resilience understanding and application.

Healthcare, and its front-line workers, was one of the most heavily impacted and most overburdened, both work load and psychological strain wise, industries during and after the pandemic, on a global front (Gupta et al., 2021; Sutherland et al., 2020). Front-line workers within hospital settings (Baker et al., 2022; DiFazio et al., 2020), and also the lesser discussed primary healthcare environment (Gray & Sanders, 2020; Verhoeven et al., 2020), continued being the first port of call for patients, as global lockdowns were in place in order to prevent the spread of the virus. In addition, in New Zealand in particular, the longest hard lock downs with accompanying social isolation and psychological distress were the strictest and longest globally, leading to increased anxiety, stress and mental distress for an extensively prolonged period (Officer et al., 2022). This situation isolated these front-line workers from wider support circles (Cevik et al., 2021; Razai et al., 2020), leading them to experience high intensity demands, high vulnerability, high anxiety and low social support from wider networks.

Primary care front-line workers in general are relatively under studied as compared to their hospital based counterparts (Grut et al., 2023; Schrimpf et al., 2023). GP doctors and nurses alike deal with high workloads, rapidly changing conditions and increasingly strained staffing needs (Greenberg, 2020; Walton et al., 2020). These ongoing stressors place GP front-line workers at increased risk of burnout, anxiety, post-traumatic stress disorder (PTSD), and mental injury. These added stressors also place them at risk of leaving the profession amidst growing shortages, which culminating in significant harm to the individual, patient care and

the profession (Carr et al., 2021; Keyes et al., 2023; Mian et al., 2021). To counter these effects, resilience in healthcare workers has gained increasing recognition as a desirable means and resource to build better capacity to withstand increasing crises and disease outbreaks (Cheshire et al., 2017; Di Monte et al., 2020), such as COVID-19.

Resilience is a concept applicable to varied fields and across disciplines and as such has numerous variations in definition. It has been studied and defined by diverse academic disciplines on the foundations of moving beyond surviving to thriving in the face of negative stresses (Carpenter et al., 2012). Social sciences assign the term resilience as a general state of living organisms adapting positively to adversity or challenge (Caza & Milton, 2012). Other social psychological resilience definitions have been identified as the ability to maintain a stable psychological state with fewer mental health problems experienced in the face of threats (Bonanno, 2005; Frederickson et al., 2003), or a dynamic process view of resilience encompassing positive adaptations when met with adversity (Luthar & Cicchetti, 2000; Masten, 1994; Masten et al., 1990). Communication resilience research suggests that the strongest influence on individual relational resilience is drawn from their social relationships (Afifi, 2018). This individual relational resilience accrued from wider social networks may in turn be utilised towards the process of enacting and building communication resilience, thought to primarily be through crafting normalcy (Buzzanell, 2010). The relationship between the two fields of psychology and communication has not yet been explored to establish how and what impact the former has on the latter towards resilience formation.

Identity is a characteristic that requires communication for its formation and maintenance as identity-as-possession-of-a-unique-self (Mackenzie, 1978). Identity can take both a oneness defining form, such as a shared identity within a group, or an individualistic form whereby an individual seeks distinction from any others in uniqueness and towards security to define the

self (Lasswell, 1935). Lasswell's view of security towards the self, laid the communication-centred foundations of organisational identity. As individuals narrate their lives' stories, they also narrate their identity and work as a member of their organisational membership towards organisational identity, which then enhances cohesion towards organisational culture (Boje, 2001). In this way building identity also enhances and supports developing organisational wide culture and cohesion. Examining how communication, and communication resilience in particular, plays a part towards organisational identity formation and organisational culture may offer further insight towards interventions and enhancements towards identity maintenance and formation towards organisational identity and culture in turn, to build and enhance resilience to maintain and sustain organisational identity and culture during times of crises, like COVID-19.

To date, there has not been notable empirical research bridging the theory of Communication and Organisational Culture to synthesise a broader understanding of their interactions on each other (Putnam & Mumby, 2013). That effective communication is a foundational requirement for successful organisational functionality is widely accepted (Choo, 1996; Smith & Mounter, 2008; Tompkins & Wanca-Thibault, 2001). When good communication is fostered within organisations, the efficiency and probability of improved performance is greatly increased, regardless of organisational goal and aim definitions (Downs et al., 1988). Within organisations, the way they are organised into functional units, allows patterns of ordered activity, interaction, and information to flow, allowing for those that do not directly interact with each other to be linked through network structures (Keyton, 2010). It is these interdependent communication networks across organisational structures that create and maintain organisations themselves (Şomăcescu et al., 2016). By analysing how communication plays a part in influencing organisational culture, we may better be able to develop strategies

and interventions to enhance and support cultural cohesion and success during times of adversity and challenge.

1.3 Research aims

Within the communication field, there is a growing interest in resilience, though compared to other fields, this is still yet mostly in its infancy in empirical findings. The research carried out here aims to explore three primary interactions to further develop and contribute novel and empirical insight to the communication field.

As the impact and relationship between psychological resources towards establishing psychological resilience and the ensuing behaviour in enacted process of communicating resilience has not yet been studied, this research makes its first novel contribution by bridging our understanding of these two key resilience facets and how they interact. Exploring this interaction may allow for more effective strategies and interventions to be developed where organisations can enhance the enacted process of communication resilience by directing strategies further upstream towards psychological resilience resources. Towards this understanding the first research question asks:

RQ1: To what extent does psychological resilience predict communication resilience?

Second, the relationship between communication resilience and organisational identity has not yet been empirically explored. The construct of communication resilience itself has received little empirical research. Organisational identity is said to be constructed by the individuals' interpretation of their surroundings and reality through narrative (Betts et al., 2022). Cheney postulated that the individual–organisation relationship towards identity begins in understanding rhetoric (Cheney, 1983b). In times of disruption, instability or change, people often experience these uncertain times as a threat to their identity (Albert & Whetten, 1985), where this self-identity directly relates to professional identity and ultimately organisational identity. During the unfolding COVID-19 pandemic, GPs and nurses within clinics have been at the coal face in the front-line throughout to sustain success in fighting the virus (Cook et al., 2021), in New Zealand and globally. This fast moving, often conflicted information in a given time span and complex context required medical staff, including GP practice doctors and nurses, to continuously reframe and make sense of new and emerging realities, at the cost of significant cognitive and emotional labour (psychological resources) for these front-line staff (Te Hononga, 2021).

Building resilience as a stabilising or preventive measure for organisations to withstand this potential organisational identity deterioration, formed from self, to professional to organisational identity, could offer beneficial strategies against individual and organisational compromise in times of ongoing stressors. To synthesise a second novel contribution and further the communication resilience literature on this front, the second question asks:

RQ2: To what extent are communication resilience processes associated with organisational identity?

Organisational identity and organisational culture are closely aligned, given that organisational identification towards organisational identity is proposed to be as much of a continuous process as it is an outcome where the individual's perception of the organisational culture may influence levels of the individual's identity with the culture (Cheney & Tompkins, 1987). To date there does not appear to be any extensive empirical studies done on communication resilience and organisational culture. Communication plays a key role in shaping the workplace environment and more specifically the culture (Gautama So et al., 2018; Sebastião et al., 2017; Vazirani & Mohapatra, 2012). A communication perspective on resilience acknowledges that resilience is an ongoing process that is developed, sustained and enhanced through discourse and so is dynamic and evolving over time and events into patterns of communication (Buzzanell, 2010). During and following times of challenge, adversity or crises, such as COVID-19, it is typically what people do and say to try to establish their lives back that often results in establishing resilience (Buzzanell, 2010). This process can in turn affect the organisational culture. Therefore, the final research question, and third novel contribution asks:

RQ3: To what extent are communication resilience processes associated with organisational culture?

1.4 Research design

The research presented here utilises confirmatory factor analysis, correlations and regressions to answer the three major research questions, based on front-line GP doctors and nurses during the post-COVID-19 pandemic period in New Zealand. Primary healthcare workers were chosen as they are relatively understudied compared to their hospital-based counterparts. Though there is substantial literature on healthcare experiences during and following the pandemic, most of these have been in a hospital setting (Chandler-Jeanville et al., 2021; Murphy et al., 2021; Villar et al., 2021).

A wide range of evidence has emerged that front-line workers in health care, such as general practitioner doctors and nurses, suffered higher deterioration in psychological health during and after the COVID-19 pandemic compared to the general public (Chew et al., 2020; Shechter et al., 2020). These front-line healthcare workers showed greater mental health deterioration with an increased rate of anxiety, burnout, depression, and PTSD, with poorer mental health also impacting patient care and potentially increasing the risk of suicide (Reger et al., 2020; Serrano-Ripoll et al., 2020). During crises and highly stressful times such as disasters, calamities and disease outbreaks, insufficient levels of psychological resilience can leave individuals more prone to suffer adverse mental and psychological health and diminished coping capability (Duncan, 2020; Labrague et al., 2018). Although the need to be resilient has gained increasing recognition within healthcare in general, in order to cope with increasing demands, difficult situations and to increase staff retention, resilience and its requirements within primary care remains relatively understudied (Luthar & Cicchetti, 2000).

This research employs the quantitative methods that are best aligned to the positivist paradigm, using surveys to measure the value free constructs. Positivism is directly related to

objectivism where the key desirable is general information using large scale data collection (Cooper & Schindler, 2014). Quantitative data and findings can offer empirical validation, reproducibility and so generalisation across demographics upon further qualitative studies. To answer the three research questions, a survey was designed with appropriately chosen scales to measure each of the constructs of Organisational Culture (OC), Organisational Identity (OI), Communication Resilience Process Scale (CRPS) and Psychological Resilience (RSA). This study recruited participants from New Zealand General Practitioner (GP) doctors and nurses.

Firstly, correlations were carried out between each construct of Resilience Scale for Adults (RSA), Communication Resilience Process Scale (CRPS), Organisational Identity Questionnaire (OIQ) and the extended Organisational Culture Survey (OCS), using these survey-based ratings of a 5-to-7-point Likert scale. Correlations allow the establishment of direction of relationship as either negative or positive but does not establish causation.

To further assess the strength between variables and their associations and outcomes for a linear model fit towards generalisable relationships for interactions between the variables in direction and strength, regressions were then carried out. Multiple regression analysis was conducted as interval data was used to assess the association between variables as well the strength of the relationship between them.

1.5 Research contributions

This thesis contributes to existing knowledge in communication resilience and contributes several novel findings. Firstly, this is the first empirical work that synthesises and develops the interdisciplinary key psychological resilience resources towards establishing

psychological resilience and the ensuing enacted process through communication resilience and proposes the dynamics and key requirements and interactions between the two. Secondly, this research furthers the communication resilience and identity literature with quantitative research exploring the relationship between communication resilience processes enacted with organisational culture and identity post-COVID-19. Thirdly, the communication resilience literature is further synthesised and develops our understanding with the first empirical exploration of the relationship between communication resilience and organisational culture. This novel research hence contributes several key findings to further inform the literature on resilience as conducted in the post-COVID-19 landscape, framed within primary care healthcare doctors and nurses in GP practices in New Zealand.

1.6 Thesis structure

This chapter concludes with identifying the relevant gaps in the literature and puts forward the rationale for the research conducted and the three primary research questions explored in this thesis. The next three chapters each review the existing literature on organisational culture, organisational identity and resilience, respectively. Chapter Five introduces the challenges faced by front-line doctors and nurses faced during and after COVID-19 and the need and justification towards building and understanding resilience further.

Chapter Six details the research design, participant recruitment and restrictions, and the quantitative methods used and why, as well as the scales used in this empirical study. Chapter Seven encompasses the data analysis results as they pertain to each of the three key research questions, presented with empirical significance findings per sub-scale relationship for each of the explored Resilience Scale for Adults (RSA), Communication Resilience Process Scale

(CRPS), Organisational Identity Questionnaire (OIQ) and the extended Organisational Culture Survey (OCS) constructs.

And finally, this thesis is concluded with Chapter Eight. This final chapter discusses the findings considering previous literature and the key research findings presented in this thesis. It expands and synthesises the rationale for the novel findings and contributions of each research question, hence filling some of the gaps identified in chapter five within the literature towards furthering theory and practice. Further theoretical and practical implications are synthesised and discussed. This final chapter then concludes the research carried out here with a discussion on the research limitations and future research that the newly synthesised findings presented in this research raises.

CHAPTER TWO

Literature Review: Organisational Culture and Communication

2.1 Introduction

This chapter reviews the literature on organisational culture and frames it within the communication lens. We begin by looking individually at culture and communication and how the need for communication plays a foundational role in developing organisational culture across varying members of the organisation and the roles they play through the organisation. We then examine the literature on how communication and culture enhance organisational success by way of establishing a cohesion and competitive advantage. Finally, we conclude this literature chapter by discussing the New Zealand organisational context and cultural facets the research here will examine, and the call answered, as the yet unexplored associations of communication resilience enhancement processes and organisational culture.

2.2 Communication and Organisational Culture Background

A widely accepted concept is that communication is vital for the functionality, and success, of an organisation (Choo, 1996; Smith & Mounter, 2008; Tompkins & Wanca-Thibault, 2001). Poor organisational communication often results in difficulties in problem solving and difficulty in navigation to adequate solutions (Smith & Mounter, 2008). When good communication is fostered within organisations, the efficiency and probability of improved performance is greatly increased, regardless of organisational goal and aim definitions (Downs et al., 1988).

The dynamics between organisational efficiency and effective communication has been explored across various perspectives, including engagement, performance (Leiter & Bakker, 2010; Truss et al., 2013), and communication (Choo, 1996; Smith & Mounter, 2008). How communication challenges arise and addressing these challenges is fundamentally important to organisational success and has also been widely analysed (Leiter & Bakker, 2010; Tourish & Hargie, 2009; Truss et al., 2013). Categorically, the challenges of communication within organisations can be classified into two categories, the exchange of information, and discrepancies with the relational communication (Nordby, 2021). Exchange of information pertains to the conveyed, interpreted and implemented knowledge and actions norms within the organisation. Relational communication refers to the attitudes, concerns, values and experiences of how people understand and interact with each other (Nordby, 2021).

Theoretically, if numerous individual perspectives exist within organisations from which to communicate between each member, efficient communication becomes difficult to achieve (Kotter, 2012). Disparate and inconsistent perspectives will impact organisational member interactions, cooperation and ultimately organisational efficiency, by undermining performance and goals (Gagné, 2014; Leiter & Bakker, 2010). Empirically, several studies have reinforced that individual and system-based factors can cause barriers to effective communication and have a negative impact on organisational performance (Gagné, 2014; Truss et al., 2013; Wentland, 2009). It is of fundamental importance then to address gaps of subjective meaning and varying idiosyncratic views when addressing communication challenges and discrepancies to achieve organisational competence and efficiency (Jablin & Sias, 2001). To date there has not been any empirical researched bridging between the theory of Communication and Organisational Culture to synthesise a wider understanding of how the two are associated with each other given the key role communication plays in developing and

maintaining cohesion and shared meaning, or horizons, towards organisational culture (Putnam & Mumby, 2013).

Organisational culture swiftly moved from the human relations platform into the business management spotlight where there was an increasing need to address practical management needs such as increased competition, turbulent markets, decreasing productivity and internal and external changes (Deal & Kennedy, 1982; Waterman & Peters, 1982). From this shift emerged the concept that organisational culture could serve as a social glue holding together an organisation (Alvesson & Berg, 1991). Here, any organisational development or change requirements were expected to be underpinned with an organisational culture evaluation as a starting point, taking on a managerial perspective, leading to organisational culture becoming synonymous with success and resilience, or failure, of an organisation (Keyton, 2010).

Organisational culture can also be used as a tool developed by management to improve operational efficiencies, increase the bottom line and enhance customer satisfaction, in effect being used as an internal process to affect external outcomes. Here management can create a culture for employee motivation and satisfaction to increase their willingness to engage in and follow managerial directives and be more productive (Parker, 2000). In order to achieve these organisational outcomes, management must communicate their directives as the foundation for cultural change, whereby communication becomes the tool that can be modified and improved for cultural change towards the desired organisational outcomes (Penman, 2000).

Studies that have dissected culture from communication and their effect on performance have shown mixed results (Alvesson, 2004). A recent study showed organisational culture as having no significant effect on employee motivation or performance, whereas communication

significantly influenced employee motivation and therefore performance (Gautama So et al., 2018). Another study found only slight, and insignificant, positive effects of communication on employee organisational commitment and job satisfaction (Novia & Faisal, 2021), which have been shown to increase performance (Fu & Deshpande, 2014; Vandenabeele, 2009). This study also found culture to have a positive, insignificant effect on employee organisational commitment and job satisfaction (Novia & Faisal, 2021). Differing scales were used in each study which may account for the varying results. Varying elements of culture may relate to differing manifestations of culture , which may also account for varying culture-performance findings (Alvesson, 2004).

There are generally two managerial views on how organisational culture can be characterised. The first is more objective and views culture as residing in the organisation through management-controlled resources, such as strategy, technology, and the organisational structure. This objective stand point sees "culture as something an organisation *has*" (Smircich, 1983, p. 347). The second, more subjective, similarly aligned to the communication perspective, is that culture is the essence of an organisation where all members contribute to its creation. Here "culture is something an organisation *is*" (Smircich, 1983, p. 347).

The most unique, sustained competitive advantage an organisation can have is said to be its culture (Ferris et al., 1999). Whereas technological and financial resources can be generically obtained by any organisation, an organisation's unique, collective human resource, which makes up its culture, cannot be easily replicated by others. An organisation's culture , when nurtured, can then provide the competitive advantage and higher performance than its competitors, as culture cannot be imitated (Ferris et al., 1999). Organisations that make culture a top priority by aligning their values and behaviours to statements, examined their culture

critically through self-reflection and where leadership modelled the culture they were shown to have greater economic performance (Sackmann, 2006).

2.3 Organisational Culture

The notion of organisational culture began within the early management field, with Elton Mayo being a key contributor, with his work on human relations within workplaces (Mayo, 1924). Mayo was one of the first to suggest that social interactions within organisations had a role on influencing organisational workings (Mayo, 1924). Some of his key contributions was the recognition that organisational structures could not explain some of the informal interactions between organisation members that led to expectations and constraints, and that employee beliefs, attitudes and values heavily influenced their own view of the organisation, themselves within it and the role they played (Mayo, 1924). The concept of organisational culture within the body of the management field may be traced back to the early 1950s (Jacques, 1951), and by the late 1960s the term was inextricably linked to organisational change (Bennis, 1969). Communication began being integrated into organisational communication in the late 1970s when scholars relocated communication into central organisational processes that were equated with organising, on the basis of system theory, or interpretation of patterns within organisations (Weick, 1979). Communication scholars in particular have been drawn to the messages, meanings and symbols that are central to organisational culture, and existence (Parker, 2000).

In the early 1960s it became increasingly recognised that the best way to develop and achieve change within organisations was to address its culture (Bennis, 1969b). This culture was equated to the organisations systems (Pondy & Mitroff, 1979; Weick, 1979) that

individuals lived and worked within and became seen as being critical to achieving change within organisations (Bennis, 1969b). Further, sustained problem solving and development over long time periods in process renewing within organisations, requiring effective management collaboration, required an emphasis on team culture to be achieved (Bell et al., 1973).

Right from the early studies of culture in anthropology, to more recent times, the central focus of culture has been on the sum of the parts in the complex whole within a social boundary, rather than any singular element (Keyton, 2010). Individuals interacting within a given social structure at any given time are creating and producing their culture, rather than culture being provided for them. Further, this culture is constantly evolving and changing as members of the social construct continuously interact with each other and enter and exit this social structure (Eisenberg & Riley, 2001). These social interactions and norms form patterns, expectations, and meanings that emerge and in turn are negotiated and restructured as the social structure's individuals come into and leave the boundaries (Keyton, 2010). The interpretations of messages sent and received by individual members results in patterns and expectations, where the interplay between the messages sent and the meanings derived create the culture of the social structure (Bantz & Pepper, 1993). This culture is made up of a set of artifacts, values, and assumptions that people interpret from the message sent, against the backdrop of the social structure, to dictate their own subsequent behaviours and messages. Culture is then also a process and a product within, and of, the social structure in question (Bantz & Pepper, 1993).

Culture defines groups and distinguishes one from another as it is learnt and passed on through time. Culture allows one to make sense of the given setting to interpret the messages to decipher what is happening to enable the receiver to function within the setting, thus facilitating sense making. Culture is also confining as it can limit the perspective the receiver

may have as it confines the framework of message and interpretation of it within the cultural context (Keyton, 2010). The reality of any social group then is simultaneously tied to its past in traditions as well as open to new interpretations based on current social structures. Members and interactions are always changing and evolving with new members entering and leaving, contributing to a dynamic environment (Stohl, 2001).

Not all messages sent, received, and interpreted into actions, constitute part of the culture backdrop. In order to be incorporated into the cultural fabric of the social construct the meanings derived from messages need to be: (a) deeply felt or held, (b) perceived commonly, and (c) accessible widely within the common structural social collective (Carbaugh, 1988). No single symbol or value makes up the culture or exists in isolation, cultural aspects are intertwined with other cultural aspects, culture is created and consists of a number of symbols and values intertwined as well as their interaction with members, and each other (Keyton, 2010). When emotions or identity are deeply felt as a result of physical symbols, they become part of the cultural identity and symbolic of a particular artifact, value or assumption, created by the individual interpreting messages (Rafaeli & Worline, 2000). Cultures are further dynamic due to internal and external threats and opportunities that arise from their environments (Keyton, 2010).

Organisational culture is a system of artifacts, values, and assumptions. Schein defines organisational culture as, “a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptations and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.” (Schein, 2004, p. 17). Further, organisational relational dimensions of the culture, such as supervisor support, may influence whether an organisation develops into a fragmented or integrated workplace. Having a shared

purpose or goals helps establish cohesion towards an integrated environment to then enhance organisational culture cohesion and relies on shared understandings of requirements, processes and objectives in achieving organisational outcomes (Martin, 1992).

2.4 Shared Horizons

Shared horizons, the process through which the members of a group's dialogue establish the broader context within which they come to a shared understanding, have been argued to be a prerequisite for communication within the social interaction literature of philosophy (Benhabib, 1986), conditions for understanding within consensus theory (Gadamer, 2013), and the theory of deliberate interaction (Habermas, 1990). Whilst the Theory of Consensus discusses shared horizons as the basis for meaningful dialog (Gadamer, 2013), the Theory of Deliberate Interaction places shared horizons as a platform for communicators to freely and rationally obtain shared knowledge about a topic of discourse (Habermas, 1990). Within organisational theory, these theories can lend conceptual understandings on multiple dimensions, most notably to study individuals or groups where tensions and conflict often result from overly heterogenous horizons (Willmott, 2003).

When communicators understand each other from very different frames of reference, this typically often leads to miscommunication and other communicative challenges (Littlejohn, 2007). Different viewpoints can not only shape an individuals' interpretation of their environment, context and others, but also create barriers to understanding meaning in the language used and its corresponding intended connectedness (Wood, 2015). When a sender uses a communicative act with a specific intention in expressing a communicative process, it may not always result in the audience associating the intended message or associated act in the

same way (Burge, 1979; Fairhurst, 2001). These differences in shared horizons can often be due to intrinsically personal and individual values and idiosyncrasies in preferences (Nordby, 2021).

In the context of organisational culture, differences in shared horizons can also be traced to formal and informal positions and roles (Kotter, 2012; Roche et al., 2014). Managers will often take a top-down view on employee roles and organisational goals and challenges (Tourish & Hargie, 2009). In contrast, front-line employees closely connect their roles and experiences from a bottom-up view within organisations (Nordby, 2014). These positional differences between managers and employees can be problematic when trying to establish shared understandings when communicating desired goals in relation to job tasks, obtaining efficiency and other desired performance aims (Harigopal, 1995; Truss et al., 2013).

Differing horizons of understanding can negatively impact the fundamental communicative processes and affect both dialogue as well as behaviours and social interactions. By applying collective knowledge of fundamental communication principles, the efficiency of organisations can be greatly improved (Nordby, 2021). Shared horizons require and are impacted by four fundamental communications conditions: (1) the need for attention, (2) the need for a shared language, (3) the need to avoid associative misinterpretations, and (4) the need to communicate attitudes, emotions and experiences (Nordby, 2021). When these conditions have been met, shared horizons can help improve organisational culture in at least two primary ways; as an essential part of well-functioning organisation as well as being used to establish personal and system based conceptual tools to strengthen communication (Nordby, 2021).

2.5 Organisational Culture as a Communication Construct

The interpretive approach to studying organisational culture has been adopted by most organisational scholars as it focuses the complexity of meaning within social interactions (Keyton, 2010). This interpretive approach treats organisations as social constructs of reality where the process of organising and communicating are inseparably linked (Putnam, 1983).

Organisational culture establishes employee identity and belonging within the organisation, as well as indicating how problems and issues are approached (Schein, 2004). Culture is seen as the observable behaviours as the outcome of cultural characteristics. Schein proposes that the most desirable leadership quality within organisation's is to be able to understand, transform and manage the culture into a productive outcome (Schein, 2004). Innovation can also be seen to be related to the structure of organisations and its consequential communication within (Rosenfeld et al., 2004). Communication and structure form a duality where one is reciprocal and continuously effecting the other, where both are the medium and the outcome (Giddens, 1979).

Individuals seek to draw on structure , such as policies, rules, procedures, to interact with the organisation, and each other, which itself has no independent existence without the social interactions that frame themselves from it (Rosenfeld et al., 2004). The structure and organisational culture then are consistently produced and reproduced in a reciprocal cycle through communication (Rosenfeld et al., 2004). In this way, insufficient or poor communication causes ambiguity and uncertainty (Eisenberg, 1984; Kahn et al., 1964), loss in job satisfaction, organisational commitment and decreased productivity (Marks, 1982). In particular, when there is low adequacy in communication regarding policies and organisational performance, the lower the perception is of available job resources, such as supervisory support

(Rosenfeld et al., 2004). In addition there is uncertainty of innovations and expectations, especially from supervisors (Rosenfeld et al., 2004). Contrasted with when rules, policies and regulations are consistently communicated, this creates a cohesive and integrated cultural perception (Frost et al., 1991). Communication is both the means and outcome of policies, procedures and performance which ultimately shape the unification or diversification of organisational culture (Eisenberg et al., 1998), which ultimately impacts performance (Lather et al., 2012; Park & Kim, 2018).

Communication is not a static act of simply moving information between parties, rather it is a complex interaction affected by numerous factors and between numerous members. This system of communication in turn influences the people within the organisation and their activities (Nordby, 2021). As these processes are not always visible, nor tidy, it is beneficial to analyse organisational culture from a number of different lenses from what emanates from these communication systems to address the construct of organisational culture (Keyton, 2010). It has been argued that viewing organisations through a cultural lens, exposes the rich symbolism that exists in all facets of organisations, rather than organisations being just bureaucracies with hierarchical structures (Morgan, 1997).

Morgan also draws attention to the additional benefits that can be drawn from the cultural lens shift from the traditional focus on managers, leaders and executives to cultural elements that exist within interactions throughout the organisations (Morgan, 1997). A cultural perspective also allows researchers to explore; an organisation's daily reality of life, how this reality may be created, the interpretations of this reality for various stakeholders, and the influence these interpretations may have on organisational activities (Keyton, 2010).

Effective communication is needed to ensure aligned organisational goals and objectives are clearly established for all employees. Clear communication also helps form cohesion for strategic direction as well as strengthen employee relationships. It is in this way that a relatively recent organisational culture theory with a communicative approach proposes that communication gives way to the emergence of organisations (Taylor & Van Every, 1999). This theory was further extended to examine the relationship between organisational discourse and organisational culture and proposes three facets by way to explain their interrelationship (Bisel et al., 2010).

The *object orientation* posits organisational culture precedes organisational discourse. Here it is assumed that culture can be changed to affect the organisational member discourse. This functional approach assumes that (1) culture can be measured, (2) culture is manageable, (3) discourse is produced from culture, and (4) changing the culture will result in corresponding changes to communicative activities within the organisation (Bisel et al., 2010). Where culture is the driving force to influence discourse, controlling cultural aspects are often emphasised at the expense of the realisation that culture is a multifaceted phenomenon (Putnam & Mumby, 2013).

The *becoming orientation* takes the opposing view, where organisational members' discourse gives rise to the ensuing culture. Here culture is ever dynamic rather than fixed (Fairhurst & Cooren, 2004).

The *grounded-in-action orientation* does not prioritise either discourse or culture but rather views each as mutually constituted by the other. It is not merely the *object* and *becoming* orientation combined (Fairhurst & Putnam, 2004). The grounded-in-action orientation does not achieve an identifiable form as it is anchored in social practices and discursive forms (Bisel et

al., 2010). Where every-day interactions are enabled, and constrained, by past interactions (Bisel et al., 2010). This orientation then may be best placed to provide the most complete insight into organisational culture (Putnam & Mumby, 2013).

The study of organisational culture through a communications lens has resulted in highlighting the meaning centred approach to the study of organisational communication (Putnam & Mumby, 2013). Every organisation has a unique culture, made up of elements such as language, traditions, symbols, practices, history and social facts (Şomăcescu et al., 2016). Culture can be broadly thought of as comprising of a set of artifacts, values and assumptions precipitated from its' members interactions (Keyton, 2010). In this way, employees, customers or clients experience an organisation's culture through interacting with specific organisational members (Eisenberg & Riley, 2001). Executives and managers are particularly interested in organisational culture as a means to improve efficiency, effectiveness and productivity (Şomăcescu et al., 2016). Combined, organisations are said to be social systems relying on communication in order to improve efficiency, where this system becomes ever more reliant on communication in times of uncertainty to maintain efficiency (Katz, 1966). Strong links have been shown between organisational culture, communication, performance and strategy implementation, with communication being the catalyst for change and improvements (Morley et al., 2002; Schyns & Schilling, 2013). By analysing unique cultures and their influence on organisational communication, and vice versa, we may be better able to understand specific organisational outcomes (Keyton, 2010).

2.5.1 Communicative Lenses for Studying Organisational Culture

The communicative perspective of organisational culture was initially postulated within a thematic framework of *communicative processes* and *communicative goals* (Eisenberg &

Riley, 2001). Where *communicative processes* comprised culture as symbolism and performance, text, critique, identity, and cognition. And *communicative goals* comprised culture as a climate and its effectiveness (Eisenberg & Riley, 2001). Keyton later expanded and reconceptualised these themes as lenses to study organisational culture (Keyton, 2010). This reconceptualization is a particularly useful way of bringing into focus and sharpening aspects by which to study organisational culture in varying contexts. With each differing lens having its own merits, but also limitations, when used in isolation. In this way multiple lenses can be used concurrently to examine organisational culture to reveal varying cultural elements and interpretations. The use of multiple lenses also acknowledges the realistic complexity within organisational life more closely (Putnam & Mumby, 2013). Keyton's expanded and reconceptualised lenses for studying organisational culture consist of: symbolic performance, narrative reproduction, textual reproduction, management, power and politics, technology and globalisation (Keyton, 2010). Though in most instances studies do not directly seek to study culture per se, rather the researcher will enter the organisation to study communication and some other aspect, frequently to conclude that it is organisational culture at the root of it (Putnam & Mumby, 2013; Smith & Keyton, 2001; Zoller, 2003).

Lens of Symbolic Performance. As a reconceptualization of Eisenberg's (Eisenberg & Riley, 2001) routine and unique communication responsible for the creation, maintenance, and transformation of reality, using the symbolic-performance lens allows a researcher to explore *how* culture comes into being (Putnam & Mumby, 2013). Five types of performances have been described within this lens. *Rituals* are regular behaviours that are interspersed with the work experience. *Social codes* are exchanged behaviours where courtesies and pleasantries in talk occur upon leaving or encountering. *Politics* in performance enact power and control as allies are recruited and negotiations are carried out. *Enculturation* requires negotiating the

organisational environment beyond work related proficiency, through acquiring knowledge and skills towards competency. Finally, *passion* describes the heightened workplace activities that are commonly carried out (Pacanowsky & O'Donnell-Trujillo, 1982).

Lens of Narrative Reproduction. Employees often make sense of their organisation through storytelling, where the stories then become artifacts encumbered with values, norms and beliefs (Bruner, 1991). Stories generated from an individual's point of view get told and retold to become, as well as convey, the organisation's culture, resulting in the future being influenced by the past (Linde, 2009). In this way stories can become powerful cultural vehicles within organisations as it is often the dominant groups interests that are conveyed (Putnam & Fairhurst, 2001), and are indicative of which values are accepted and which are rejected (Coopman & Meidlinger, 2000). Organisational members will often propagate organisational values and assumptions from lessons drawn from a reservoir of previously told stories when conflict and problems arise, as an explanation to draw on for how things are done within that organisation in such situations (Jameson, 2001; McCarthy, 2008).

Lens of Textual Reproduction. Organisational texts in written or digital form can be either formal or informal in providing a record of organisational culture (Eisenberg & Riley, 2001). Formal texts are controlled by management, such as mission statements, policies and procedures, promotional material and websites, to focus on formal artifacts and espoused values. These types of texts are permanent in form (Putnam & Mumby, 2013). Informal texts, such as emails can also be in fleeting forms, and are more likely to express what actually happens within organisations as the enacted culture (Turnage & Keyton, 2013).

Lens of Power and Politics. A broad, interdisciplinary body of work conceptualises "organisations as dynamic sites of control and resistance" (Mumby, 2012) where the critical-

research explores "the communicative practices through which control and resistance are produced, reproduced, and transformed in the process of organising" (Mumby, 2012, p. 3427). Within organisations lies an environment brimming with hierarchy, dominance and power, where its members will have varying degrees of power and status and varying degrees of control over the messages they create and give meaning to (Putnam & Mumby, 2013). This lens examines the alternative communication means that will allow for a more democratic, creative and productive form of cooperation between relevant stakeholders (Deetz, 2005). It also examines how the members understand and contest artifacts, values and assumptions that are presented to them upon employment within the organisation. Issues pertaining to gender and race also form part of this power and politics lens of organisational culture (Dougherty, 2001). The ensuing struggle and resistance to this power assertation reveals important cultural particulars. As the more powerful organisational members are able to convince the less powerful members of the dominant view and values for ways of working, normative practices are established (Putnam & Mumby, 2013). Where these dominant views are not shared or accepted by the less powerful and are seen as unfavourable, these employees may be negatively affected, and the quality of the working environment may deteriorate (Fleming, 2005).

Lens of Technology. Where an organisation's image, brand, market niche or identity is primarily dependant on either the supply or production of technology, it's values and vision will likely incorporate this technological aspect. Here the technological grounding is distinct from an organisation that merely uses technology and that is not central to the organisation's viability from that whose image is intertwined with the technology it produces, sells or services (Leonardi & Jackson, 2009). Within these organisations', technology is viewed as a "practise that entwines itself with other work and communication practices to constitute a culture" (Leonardi & Jackson, 2009, p. 396). Where technology is central to the identity or image of

the organisation, it cannot be extracted or separated from the culture that has helped create its functionality or need.

Lens of Management. When the underlying view of administrators is that by controlling the work environment, the culture can be changed to control worker output, organisational culture is seen as a tool or resource for control by management (Keyton, 2010). The managerial lens can also be used to minimize employee turnover by selecting employees that fit with the culture of the organisation. Meaning the congruence between the individuals hired and the organisational values are well aligned so as to reduce turnover and so the costs of turnover mitigated (O'Reilly et al., 1991). As well as managing or influencing the organisation's culture to financial success through increased performance, as culture is the product of managerial decision making (Schoenberger, 1997).

2.5.2 Organisations through a Communication Lens

An organisation is composed of individuals, the interactions of which results in the organisation's existence (Keyton, 2010). Organisations themselves can be considered a network of purposeful interactions and communication flows; symbols, messages, networks and interactions, between those that make up the organisation and attaining organisational goals (Cheney et al., 2010). Within organisations, the way they are organised into functional units, allows patterns of ordered activity, interaction, and information to flow, allowing for those that do not directly interact with each other to be linked through network structures (Keyton, 2010). It is these interdependent communication networks across organisational structures that create and maintain organisations themselves (Şomăcescu et al., 2016). This interdependent interaction is required to aid the purpose of organisations, which is towards superordinate goals. Goals that are so complex, time-consuming and difficult, that a single

person's capacity to fulfil it is beyond their own capacity and capability (Keyton, 2010). Such superordinate goal fulfilment requires bringing together people across skill sets and strengths, functional structures, or functional units, to work interdependently and cooperatively, within an organisation (Şomăcescu et al., 2016).

An organisation is also a dynamic open social system as it is reliant on, and interacts with, both internal and external stakeholders as it develops, is maintained and evolves (Weick, 2001). To this effect, Keyton defined organisations as a "dynamic system of organisational members, influenced by internal and external stakeholders, who communicate within and across organisational structures in a purposeful and ordered way to achieve a superordinate goal" (Keyton, 2010, p. 9). From this communication lens, an organisation is not defined by its size, purpose or structure, but rather its internal and external interdependencies' linguistic properties (Deetz, 1992). As an organisation emerges through this communication interdependencies, and is always being constituted, organisations have been said to be a property of communication (Taylor & Van Every, 1999). Organisational communication can be seen to be a complex and continuous process where members create, maintain and change an organisation by all members participating at some time and to a varying extents, though it is disproportionality influenced by top-level executives (Keyton, 2010). Meaning is created from this communication on a contextual basis and communication is transactional in being enacted by both senders and receivers, where interpretations are not always mutual or as intended (Stohl, 1995). Further, communication can be not only verbal but also nonverbal, electronic or written, whereby the outcome is consequential, intended or not (Şomăcescu et al., 2016).

Several other conceptualisations of organisational communication have been proposed. Miller implies five key elements are required; a social collective, individual and organisational

objectives, coordinated activities, organisational structures and external interactions (Miller & Barbour, 2014). Broadly, the framework of organisational communication contains certain preconditions; normative communication that relies on an organisational structure, aspirational communication where all levels have some objectives present, and network communication that relies on the presence of interactions between internal and external parties (Şomăcescu et al., 2016).

This central process of communication within organisations required for organising tasks and systems towards goals, relocated communication as the equivalent of organising (Farace et al., 1977; Johnson, 1977) and the culture as the replacement for systems towards this goal (Pondy & Mitroff, 1979). Employees may have shared or similar task goals within organisations, where the success of achieving these goals is dependent upon the social interactions between employees that bind them. As the appreciation of organisations existing as social interactional entities grew, the processes of communication within these organisations as the means to being constructed, maintained and transformed, embedded the role of communication as central to creating an organisations' culture (Eisenberg & Riley, 2001).

2.6 Communication Theory

The analysis of organisational culture can be analysed from many academic perspectives. The philosophy of mind and language provides important resources for a conceptual analysis when theorising meaning and understanding in the field of organisational communication (Nordby, 2021). This relevance of meaning and shared language is highlighted in importance when conceptualising relational interactions within organisations in organisational shared language and culture as a communicative practise (Bryman, 2013). A

general philosophical framework can be used to analyse the primary conditions of effective communication, giving way to the four requirements of shared horizon conditions that must be met for communication success to transpire; the need for attention of the audience, the importance to communicate in a shared and mutual language, the need to mitigate for misinterpretations, and understanding values, attitudes and preferences, or, the relational communication aspects of social interactions (Nordby, 2021).

Audience attention. Communication cannot be successful unless the intended audiences' attention is secured by the sender of the communication process. Further, unless the message is processed by the audience, regardless of witnessing the communication act, the communication has not been successful (Wood, 2015). In instances where the audience members are under chronic stress or experiencing anxiety may serve as such an example where a message may not enter the audience members consciousness (Littlejohn, 2007). When these action guiding communication information sources are not received through lack of attention, the resulting inactions or nonintentional actions can have significant negative consequences (Littlejohn, 2007; Wood, 2015). The need to secure attention for effective communication also has a psychological dimension (Kotter, 2012). Failure to understand, or receive, the basis of decision making by way of lack of attention can result in failure to understand the rationale, leading to negative consequences with respect to motivation and efficiency (Leiter & Bakker, 2010; Wentland, 2009).

Language. Gaining attention alone does not lead to effective communication (Nordby, 2021). A shared language is also a requirement to be able to understand the communicators message and so as to not misinterpret communication intentions. If communicators and audiences understand language in very different ways, communication breaks down (Burge, 1979). The verbal and nonverbal expressions of meaning, the communication, need to have a sufficiently

similar understanding by the sender and the audience alike (Nordby, 2000). In the mind and language philosophy, the meaning of a shared language is widely accepted as being tied to the exchange of concepts (Cappelen & Lepore, 2008; Carston, 2008; Nordby, 2000; Peacocke, 1992).

Misinterpretation. Audience attention and a shared language are only the foundations of the requirements for effective communication. During the course of social interaction, verbal and non-verbal cues, apart from the literal words expressed, can translate to varied beliefs and thoughts by the corresponding member in the social interaction (Sperber & Wilson, 1985). This is likely attributed to ordinary dialogue being economical in conveying meaning (Sperber & Wilson, 1985). Communicators ordinarily verbalise only minimally on what they want to communicate, aiming for maximal relevance in spoken account, with the hope that the audience will understand the remaining message as was intended, on the basis of contextual and conventional social norms of interpretation (Wilson & Sperber, 2002). Social norms can either be broadly applied as a whole norm within the language community, or more specifically within a given context or social group , with interpretations in line with established cultural context for this narrower group culture (Fairhurst, 2001). When there are numerous contextual or group specific interpretations within an organisation, a significant negative impact may result as the impacted communication is more likely to have multiple interpretations, and so, misinterpretations (Eisenberg & Riley, 2001; Fairhurst, 2001). These multiple interpretations and misinterpretations of communicated frameworks can ultimately have a significant negative impact on organisational performance (Eisenberg & Riley, 2001).

Relational communication. In addition to the focal points of thoughts and beliefs discussed so far, as the conditions for effective communication, another dimension to expressed and interpreted information means is the relational aspect of social interaction (Wood, 2015).

Communication can only be successful if the audience are able to also interpret the sender's attitudes, preferences and values, the mental state expressed by the sender (Wood, 2015). In addition to the senders' thoughts and beliefs, that are successfully interpreted through a common language when the audience's attention is secured. With this additional requirement, it is not the communicators definition of their intended mental state, such as emotion experience or attitude, that dictates successful communication, rather that the audience is able to experience the attitude as intended when conveyed by the communicator (Nordby, 2021). The way in which the sender also intends other non-conceptual states, such as values, interests, and preferences, to be understood, needs to correspond to how the audience experiences the communicator. Where there is a discrepancy between communicated verbal and nonverbal language, uncertainty of intent and negative interpretations often result (Wood, 2015). In essence, where positive attitudes and a positive environment fostering is desired, to enable advantageous outcomes such as performance and efficiency, incongruent communication between verbal and nonverbal communication is to be avoided in preference to clear and compatible expressive communication for a positive culture (Eagly & Chaiken, 1993).

Effective communication is a process consisting of a feedback loop whereby understanding of the intended message by the recipients forms a circular completion by the audience in turn. For effective communication to transpire the audiences' attention must first be gained, in a suitable shared language, where beliefs and thoughts are interpreted by the audience in the way the sender intended, with attitudes, values and preferences also appropriately translated and received by the audience, and finally, the audience has to close the loop by confirming the message is received and provide feedback back to the sender (Littlejohn, 2007; Wood, 2015).

2.7 New Zealand primary Healthcare and Organisational Culture

Organisational behaviours, attitudes, outcomes, and performance are ultimately impacted to some degree by the national cultural values (Hall, 1976; Hofstede, 1984; Kluckhohn & Strodtbeck, 1961; Lonner et al., 1980; Ronen & Shenkar, 1985; Schwartz, 1994; Trompenaars & Hampden-Turner, 1993). Arguably the most influential of these cultural classification frameworks has been that of Geert Hofstede, *Culture's Consequences: International Differences in Work-Related Values* (Hofstede, 1984). However, limitations of this seminal work have also been highlighted and a call to look beyond Hofstede's country analysis of five dimensions of cultural value; individualism-collectivism, power distance, uncertainty avoidance, masculinity-femininity, and long term orientation has been encouraged (Kirkman et al., 2006). One such other dimension highlighted was individual attributes and the role these may play within organisational performance rather than cultural values alone (Kirkman et al., 2006; Leung & Bond, 1989). Attribute such as resilience (Buzzanell, 2010) and identity (Abimbola & Vallaster, 2007) have yet to be explored in relation to organisational culture effects and interrelatedness.

Hofstede and Kirkman et al. both consider culture "the collective programming of the mind" (Hofstede, 1984; Kirkman et al., 2006, p. 286), providing a basis for group understanding which ultimately shapes the behaviour of individuals and organisations (Hofstede, 1984). Whereas Hofstede's cultural distance work primarily offered a framework for national culture and country level outcomes and comparisons, this country level score has often been assigned to individuals to examine cultural effects (Kirkman et al., 2006). Kirkman et al. also claim that the majority of cultural variation, over 80%, resides not in inter-cultural between countries but rather intra-country variations and at varying organisational levels (Kirkman et al., 2006). Hofstede's cultural framework also draws other criticisms from other

groups. Shenkar highlights three main issues; cultural distant constructs assume similar relationships between varying organisational outcomes and cultural distance, assume national homogeneity with uncorrelated cultural dimensions, and the possibility of Hofstede's index measures being outdated (Shenkar, 2001).

Kirkman et al. call to move beyond cultural values by country to expand the common Hofstede scope of cultural examination, to include such aspects as cultural dynamics and include research at the individual level (Kirkman et al., 2006). To highlight these and other discrepancies, Kirkman et al. specifically draw three points of differentiation in cultural and organisational analysis; not equating country with culture, incorporation of cultural values beyond the five proposed by Hofstede and explore culture beyond country levels to include other social groups, and individuals, and not *whether* culture has an impact but rather *how much* culture has an effect (Kirkman et al., 2006).

It is towards this broader cultural and organisational understanding of the individual this current research explores the associations between individual resilience, organisational identity and organisational culture within the healthcare industry, and to what degree these attributes are associated with each other quantitatively. The study here is intra-cultural focused within the NZ primary healthcare GP practice.

CHAPTER THREE

Literature Review: Organisational Identity

3.1 Introduction

This chapter on organisational identity reviews the foundations, construction and advantages of employee integration, membership, and inclusion within the workplace. It begins by reviewing the background and ontological and epistemological origins of organisational identity. We then discuss why organisational identity is a key factor within the workplace and the pivotal role it plays towards establishing cohesion for organisations. The success of an organisation in reference to organisational identity is finally discussed. A key research gap exploring the relationship between organisational identity and culture in relation to employee communication resilience is highlighted.

3.2 Organisational Identity Background

Identity is a characteristic which requires communication in a variety of forms in establishment and maintenance and has practical as well as theoretical implications across the cellular to system wide unit structure (Luhmann, 1990). Traditionally, tribal societies did not explicitly address individual identity with constant repetition or negotiation, rather the individuals identity generally related to the broader tribal collective they were a part of (Durkheim, 1993). An individuals' identity is a relatively recent industrialised world preoccupation (Cheney et al., 2014). Through the rise of industrialised societies, questioning of traditional authority and practices eventually eroded these institutional societal roles and

positions that were relatively fixed and beyond the individual's influence (Nisbet, 1970). Identity was consequently pursued as well as contested at multiple levels as it emerged as a prominent focal point within industries and organisations (Haslam et al., 2003). Organisational identity, in turn, also became the product of the modern industrialised societies (Foucault, 1984).

Popularised during the European Renaissance, identity reached full heights during the Enlightenment discourse onwards with identity-as-possession-of-a-unique-self becoming more prominent through English and American political platforms in the early 1800s (Mackenzie, 1978). Identity can take both a oneness defining form, such as a shared identity within a group, or an individualistic form whereby an individual seeks distinction from any others in uniqueness. Linkages and parallels can also be drawn between national and cultural expression and the individual's requirements for security and defining the self (Lasswell, 1935). It was Laswell's observations to this effect that went on to lay the communications-centred foundations of organisational identity, specifically in the way organisations address *why* they undertake certain actions based on characteristics and values (Cheney et al., 2014). Though, the field of organisational communication has been slow in accepting the role external practices may have on influencing and shaping the identity of an individual and the organisation (Cheney, 1983b).

Today, organisational identity is pervasive throughout the decision making and strategic landscape. Identity is not only an organisational point of reference for decision making but also a key building block for objectives and goals (Cheney et al., 2014). Programmes and messages focused on organisational identity are conveyed and built through networks of activities and projects, such as mission statements, values articulation and marketing (Cheney et al., 2014). It is a necessary interplay between organisational individual identity

operationalisation, the organisations formulation of identity and the broader social landscape within which these exist that ultimately formulate an individual's identity (Cheney et al., 2014). Bringing together the study of organisational culture and identity can bring a broader and richer focus on organisational identity within the communication field (Kenny et al., 2011).

The establishing of organisational identity through communicative means must firstly consider the resources available, and those required, within the stakeholder community to construct and transform identity, and also how to promote it. What is, and how to articulate identity also needs to be considered, together with the bonds between the individual and the organisation and the link to the wider image, sector, profession, and other relevant aspects, which may all vary between organisations (Cheney et al., 2014).

3.3 Organisational Identity Ontology and Epistemology

Despite their central importance in modern working life, identity and identification are both fraught with ambiguity in defining (Kenny et al., 2011). The notion of identity presumes a relatively stable identity, where the latter, in reality, is open to interpretation and is often precarious, making the ontological foundation of identification uncertain and fragile (Kenny et al., 2011).

3.3.1 Organisational Identity Ontology and Epistemology

Organisational identity is predominantly seen as either a social construct or an inherent property of the organisation (Cheney et al., 2014). Managerial literature often combines both perceptive where organisational identity will be referred to in the context of the essence of the organisation and organisational continuity as coexisting through communication (Kunde,

2000; Olins, 1990). Scholarly literature also has contradictory descriptions for organisational identity as being both intrinsic, solid and reliable, whilst assuming it can be malleable, planned for and constructed (Van Riel & Balmer, 1997). A seminal theoretical construct of organisational identity was proposed by Albert and Whetten where identity is constructed as the central, distinct and enduring facet of the organisation (Albert & Whetten, 1985). Here the reference to organisational identity considers it as the core of an organisation which dictates the choices made within it and forms the integrity of the organisation. It is the communicative focal point as well as being the organisational stakeholders key reference point (Albert & Whetten, 1985; Balmer, 1995).

A more malleable and contrasting theoretical construct of organisational identity as a changeable entity constructed by ongoing stories about the 'soul' of the organisation, was proposed by Ashforth and Mael (Ashforth & Mael, 1996). Here organisational identity is enacted through direct or indirect stories about the organisational past, its ambitions and the perceived environment in which it exists (Ashforth & Mael, 1996)

It is now largely accepted that organisational identity has a more complex communicative existence, requiring both qualified objectivity as well as intersubjectivity, as both play a central role in the epistemological origins of the individual-organisational identity relationship that dictates identification (Cheney et al., 2014). Organisational identity is seen as a volatile social construction arising through the processes of narrative, largely through the interpretation preferences and contextual understandings of the recipient audiences (Christensen & Askegaard, 2001). It is said to be both permeated by otherness as well as shaped by narratives of the *storied-self* of past and present behaviours (Dunne, 1995; Rasmussen, 1995). Narrativity is an essential part of the development of identity which links the past to the future, hence providing a sense of continuity of self-identity (Ashforth & Mael, 1996;

Browning & Morris, 2012a). Findings across the societal, organisational and individual story telling process have shown these come together to form, inform and shape both individual as well as organisational identities (Watson & Watson, 2012).

Concurrently, organisational identity is often related to fixed facets of an organisation, such as its image (Alvesson, 1990). Identity is then formed from a duality of a fixed reference point whilst simultaneously fluid in evolution through communication (Cheney & Christensen, 2001). In practice, when identity is talked about, it is not in reference to the *whole* organisation, but specific aspects that stand for the whole, what is used to *represent* the organisation (Christensen & Askegaard, 2001). Typically it is the stereotypical, context driven, attributes conferred by those that see the organisation as relevant, with meaning to them, that are widely shared to allow for coordinated responses, and define the members from non-members by informing their behaviour and actions, such as organisational identity (Haslam et al., 2003).

3.3.2 Organisational Identification Ontology and Epistemology

The study of the individuals need to belong traditionally came out of the psychological motivation centred perspectives (Cheney et al., 2014). To this effect Baumeister and Leary expanded on the *Belonging Hypothesis* to support the need for human utilisation of resources towards the focus of targets of attachment in forming their own identity (Baumeister & Leary, 1995). They provide a wide range of evidence in support of this notion of this fundamental interpersonal need to belong as a key motivation factor, and note “human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships” (Baumeister & Leary, 1995, p. 497).

Scholars in organisational behaviour and other organisationally focused fields have since applied this perspective to study communication processes within the organisational

context and their impact on the need to belong (Cheney et al., 2014). This is in line with previous work by Patchen whose formulation of organisational identification considered belonging to be a key foundational requirement, highlighting the need for membership and solidarity in the quest to belong (Patchen, 1970). Other notable organisational identification definitions based on a psychological underpinning include Mael and Ashforth's, "perception of oneness with or belongingness to an organisation" (Mael & Ashforth, 1992, p. 104), "cognitive connection" between an individual and their organisation (Dutton et al., 1994, p. 239) as well as the concept of not identifying with the organisation "a cognitive separation between one's identity and the organisation's identity" in *disidentification* (Elsbach & Bhattacharya, 2001, p. 393).

As early as the 1970s identification was perceived as when "a person identifies himself, or herself, with a group when making decisions, he, or she, evaluates the several alternatives of choice in terms of the consequences for the specified group" (Simon, 1976, p. 205). Across these varying theoretical definitions, organisational identification is perceived as an attachment to the organisation with behavioural and attitude-based outcomes. A more communications focused approach to identification highlights how these interactions with interest groups, reference groups or objects, gives way to and shapes an individual's sense of identity and therefore identification with the point of reference. Combined, the foundations are laid for a fluid state of identity formation and the interplay of individual identity and organisational identification through language centred connections, decisions, and behaviours (Chaput et al., 2011; Harré & Secord, 1972; Tompkins & Cheney, 1983). These perspectives draw from social identity theory where individuals define themselves according to how they classify themselves into social categories (Ashforth & Mael, 1989; Scott, 2007; Tajfel & Turner, 2004). Of which

organisational membership can serve as a kind of social identity, in organisational identification (Haslam et al., 2003).

Though earlier studies approached the individual-organisational bond forming of identification as a static sense of *being* identified rather than a more dynamic *becoming* (Glynn, 1998), growing research has begun to combine the two perspectives viewing identification as both a product and a process (Kuhn & Nelson, 2002). An empirical study confirmed the duality of constructing and reproducing organisational identification through identity as a set of resources as well as the process of mobilisation of these resources, invoking their reference points, as resources for identity formation that can both enable and constrain the formation (Scott et al., 1998). The process of identification has also been described as an unfolding of daily interactions that result in the co-production of the organisations essence and negation and renegotiation of mobilising agents such as policies, organisational image, foundations, principles and history, which in turn interplay with the communicative means of each of these (Chaput et al., 2011), and is thus constructed over time. Whilst identity forms the basis for organisational identification, it is the process of identification which shapes and develops organisational identity, establishing a feedback loop between the two (Cheney et al., 2014).

3.4 Organisational Identity

Although employees are a primary stakeholder within organisations, they are often overlooked in prioritisation. Organisations have instead traditionally prioritised external stakeholders whose importance is perceived as greater in relation to organisational survival (Stuart, 2002). In addition, breakdowns and competing interests between internal/external stakeholder demands, organisational identity shifts and employee identity all pose risks to

organisational survival. There is a need then to balance these internal and external competing interests and demands as organisational identity by employees can contribute to organisational cohesion and cultural strengthening with increased performance outcomes (Riketta, 2005). External stakeholders can only have a uniformed view of the organisation if there is a consistent view formed by the internal stakeholders (Shee & Abratt, 1989).

Aligning personal values with employee identity is a key element of an organisations' identity (Balmer & Gray, 1999). It is this employee identity as a collective that affects the organisational identity perception to external stakeholders, with employees being a sustainable source of enhanced performance and resilience through cohesion (Whetten & Foreman, 2014), where organisational identity 'expands' the self-view (Rousseau, 1998). The more employees identify with the organisation, the more stable and consistent the organisational identity. And the more likely employees are to uphold, support and work towards organisational goals and objectives (Whetten & Foreman, 2014). When efforts are expended to socialise newcomers to an organisation and the individual identifies with the organisation, integration is more successful, where identification and socialisation have been shown to be highly correlated processes empirically (Klein & Weaver, 2000; Myers & Oetzel, 2003).

However, in times of crises, disruption and outsourcing, organisational identity can be 'dismantled', resulting in organisational identity moving from the this is *"Who we are"* to a more confused or resistant *"Who are we now?"* (Rousseau, 1998). This may occur as new espoused organisation values are communicated or previous actions may seem to conflict with new organisational objectives (Stuart, 2002). As employees identify less with organisations, or there is a lack of clarity of its' core values, the organisational identity gets weaker and less stable (Stuart, 2002). The less employees identify with the organisation, the less willing they

are towards fulfilling organisational goals and objectives, or to expend discretionary efforts towards them (Whetten & Foreman, 2014).

The ever growing need to adapt to an increasingly challenging, global landscape, invariably results in changes within organisations and so in organisational identity from time to time. Through these fluid times there is also the need to balance the changing external environment with retaining the internal employee identity to a high level to maintain a stable organisational identity needed for organisational success and resilience.

3.4.1 Organisational Identity

Organisational identity (OI) is the collective and shared understanding of an organisations distinct values and characteristics (Hatch & Schultz, 1997). OI is broadly about 'self-referential meaning' and 'an entity's attempt to define itself' (Corley et al., 2006). It is the 'who are we?' and the 'who do we want to become?' of an organisation's identity (Whetten & Foreman, 2014). The concept itself was first defined by Albert and Whetten in their seminal work where OI was said to be" the shared understanding of the central, distinctive and enduring character of the organization" (Albert & Whetten, 1985, p. 265).

Though, this largely accepted definition of shared central, distinctive, and enduring qualities has been challenged more recently, Gioia argues that identity is more accurately '*adaptive*' rather than '*enduring*', as even though values may be stable, their interpretation is often not fixed or stable, but rather, relies upon an adaptive instability (Gioia et al., 2000). For the purposes of this research, the social constructivist view of OI will be adopted, which focuses on variability in OI perception across individuals and time, and also allows a bridge between organisational identity and the complementary employee identity with it (Whetten & Foreman, 2014).

OI is now recognised as a key factor in understanding strategic change within organisations as the need to balance internal and external challenges is salient to organisational success (Cheney et al., 2014). OI is also generally central to other key strategic requirements as they pertain to decision-making (Debora Riantoputra, 2010), internal conflicts (Humphreys & Brown, 2017), communication (Gebhart, 1996), issue interpretation and response (Dutton & Dukerich, 1991), and legitimacy (Sillince & Brown, 2009).

Strategy harmonises the organisation and its internal and external environment, and is influenced by the organisation's identity (Camillus, 2011). To provide firm and stable foundations for strategy development, a need for drawing out what *is* stable of organisational identity in identifying the core, unique and lasting characteristics would be of benefit. The elemental essence of OI that consist of the three requirements of what is central, distinctive and enduring has been proposed; the values embraced by the organisation (Camillus, 2011), the competencies it possesses (Prahalad & Hamel, 2009), and the aspirations that are espoused (Camillus, 2008).

In the requirement to sustain both profit and growth, strategic challenges rely upon organisational identity to employ long term economic sustainability as OI is a driver for value creation and developing strategies that balance the need to respond to current realities and expectations against transformation requirements dictated by unpredictable environments (Camillus, 2011).

3.4.2 Organisational Identification

To explain employee-organisation relationships, social identity theory has been widely applied to study these dynamics (Ashforth & Mael, 1989; Dutton et al., 1994; Hogg & Terry, 2014). Organisational identification (OID) has garnered a relative consensus in its

conceptualisation, with a predominant social identity perspective (Ashforth & Mael, 1989). An individual's social identity is the "knowledge of his membership of a social group, or groups, together with the value and emotional significance attached to that membership" (Tajfel, 1978, p. 63). The organisation is one such social category that an individual can develop identification with (Ashforth & Mael, 1989; Hogg & Terry, 2014; van van Knippenberg & Hogg, 2001).

Organisational identification is the extent to which an employee defines themselves in reference to their organisational membership. When an employee perceives oneness with their organisation and that they belong to it, organisational identification is said to have developed (Ashforth & Mael, 1989).

OID has been defined as the level of congruence between how the employee's define themselves with the same attributes that they perceive defines the organisation (Dutton et al., 1994). The greater the fit between the organisation and the employee, the more aligned the attitudes and behaviours of organisational members are with organisational goals (O'Reilly & Chatman, 1986). When individuals internalise and adhere to group values and norms in attitudes and behaviours, their commitment to the organisation is further strengthened (Ashforth & Mael, 1989).

As turbulence within organisations and between societal groups cause an increase in the individual-organisational relationship fragility, the need for the individual's work-based identification increases (Ashforth et al., 2008). OID has a potential capacity to generate beneficial and desired employee and organisational outcomes, such as employee satisfaction, employee wellbeing, low turnover intention, organisational citizenship and increased employee performance (Ashforth et al., 2008; Riketta, 2005).

3.5 Self-Communication and Organisational Identity

Despite the generally accepted understanding that organisational communication comes from the interrelated dimensions of internal and external sources, which are difficult to dissect from each other (Cheney & Christensen, 2001), much theory continues to frame an organisations' communication as set *within* the organisation (Carlone & Taylor, 1998). Similarly, much of the literature also continues to assume that organising and identity occurs *in* organisations (Cheney et al., 2014). A point to consider is that there is a range of influences that impact identity formation within professional settings that are established both across and within the organisational boundaries and sites (Cheney & Lee Ashcraft, 2007).

Multiple levels of influence on identity formation have been demonstrated (Abbott, 1988; Macdonald, 1995; Sarfatti Larson, 1977), highlighting how locales, identities and organisational practices together construct organisational identity (Kuhn, 2006). Identity formation and organisational identity have been found to not be defined just by organisational boundaries, whether physical or abstract, and can be established through a variety of ways and across places. This includes past employers when entering a new organisation (Stephens & Dailey, 2012), hiring agencies and clients (Gossett, 2002; Gossett, 2006) and non-organisational members (Richardson & McGlynn, 2011).

Efforts to construct organisational and member identity are similarly dependent on cross-boundary communication beyond formal boundaries (Cheney et al., 2014). Externally directed communication can influence internal stakeholder organisational identity in a broad systemic context by way of auto-, or self-communication (Lotman & Lotman, 1990). Self-communication, or intrapersonal within oneself, was conceived from the combined fields of biology, semiotics and anthropology to understand an individual's addressing of a collective

with the emphasise on social communities communicating within themselves, serving to construct, maintain and develop cultures within themselves (Cheney et al., 2014). Rituals, for example, serve a confirmation of basic values and reinforce a community's feeling of belong whilst introducing new members to the community (Geertz, 1973).

Within the organisational context, self-communication can be applied through strategic planning documentation and annual reports for future identity projection of employees (Broms & Gahmberg, 1983). Similarly, marketing strategies can be used to project an external message to an internal self-communication role as the external media grants status and authority to the message to influence communication evaluation from their own workplace in order to confirm and reproduce their own cultures (Christensen, 1997). Self-communication is essential in constructing and maintaining organisational identity and encouraging identity as employees evaluate these with more interest for dimensions such as accuracy, value congruence, and effectiveness, compared to external audiences (Dutton & Dukerich, 1991; Gilly & Wolfinbarger, 1998). Self-communication may be indispensable in the identity construction process and fostering of organisational identity as messages, which are not neutral, also shape and affect the sender. The mere expression of these messages may be an essential part in stimulating involvement and expression in identity formation and new desired identity or progression insight (Cheney et al., 2011; Pingree, 2007). When these messages are directed externally they may help organisations establish the boundaries of their identity and the desired external stakeholder role the organisation ideally wants to encompass (Cheney et al., 2014).

Self-communication also has the potential to become dysfunctional when the focus may become too self-centred or self-absorbed. Traditionally, employees were physically and temporally present within organisations and draw on the organisation as an identity resource. In contemporary times, there may be several forms of attachment by which an individual may

form their organisational identity (Cheney et al., 2014). More so in the age of technology, managers especially, as well as employees, are often deeply invested in the organisations expression of identity that it may come at the cost of external stakeholder interests (Hatch & Schultz, 2002). Where organisational identities become pathological or narcissistic in being overly engaged in own identity reflections and interests, external stakeholder interests and demands can be inadequately met in requirements and actions, and when this self-focus becomes more than temporary, can pose a threat to organisational survival (Ganesh, 2003; Hatch & Schultz, 2002).

One key resource that dictates positive self-communication, a behaviour, is a positive self-image as a psychological perception, and in combination are integral to an individual’s performance and ability to cope (Burns, 1999). Positive self-concept refers to a person's overall evaluation of themselves, encompassing self-esteem, self-worth, and self-identity (Rosenberg, 1965). Self-communication, or intrapersonal communication, involves the internal dialogue individuals engage in to evaluate, reflect, and make sense of their thoughts, feelings, and experiences (Vocate, 1994). Effective self-communication strategies, such as self-reflection, self-compassion, and positive self-talk, can foster a more positive self-concept and promote psychological resilience (Neff, 2011). In this way positive self-communication can significantly enhance organisational identity formation by enhancing employee self-esteem and confidence, leading to increased identification with the organisation (Pierce & Gardner, 2004), encouraging employees to embody organisational values and norms (Aaker, 1997) and fostering a sense of belonging and commitment to the organisation (Riketta, 2005).

3.6 Organisational Identity and Resilience

The economic sustainability of organisations in today's volatile, ever changing environments is continuously challenged by uncertainty and complexity (Camillus, 2011). These ever-changing organisational boundaries, missions, strategies, and structures resulting from this ever-changing landscape necessitates an enduring organisational identity.

The greater the organisational identification, the more likely employees will have a supportive attitude towards the organisation (Mael & Ashforth, 1992), and make decisions consistent with the organisational objectives (Littlejohn & Foss, 2010), in combination contributing to organisational cohesion. OID has shown positive links with performance (Riketta, 2005), task and job performance (Walumbwa et al., 2008), creativity (Hirst et al., 2009), and organisational effectiveness and efficiency (Amabile et al., 1996). In combination, when the individuals' values and identities, and organisational identification, are congruent with the organisational identity, the extra discretionary effort and capability can come together to enhance the cohesion and culture of the organisation, contributing to resilience during times of adversity and disruption (Stuart, 2002). In turn, an individual's resilience contributes to organisational identity and resilience through communication by fostering positive self-perception and confidence, enhancing employees' sense of belonging and identification with the organisation (Block & Kremen, 1996) and enabling employees to effectively cope with challenges, promoting organisational adaptability and resilience (Linnenluecke, 2017).

To date there has been little research on organisational identity and culture and how the two are associate with individual communication resilience or psychological resilience within the organisation, if any. The research carried out here will explore these construct dynamics and the modal effect each may influence the other by.

CHAPTER FOUR

Literature Review: Resilience and Communication

4.1 Introduction

This chapter on resilience starts with a review on the broad aspects of resilience in general across diverse fields and contexts of study. It then narrows down its focus through an overview of organisational resilience before filtering towards individual resilience by first addressing the psychological resilience construct. As the focus of this research frames resilience as a communicative process, and more specifically within the workplace, the chapter then details the narrative basis of resilience and will discuss the key theoretical communicative resilience constructs of 'communication theory of resilience' as addressed in this research. Finally, the chapter concludes with the role of workplace identity towards an individual's resilience. A summary of why research on resilience within the context of communication and the general practitioner healthcare industry within New Zealand is needed is then presented. A key research gap identified is a lack of research bridging psychological and communicative resilience and the association of communication resilience between organisational identity and culture and the rationale for these four constructs to be studied in the research carried out here.

4.2 Resilience

The term resilience takes its roots from the Latin word *resiliens,* meaning the act of rebounding, dating back to the 1620s in origin (Greene & Conrad, 2002). It was first described in ecology, denoting the ability of an ecosystem to recover or avert damage when disturbed

(Holling, 1973). Resilience is further described across social-technology safety management (Hollnagel et al., 2006), disaster recovery (Norris et al., 2008b), a range of organisational dimensions (Lengnick-Hall & Beck, 2005; McCann & Selsky, 2012; Weick & Sutcliffe, 2001), and psychology (Masten, 2001), as well as positive psychology (Luthans et al., 2006), to name a few. Resilience is a concept applicable to varied fields and across disciplines and as such has numerous variations in definition. It has been studied and defined by diverse academic disciplines on the foundations of moving beyond surviving to thriving in the face of negative stresses (Carpenter et al., 2012). As the varying fields conceptualise resilience across multiple fields, the term, and so the research, on resilience is cocooned in diversity, ambiguity of definition, scope, antecedents, operationalisation and measures (Lorenz, 2013; Norris et al., 2008b). With this diversity across disciplines come the additional ambiguity of whether resilience is a capacity, capability, strategy, goal, philosophy, measure or behaviour (Koslowski & Longstaff, 2015; Norris et al., 2008b). This lack of clarity would likely hinder context specific research and operationalisation and lead to a further lack of clarity in evaluations and outcomes (Koslowski & Longstaff, 2015). Holistically and across disciplines, the term resilience falls into four broad categories; that with the (1) capacity to rebound and recover, (2) capability to maintain a desirable state, (3) capacity of a system to withstand stress, and (4) capability to adapt and thrive (Lorenz, 2013).

In ecology, resilience studies the eco system in an ever-changing natural world and the need for adaptation of plant and animal species in the face of evolution to changing external stresses (Holling, 1973). An objective view of resilience is a simplified model most commonly in the context of engineering resilience, how much disturbance the object has before it succumbs to changing, disintegrating or becoming permanently damaged, to return to its previous state and to distort less in the face of stress (Holling, 1996). Engineering resilience at

the simplest level then implies that upon a stress, a material bounces back faster after, endures a greater amount, and is disturbed less, where this stress can be chronic difficulty or acute crises. The ecologist C.S. Holling however, put forward the critical assessment that this simple engineering view was not accurate for ecology, with future fields developing similarly in understanding, with a more fitting resilience view being of complex adaptive systems (Holling, 1996). Resilience is traditionally a material science terminology that applies fundamental science to understand the properties and behaviours of specific material. In its applications to humans, resilience originally had its theoretical underpinnings of psychological resilience emerging from child development studies of at risk children related to genetic or experiential circumstances such as parental mental illness, poverty or a combination of both types of risk factors (Masten et al., 1999). In more recent times disaster planning and organisational management have had a growing interest in organisational planning for resilience to external threats (Burnard & Bhamra, 2011; McDonald, 2017; Melián-Alzola et al., 2020). Other disciplines have also studied resilience within their respective contexts, such as political science, sociology, international development and business administration, and others (Barrett & Constas, 2014; Endress, 2015; Noakes, 2014; Parsons, 2010).

With each field constructing its own view and utilisation of the term, the study of resilience has generated multiple definitions of the concept, framed in the field and context of the issue being addressed. Within the workplace, Bridges defined resiliency as the ability to bend but not break (Bridges, 1995). This definition is well aligned with the natural physical sciences referring to the inherent material property that allows it to return to its original form having been bent, stretched or compressed (Caza & Milton, 2012).

Social sciences, in contrast, assign the term resilience as a general state of living organisms adapting positively to adversity or challenge (Caza & Milton, 2012). Those within

psychology have defined resiliency as a relatively stable personality trait that allows an individual to bounce back from adversity or negative stress due to flexible adaptations to changing demands (Block & Block, 1980). Other social psychological resilience definitions have been identified as the ability to maintain a stable psychological state with fewer mental health problems experienced in the face of threats (Bonanno, 2005; Frederickson et al., 2003), or a dynamic process view of resilience encompassing positive adaptations when met with adversity (Luthar & Cicchetti, 2000; Masten, 1994; Masten et al., 1990). Resilience has gained traction over the past few decades in the context of psychological resilience across psychology, counselling, and psychiatry. It has increasingly garnered interest in both research and application, and especially so in primary prevention and intervention capability development (Cowen et al., 1995; Galante et al., 2018; Southwick et al., 2005; Wyman et al., 2000).

Resilience has two aspects that are consistent in definition emergence and share a commonality across viewpoints. Firstly, resilience requires exposure to a negative stressor or a significant threat (Luthar et al., 2000). Secondly, the requirement of a flexible or positive adaptation in the face of the adversity or threat (Garmezy & Masten, 1990; Luthar et al., 2000; Masten & Reed, 2002). In line with communication process development view, the positive psychology view from Sutcliffe and Vogus add: “An entity only survives/thrives by positively adjusting to current adversity, but also in the process of responding strengthens its capabilities to make future adjustments” (Sutcliffe & Vogus, 2003). Further, communication resilience research suggests that the strongest influence on individual relational resilience is drawn from their social relationships (Afifi, 2018). For the purposes of this body of work, resilience is framed and defined in line with the process view of positive adaptations when met with negative stressors, within the context of the *how* of communication resilience.

Ever changing environments due to unexpected man made and natural disasters, and increasingly rapid technological changes, have brought the concept of resilience to the forefront as a highly desirable quality and characteristic of both individuals and organisations (Lim et al., 2020). Resilience in general terms is accepted as the ability to recover from challenge (Martin-Breen & Anderies, 2011). As unforeseen calamities play out, such as recent events in COVID-19 (Killgore et al., 2020) and Cyclone Gabriel (Whyte, 2023), the economic, social, infrastructure and other crucial fall outs materialise, we increasingly see the need for resilience as a critical element required at the system, as well as individual level, not just for survival but also for continual growth (Lim et al., 2020). The concept of resilience has been addressed across varying disciplines, including psychology (Masten, 2001), engineering, ecology (Holling, 1996), economics (Rose, 2004), organisational studies (Seville et al., 2006), and more recently in communication studies (Buzzanell, 2010; Hutchinson et al., 2007; McAninch et al., 2022).

Within communication, resilience does not share its view with other fields in that it is not viewed as a trait, tool, or entity. Rather, communication scholars view resilience as a developable process that is framed, sustained and grown (Buzzanell & Houston, 2018). Further, resilience through communication can be viewed as a *predictor* of stress, an *outcome* of these stressors, as well as a *process* via calibration to stress over time (Afifi et al., 2019). Communication does however share its views following adversity, the reactions to which can lead to adapting and potentially thriving of individuals, families, organisations, communities and nations, due to their relationships with each other (Buzzanell & Houston, 2018).

The concept of human resilience continues to gain popularity amongst practitioners and scholars alike (Buzzanell, 2018). The human application of resilience was first studied within the domain of childhood resilience and trauma in development (Masten et al., 1990). Human

resilience has since been studied across human systems, such as the adults, families and communities (Buzzanell, 2018).

The communication process of resilience within the workplace has to date received little attention. Despite the recognised need for having a resilient workforce being high on the priority list as it is seen as an essential quality directly linking individual, organisation and national competitiveness (Carver, 1998; Holling, 1973). In the face of adversity, catastrophic events or adverse conditions, it is often resilience after the event that makes the difference between not only recovery but also growth from adversity (Lim et al., 2020). Given the recent COVID-19 pandemic and the unique landscape resulting in multidimensional stressors across individual (Goldfarb, 2020; WHO, 2020), system (WHO, 2020), national (Medina-Jimenez et al., 2022) and organisational (Yu et al., 2021) factors, a study of organisational resilience within the communication context offers a novel opportunity to contribute to an organisational communication resilience gap that has to date received minimal attention.

4.3 Organisational Resilience

Organisational resilience is the ability of an organisation to manoeuvre through disruptive events that may lead to deviations, degradation or halting of operational goal attainment (Somers, 2007). Any event that compromises an organisation's product or service delivery as expected or has an otherwise negative impact on operational, workflow or strategic deliverables can be considered a disruptive event (McManus et al., 2008; Stephenson, 2010). Disruptive events may be a crisis (Sapeciay et al., 2017), business uncertainty (Borekci et al., 2014; Sapeciay et al., 2017), risky events (Sonnet, 2016), adverse event (Borekci et al., 2014), emergency (Jung, 2015), threat (Mafabi et al., 2013), or business failure (Mafabi et al., 2012).

Climates of uncertainty that may pose serious challenges to individuals, groups or whole organisations are an inevitable norm. Whether its external events such as ecological disasters, financial crises or COVID-19 pandemics, or internal events that induce business strains that tip beyond tolerable thresholds, organisations inevitably encounter adversity at some point (Ahn et al., 2018). During these challenging periods, having organisational resilience will often be the difference between perishing and strengthening (Vakilzadeh & Haase, 2021). Organisational resilience has been defined as positive adjustments during adverse conditions. (Sutcliffe & Vogus, 2003). Resilience is a key response during times of adversity that strategically links organisational success, growth and survival (King et al., 2016). Though it is most visible during acute disasters, it is none the less required and utilised on a day to day basis to a varying extent, such as for financial issues, supply chain breakdowns, accidents or similar (Stephenson et al., 2010). Organisational resilience has been conceptualised in various forms, most notable as a single organisational only factor dynamics (Williams et al., 2017), as well as an individual employee as part of a multi-level system dynamic (Kossek & Perrigino, 2016) and the individual interaction with their teams (Hartmann et al., 2020).

Like resilience in general, defining organisational resilience has taken various forms as researchers take fundamentally differing conceptualisations from each other. Organisational resilience has been defined as bouncing back from unanticipated dangers and having the ability to cope through them (Wildavsky, 1988), a process whereby an individual, organisation or community utilises available capabilities to interact with their surroundings to enable positive adjustments in order to maintain functionality prior to, during and after the inflicting adversity (Williams et al., 2017), to being able to adapt before circumstance progress to a crises (Somers, 2009).

A more comprehensive approach incorporating the varying phases of resilience into one model and the accompanying capabilities has been recently proposed by Duchek. Here resilience is differentiated into three sequential phases; (1) anticipation, (2) coping, and (3) adaptation (Duchek, 2020). During the anticipation phase that is conceptualised as part of the organisational resilience phase, organisations observe and identify threats in preparation for any potential adversity. Upon adversity encounter, this is followed by the coping phase where acceptance of the situation and solution planning and implementation are carried out. And finally, learnings and reflections from the adversity encounter and fallout are considered (Duchek, 2020). Adversity avoidance does not constitute resilience (Vakilzadeh & Haase, 2021). Rather proactively avoiding adversity is an effective goal attainment strategy for an organisation (Stoverink et al., 2020). Adversity then is necessary in order for an organisation to display the anticipatory, coping and adapting process of resilience (Vakilzadeh & Haase, 2021).

Though there is no clear consensus on a definition for resilience or specifically what the building blocks of organisational resilience are, varying empirical research groups are of the general agreement that the higher level requirements are awareness (Rahi, 2019), anticipation (Vakilzadeh & Haase, 2021), planning (Gonçalves et al., 2019), coping (Vakilzadeh & Haase, 2021) and adaptation (Gonçalves et al., 2019; Rahi, 2019; Vakilzadeh & Haase, 2021). In order for organisations to better prepare for future disruptive events, proactive measures such as adverse event anticipation (Ortiz-de-Mandojana & Bansal, 2016) and building a culture of resilience (Sawalha, 2015) should be adopted.

Central to both anticipation and coping, key requirements of organisational resilience, is organisational culture (Vakilzadeh & Haase, 2021). Organisational culture builds organisational resilience through anticipation by promoting a focus on long term survival,

shared values and dialogue, (Andersson et al., 2019) high employee awareness (Herbane, 2019; Păunescu & Argatu, 2020), business continuity planning promotion (Păunescu & Argatu, 2020), and supporting positive change management (Spee, 2020). Coping towards organisational resilience can be promoted by preventing maladaptive thinking (Linnenluecke & Griffiths, 2013), own culture understanding (Harrison et al., 2017), having an open culture (Gover & Duxbury, 2018), promoting quick resolutions through empowerment and having a proactive discrepancy reporting and awareness understanding (Barton et al., 2015). In addition, the key resilience requirement of positive adaptation requires culture change management to successfully establish organisational resilience long term (Harrison et al., 2017).

Organisational resilience largely also depends upon the individual member's psychological resilience within it (Seville, 2018; Zellars et al., 2011). When an organisation is met with disruption and pressure, it is how the employees come together and behave that can make or break organisational resilience and survival. Specifically, it is the organisational culture that will enhance or erode the individuals resilience and dictate individual employee behaviour (Zellars et al., 2011). Further, emotions can be contagious (Cozolino, 2014), and so an individual's state can affect those of their teammates and the wider organisation, making individual resilience important at times of adversity to create a healthy organisation that can withstand these stressors and survive (Lim et al., 2020). Individual employee psychological resilience then contributes to overall organisational resilience.

4.4 Psychological Resilience

People typically are met with varying adversities and challenges throughout the course of their lives, ranging from daily challenges to major life setbacks. People often react with

varying degrees of distress to the same adversities where some succumb to trauma and others do not and still others react positively to the most testing of circumstances (Bonanno, 2004; DeLongis et al., 1982). The study of why, how, and what factors allow an individual to not only withstand adversity but even to thrive in the face of them is psychological resilience.

The construct of psychological resilience first started investigating resilience in children in the early 1970s (Werner et al., 1971). This first wave of resilience research in the early 1970s pertained primarily to *identifying factors* that resulted in an individual having resilience (Wright et al., 2013). A second wave of resilience research in the early 1990s investigated *how to acquire* protective factors associated with resilient outcomes identified from the first wave (Mizuno et al., 2016). The following third wave of resilience research explored how resilience could be *fostered* to increase resilience when it was not naturally occurring (Wright et al., 2013). A more recent fourth wave of research has delved into the biological and neurological resilience factors (Wright et al., 2013). The progressive phases of resilience research do not denote the completion of all knowledge from moving from one wave to another in focus. But rather the need for research progression is required due to research advances into new areas or as advancement becomes imperative (Vella & Pai, 2019). The communication approach to resilience is more closely aligned with this second wave in researching how resilience is constructed by discourse (Buzzanell, 2010).

Although the research of resilience has spanned decades, there remains a lack of consensus on the definition, concept and measure of resilience (Vella & Pai, 2019). This is largely due to the specific nature of a definition being founded in the historical and sociocultural context and contextualisation of the research and the population studied (Fletcher & Sarkar, 2013). Despite varying fields and researchers operationalising resilience in different ways, the majority of definitions incorporate the two core concepts of adversity and positive

adaptation (Fletcher & Sarkar, 2013; Rutter, 2006). With these foundational requirements resilience is commonly described as achieving positive outcomes or adaptations despite the presence of adversity, so as to fall forward or bounce back and beyond (Luthans et al., 2015).

Resilience has been further described in varying constructs as state or trait (Stainton et al., 2019), a personal characteristic (Ayed et al., 2019), a process (Ayed et al., 2019) and an outcome (Zautra et al., 2008). Though most scholars concur that resilience requires the presence of the dual concepts of adversity and positive adaptations (Luthar & Cicchetti, 2000; Luthar et al., 2006; Masten et al., 1990; Rutter, 2006), these latter terms themselves have inconsistencies in the specific delineations of each concept which has led to differing understandings of their respective meanings (Bodin & Winman, 2004). In order to understand why differing approaches have prevailed, it is important to address these definitional discrepancies (Fletcher & Sarkar, 2013).

Researchers depict adversity as any hardship or suffering associated with difficulty, misfortune, or trauma, ranging from major disasters to modest everyday life disruptions (Davis et al., 2009; Jackson et al., 2007; Luthar & Cicchetti, 2000). Whilst resilience as a personal characteristic or process-based approach conceptualises adversity and positive adaptation as a starting requirement, an outcome based conceptualisation of resilience sees positive adaptation as central to post adversity framing (Vella & Pai, 2019). What will be perceived and what constitutes adversity and positive adaptation respectively will vary between individuals. Adversity is defined in varying ways. Luthar and Cicchetti define adversity in terms of quantifiable adjustment in relation to negative life events, denoting a specific statistical magnitude (Luthar & Cicchetti, 2000). Other researchers take a more subjective view, defining adversity in terms of any suffering associated with difficulty (Fletcher & Sarkar, 2013). Still others take a broader view, being inclusive of both larger negative life events as well as daily

general setbacks (Davis et al., 2009). Positive life events may also necessitate positive adaptations and so require resilient characteristics at times (Fletcher & Sarkar, 2013).

Positive adaptations in turn have variable definitions including meeting stage specific development tasks (Luthar & Cicchetti, 2000) or as symptoms of internal wellbeing (Masten & Obradović, 2006). In order to constitute positive adaptations, the indicators used should be appropriate for the adversity examined and the domain assessed against the stringency of criteria (Luthar et al., 2000; Luthar et al., 2006). In addition, an often-overlooked concept when determining positive adaptation is the relevant sociocultural context within which the individual exists (Clauss-Ehlers, 2008; Mahoney & Bergman, 2002; Waller, 2001). Unger et al have further highlighted that research on resilience has been predominantly Western culture based and therefore focusing on the individual's relational capacities (Ungar, 2008; Ungar & Liebenberg, 2011). Accordingly these authors argue that there is a lack of sensitivity to varying cultural factors that may contextualise and define resilience differently in different populations which manifest different practices (Ungar & Liebenberg, 2011).

An individual's resilience can be defined as the amount of change they can endure without a fundamental change in their coping ability given their interpersonal and intrapersonal resource pool towards pursuing aims (Gallo & Matthews, 2003; Zautra et al., 2010). Resilience then provides the ability to make adaptations beyond mere survival, before change requirements spiral to a point where additional changes are detrimental and recovery is no longer possible (Bonanno, 2004; Masten & Reed, 2002). Resilient individuals do not simply bounce back or adapt to a point of equilibrium, or recovery, but rather gain value from the adversity and are likely to thrive (Luthans, 2002), also referred to as experiencing post-traumatic growth (Tedeschi & Calhoun, 2004). Post-traumatic growth resilience training can also be allied to the organisational context (Seligman, 2011).

Rutter highlights that resilience may be derived from psychological and physiological processes rather than purely external factors or influences (Rutter, 2006). The study of organisational or communication resilience then should ideally be directly compared with the corresponding psychological resilience concurrently. Resilience as a psychological construct has been extensively studied to date. Resilience as a communication process has had far less attention in research. Recent studies have underscored the need to explore the processes by which resilience is enacted to construct new normal during disruptive times, rather than just the ability to have resilience as a psychological trait to burnout (Hintz et al., 2023). Masten has further highlighted that resilience research should be approached as a multidimensional construct, as it is now known that resilience operates across multi-level systems as well as interacting between multi-level systems (Masten, 2007). The multi-level approach of researching individual psychological and communication resilience within an organisational cultural and identity view has not yet been studied. In addition to a multilevel analysis for a broader and more holistic understand, psychological resilience is needed to better support the enacted communication process of resilience.

Enacted communication resilience, by definition, is a behaviour, requiring prior mental characteristics, functions and or attitudes, i.e. psychological states, needed prior to being able to action it, as all behaviour is result of the preceding psychological states (Doliński, 2018). To better understand, and support, more effective processes towards establishing communication resilience, the preceding psychological state should be explored as it directly relates to resilience and its enactment. More specifically, the relationship between the process of enacted communication resilience and the precursor resources that contribute towards establishing psychological resilience would offer a more holistic understanding from which to offer a stronger understanding and practical implementation in supporting towards more

comprehensive individual resilience overall. This integration towards a more holistic understanding of psychological resilience and communicative resilience has yet to be studied. To date little, if any, empirical research has been done on bridging these two dimensions of resilience which currently reside across two different fields, psychology and communication.

4.5 Narrating and Communicating Resilience

Initial individual resilience research primarily had a trait-based focus with clinical or psychological explanations for the cultivation and ability to respond to adversity (Rutter, 1979). Later research started focusing on factors external to the individual as well the social processes linked to institutions beyond the individual (Rutter, 1999).

Resilience as a communicative enactment utilises narrative theory to be framed in terms of a story (Fisher, 1984). Fisher argued that rather than an extant priori system of logic deduction to make sense of their actions, individuals use story making and telling to legitimise and rationalise their actions (Fisher, 1984, 1989). Narratives hold a dual role in coping and resiliency, concurrently shaping the individuals adaptive responses as well as reframing events to understand and facilitate the necessary adaptive sense making (Clair & Kunkel, 1998). Similarly Pals and McAdams describe how a narrative understanding is required for posttraumatic growth after traumatic incidents (Pals & McAdams, 2004).

Foregrounding narrative research has allowed an understanding of the sensemaking process in resilient behaviour (Dutta, 2019; Pasupathi, 2001) and as a means to cultivate resilience (Pals & McAdams, 2004; Pennebaker et al., 1990). As an individual narrates their lives' stories, they also narrate their identity and work as a member of their organisational

membership (Boje, 2001) and as a way to create normalcy towards building resilience when met with adverse events (Betts et al., 2022; Buzzanell, 2010). Communicated narrative sensemaking theory relates the process of narrative sensemaking with communicative resilience through coherence with additional elements such as affect, redemption, and agency (Horstman, 2019; Kellas, 2021). During difficult times, storytelling allows a way to obtain coherence and part of the healing process, by seeking normalcy through narrative (Frank, 1995).

Narrating resilience is a fragmented process with sense making conceptualised as multi-voiced (Boje, 2001), aesthetic resolution (Clair, 1998), and open architecture (Browning & Morris, 2012b). During disruptive events, forming coherent narratives is often difficult in the midst of the ensuing chaos and confusion that adversity brings (Frank, 1995). Hagedorn has taken this concept further to propose that even in times following the post-chaos where the individual is no longer experiencing the adverse event, narratives to bring coherence to the sequence of events are employed (Hagedorn, 2004). Similarly Frank notes, “chaos is never transcended but must be accepted before new lives can be built” (Frank, 1995, p. 110). A communication lens offers not only a distinctive insight into how resilience is theorised and practiced through discourse but also highlights commonalities across communication contexts for a more heuristic research, theory and practice of resilience within communication (Buzzanell, 2018).

Within communication, resilience is not constituted or cultivated as a trait, disruptive tool for repair, or entity. Rather, in communication studies, resilience is a process and is developed, shaped, sustained and grown over a lifespan relative to an individual, relationship, or a collective, including families, organisations and nations (Buzzanell, 2018). Within communication studies resilience is then operationalised and embedded within everyday

activities and interactions at ordinary and extraordinary moments of loss and disruption where responses such as stress, anxiety and trauma may be evoked. These reactions to a stressor may then be followed by coping and adaptation and in some cases thriving (Buzzanell, 2018). Resilience is collectively cultivated through a communicative process across these processes and is conceptualised as an iterative enacted via communication with others in an effort to recover following a stressful event (Afifi, 2018; Buzzanell, 2010; Deshields et al., 2016).

Resilience within communication has been studied with a multilevel approach and across metatheoretical perspectives. From a broad national resilience perspective (Bean, 2018), community resilience (Pfefferbaum et al., 2015), organisational resilience (Buzzanell, 2010), to smaller interpersonal dynamics in family resilience (Theiss, 2018) and individual resilience (Afifi et al., 2016). The primary focus of this research will be individual resilience, as such the two most relevant communicative resilience constructs focused on are Buzzanell's theories of communication resilience theory (Buzzanell, 2010). Buzzanell's interpretive, explanatory theory describes the communicative process that can facilitate resilience or the restorative process to equilibrium after encountering a stressor in the communication theory of resilience (Buzzanell, 2010).

In more recent times, the field of Communication has reframed the development and process of resilience in terms of interactions (Buzzanell, 2010, 2019), as opposed to trait-based perspectives as other disciplines have portrayed (Masten & Reed, 2002; Richardson, 2002). Buzzanell has reframed the concept of resilience foregrounding the social construction of novel realities through communication. She in turn encouraged other researchers to focus on the communicative, interpersonal dynamics of resilience as a process that individuals enact when facing adversity or stressors (Betts et al., 2022). One of the primary theories of resilience

within the communication field, developed by Buzzanell, is the Communication Theory of Resilience (CTR).

By integrating CTR with psychological resilience, researchers can better understand how individual resilience is established in the face of challenges which then contributes to enacting communication processes.

4.6 Communication Theory of Resilience

The communication theory of resilience (CTR) is an explanatory theory that conceptualises resilience as a communicative process that can restore or maintain equilibrium following a stressor, where individuals engage in discourse to do so (Buzzanell, 2010, 2019). Resilience within this theory is defined as " a constitutive process through which people reintegrate and actively construct their new normal through language, interaction, networks, and attention to their identities and identity, within their material environments and societal discourses" (Buzzanell, 2019, p. 68). The end state of CTR as it is conceptualised is crafting normalcy through the communicative processes of resilience. CTR proposes that resilience is not only a trait held by the communicator but is also a conversational process and outcome created through discourse where individuals engage in communication as a response to a stressor. In the face of difficult life events, individuals seek to construct a new normal through a communicative process, the process and outcome of 'doing' and 'having' resilience, is explained through the CTR (Buzzanell, 2010, 2019). Negotiating new normals and the capacity in achieving a new normal construction, or 'doing' resilience, can often be constrained by material, social, and discursive resource inequalities (Buzzanell, 2019). Resilient individuals create positive narratives about their experiences and often reframe them to normalise

challenges in order to make them more manageable (Buazzanell, 2010). This is also in line with psychological resilience where meaning-making and reframing help with coping during adversity through emotional regulation and learning from adversity towards post traumatic growth (Avey 2009).

The three key elements required for CTR are "(a) trigger events, (b) a focus on anticipatory and reactive resilience, and (c) five core processes" (Buzzanell, 2019, p. 68). Under CTR, a trigger event that disrupts the status quo is required for resilience to become activated and can be related to mundane or once-in-a-lifetime disruptions. A *trigger event* is where sensemaking is set in motion and either happen *to*, e.g. death, disaster, trauma, or become activated *by*, e.g. a breakup, individuals and communities (Buzzanell, 2010). Individuals or communities may further draw upon resources to enact resilience processes where these resources may have been curated either before, *anticipatory*, or after, *reactive*, trigger events (Buzzanell, 2019). Where resources are drawn upon to address or control the trigger event to a new normal, *reactive resilience*, is said to have taken place. Where resources are used to actively create a new normal in response to the trigger event, *proactive resilience*, is said to be utilised (Buzzanell, 2019). CTR primarily conceptualises resilience as inherently reactive, though proactive resilience occurs where messages and traditions are used to create new a normal (Buzzanell & Houston, 2018). CTR assumes resilience is problem-driven, where trigger events activate five conceptually distinct communicate processes to resilience and constructing new normalcy, with these being; crafting normalcy, affirming identity anchors, maintaining and using communication networks, putting alternative logics to work, and foregrounding productive action (Buzzanell, 2010).

4.6.1 The five processes of CTR

Crafting normalcy are efforts made to regain a sense of routine and norm that existed prior to the disruptive event occurring. Individuals create, maintain and/or create daily activities or rituals to create the sense of normalcy. This is constructed as the individual talks about how to reinstate pre-disruption routines and activities or how to create new normalcies through routines.

Affirming identity anchors requires individuals to uphold identity and role attachments and values which face disruption due to the disruptive event. An identity anchor is a core set of identities that endure upon which an individual relies to explain to others who they are to themselves and in relation to others. Stressors can alter this sense of self and enacting the resilience process through discourse can be used to regain and maintain a sense of self and their identity as it existed prior to the stressor materialising. Regaining these identity anchors represents communicative efforts towards enhancing or reinforcing salient values to the self and managing their identity.

Growing, maintaining, and/or using communication networks may help the process of resilience by seeking resources from connections with other individuals or organisations. Individuals may rely on existing networks and connections with colleagues, family or friends who may provide support, towards an effort to recover from the stressor. Individuals engage in communicating efforts with these networks to alleviate stress instigated by the stressor.

Putting alternative logics to work is the process of reframing one's view of the disruptive event and outcomes. Individuals communicate in ways that reframe by finding new ways to look at the stressor event and commonly use humour, metaphors, or create alternative ways of addressing a problem or hardship.

And finally, *foregrounding productive action while backgrounding or legitimising negative feelings* entails focusing on the positive aspects of the situation whilst managing the negative impact of the stressor. Here communicative efforts are made to acknowledge challenges or negative feelings resulting from the disruptive stressor while focusing on positive feelings or outcomes. It includes accepting the right to feel angry whilst trying to move on (Buzzanell, 2010, 2019; Hintz et al., 2023).

Buzzanell also extended this CTR to theorise resilience as an adaptive-transformational process where individuals not only are able to craft new normalcies but also are able to shape future outcomes by actively participating in moulding this environment to come (Betts et al., 2022). This suggests that the process of communicating resilience serves a dual purpose towards creating normalcy, to maintain a sense of continuity with what was normal prior to the disruptive event or stressor, and to catalyse change for future disruptive events (Betts et al., 2022; Hintz et al., 2023). Major disruptions, *macro-disruptions*, are seldom a single disruption, rather they are a collection of cascading disruptions unfolding across time, *micro-disruptions* (Hintz et al., 2023). This repeated unfolding of micro-disruptions may affect agency in resources when enacting the process of resilience through which new normals are negotiated (Betts et al., 2022).

4.6.2 Critiquing and resisting the status-quo, a sixth CTR process

Recently, Hintz, has extended the CTR to include *critiquing and resisting the status-quo* as a sixth resilience process (Hintz et al., 2023). Here Hintz argues that critique and resistance as resilience processes not only envision new solutions to disruptions but also invalidate logics that created the disruptions and proactively conceive new futures against the original disruption (Hintz et al., 2023). This sixth resilience process is interrelated with three

of the existing CTR processes of; (a) maintaining and using communication networks, (b) employing alternative logics, and (c) affirming identity anchors (Hintz et al., 2023). This sixth resilience process acts as means for the individual to construct resilience through cultivation of subjective resilience resources (Matiz et al., 2020), in part by maintaining and using communication networks to resisting hierarchies (Hintz et al., 2023).

Resilience processes have a fluidity as an individual moves between the adaptive-transformational responses (Buzzanell, 2018). Critiquing and resisting the status-quo centres the adaptative-transformational resilience processes to the transformational pole and is activated when the status-quo is transformed (Hintz et al., 2023). This is in line with empirical findings highlighting enacted resilience as being both towards continuity and change where an individual may seek to both replicate and change aspects of the triggering disruptive events and circumstances (Wilson et al., 2021). As not all enactments of resilience are transformative, and some are multi-level processes where resilience is enacted in response to larger structures, discourses and policies (Buzzanell, 2018), this sixth resilience process may not be activated across all contexts.

Framing resistance as a resilience process in order to craft new normals, posits a positive, constructive, and critical force that is transformative when there is dissatisfaction with current circumstances. This drives discursive reformulation of new normals by breaking down previous control mechanisms, and so draws a means in connecting to organisational resilience (Mumby, 2005). Viewing resistance as resilience process better informs the transformational aspect of CTR and draws attention to the relationship between the disruptive trigger and individuals seeking new normals (Hintz et al., 2023).

4.6.3 Anticipatory Resilience

Buzzanell originally conceptualised that most of communicative resilience is a reactionary response to disruptions (Buzzanell, 2010). She has more recently also extended this theory to propose individuals in addition also seek to cultivate anticipatory resilience as a resource to accrue against future disruptive forces through its' discursive-material nature (Buzzanell, 2017). Buzzanell's theory is akin to other related concepts, such as proactive coping through resource accumulation (Sohl & Moyer, 2009) and steeling (Waldron & Farnworth, 2020). This resilience-as-resource concept frames anticipatory resilience as something individuals do before the onset of an adverse event or disruption and then expend this accrued resource upon facing it (Betts et al., 2022). This theory of resilience as a resource to be accrued is also in line with Afifi's theory of resilience and relational load conceptualisation where resilience is conceived as emotional capital for an individual to accrue and hold in reserve during good times to expend in times of adversity or disruption (Afifi et al., 2016).

Conceiving anticipatory resilience as a resource for an individual to use towards future disruption contradicts Buzzanell's original conceptualisation of the CTR (Buzzanell, 2010) as it shifts the focus from 'doing of resilience' of CTR to 'having resilience' in the extended anticipatory resilience conceptualisation (Betts et al., 2022). Adaptive-transformational enactment of CTR processes are triggered by material, discursive and symbolic events (Hintz et al., 2023).

4.7 Identity and Resilience

Other than social and emotional capital drawn from communicative means (Afifi et al., 2016; Hutchinson et al., 2007; Zamanzadeh & Afifi, 2019), an individual's goals, values and practices at work, forming part of the individuals cognitive self, can also be a key source of resilience in resources. These collective goals, values and work practices constitute in part the identity of an individual (Schein & Schein, 1978). In support of this it has been shown that an individual's identity plays a key role when dealing with resilience in shaping the response to major life events (Mancini & Bonanno, 2009). Adversity at work has also been shown to make salient the individual's professional identity. Identity may play a key role in building resilience through a meaning-focused coping mechanism where the individual reacts to adversity by integrating the sense making of the experience with their own self-views (Caza et al., 2010). Identity processes and mechanisms may become important resources to draw upon for resilience responses to adversity through three key roles; as a resource affecting the potential for resilience, a behavioural adaptation system, and as key sense making framework (Woolley et al., 2011).

4.7.1 Identity as a communication process

Firstly, a valued work identity may bolster a sense of self efficacy, control, emotional capital, and a strong sense of self, which together affect the individual's resilient capacity and capability, with sense of self playing a primary factor (Edwards, 2009). When resilience to adversity is displayed, the individual is more likely to also feel a sense of self and identity continuity and able to further respond more effectively to external demands (Mancini & Bonanno, 2009)

Second, an individual's identity as a resource helps inform behaviour to promote capability and effectiveness in times of adversity. Specifically, flexible adaptation and behavioural elasticity may be key factors in an individual's resilience (Mancini & Bonanno, 2009). The ability to match effective behaviours to specific stressor demands involves complex identity component interplay, allowing an individual to engage in flexible adaptation. An individual's identity provides a set of schema resources to draw upon and creatively combine to enable appropriate reactions on encountering stressors and adversity, making identity a valuable key resource for resilience (Callero, 1986; Caza et al., 2010), with the more multi-faceted an identity the more practice-based resources being available for flexible adaptation and also provides important coping support during times of high stress (Mancini & Bonanno, 2009).

And thirdly, identity serves as a key meaning, or sense making, framework to help make sense of the adversity or stressor and grow from it (Caza et al., 2010). In support of this it has been shown that identity construction is a critical requirement for sense-making behaviours within organisations and is a crucial pivotal requirement to allowing an individual in developing an increased learning and competence trajectory on encountering adversity (Corley et al., 2006).

In addition to the three functionalities of identity in the resilience processes above, identity change may also be an important resilience processes indicator. As an individual experiences and responds to adversity or stressors at work, they learn more about their own capabilities and professional strengths and other aspects of the self. This may result in a broadening of their identity and an increase in complexity to their identity, thus increasing further their capability and resilience towards future needs during further adversity (Woolley et al., 2011), in combination with three resilience processes.

This, together with Buzzannells CTR, and other groups related research has shown that individuals and organisations that collectively develop identity anchors, amongst other factors, by communicative processes, demonstrate greater resilience when undergoing adverse conditions and events (Afifi, 2018; Buzzanell, 2010; Buzzanell & Houston, 2018).

4.7.2 Identity as a personal-relational attribute

Others have treated identity as a relational attribute, rather than a communication process (Sherblom et al., 2022). The perspective difference in constructing resilience through a communicative process or that which is influenced by relational attributes will have differing conceptual and measurement implications. Relational attributes affect interpersonal communication. Identity constructed as a personal-relational attribute is constituted through interpersonal conversations (Hecht, 1993; Jung & Hecht, 2008; Maeda & Hecht, 2012). Here, identity tensions that affect relationships and the experience of the relationship is the focus, rather than the process of communicating it (Hecht, 1993).

Identity as a personal-relational attribute is defined as being enacted through communication with others (Hecht, 1993). This personal-relational construct is generated through interaction of four identity frames; personal, enacted, relational, and communal (Jung & Hecht, 2004). Personal identity describes personal motivations and expectations, meaning attributes for the self. Enacted identity realises the performance aspect of self as individuals express, interpret, and internalise feedback and images of themselves through communication with others. Relational identity emerges through defining themselves from communication within the relational expectations of others. And, the communal identity contextualises expectations of the community and culture within common goals, values, and attitudes (Hecht, 1993).

These four identity frames integrate through communication with others where the individual acts out, modifies, and internalises their identity accordingly, both reflecting and affecting a person's sense of self (Sherblom et al., 2022). Inconsistencies between the individual identity and how they are seen by others creates an identity tension, where the personal-relational identity inconsistency creates tension in the relationship (Jung & Hecht, 2004). Small amounts of tension may be temporarily masked by suppressing the identity frame in question, whereas greater adversity and stress results in increased tension within the personal-relational identity (Hecht, 1993; Jung & Hecht, 2004).

Whereas Buzzanell's CTR defines identity anchors of resilience as the communication processes occurring in the "discourses upon which individuals and their familial, collegial, and/or community members rely when explaining who they are for themselves and in relation to each other" (Buzzanell, 2010, p. 4), Hecht frames identity tension as resulting from these communication processes as a contextual influential relational attribute (Hecht, 1993).

CTR's emphasis on narrative construction can shape organisational identity by creating shared stories and meaning that define the organisation's' purpose and values (Buzzanell, 2010). During adversity and crises psychological process of reframing can help organisation's reframe challenges in a way that reinforces their organisational identity to promote resilience (Weick, 1995). Sense making can also further support organisational members to create understanding of their identity in this new challenge and within the organisation during adversity and crises (Maitlis et al, 2014). Thus linking CTR informs and supports organisational identity during adversity to re-establish and potentially recreate the two interactions reciprocally.

Another closely aligned organisational facet that is similarly create and recreated by its members is the organisational culture where culture influences how members communicate

and respond to challenges (Schein, 1992). Here shared meaning and the narratives constructed also contributes to the maintenance, recreation and development of the organisational culture (Smircich 1983). This organisational culture in turn then shapes the communicative norms to influence how members communicate to respond to adversity, to contribute towards furthering resilience, or eroding it (Eisenberg et. al, 2001).

To date there has not been any research carried out between employee identity within the context of communication resilience and how it relates to organisational culture.

4.8 Summary

In this chapter we have explored and summarised the broad literature on resilience across varying fields and discussed varying definitions and why a common definition remains elusive. There is however a commonality across fields whereby resilience requires an adverse event or chronic stressor, followed by positive adaptation, whether of the system or the individual in question. We have started with a broader ecological and engineering systems understanding of resilience before filtering down to individual human psychological resilience, and their respective constructs and definitions as we frame the current research within the individual communication resilience context. We have further drawn attention to the specific context of communication as a process, rather than a psychological trait, of enacting resilience. We highlighted two of the primary theories within the field of Communication with respect to resilience, Buzzanells' Communication Theory of Resilience and Afifi's Theory of Resilience and Relational Load. We then discussed one of the primary tenants of communication resilience, identity, as we discussed the role identity plays in both communication as a process and communication and as a relational attribute.

Whilst the study of resilience began within ecological and engineering systems, the shift to human psychological resilience has paved the way to shift the focus from a system in equilibrium, to trait based to the process of resilience within communication. Though a trait-based perspectives has long dominated studies of psychological resilience (Masten & Reed, 2002; Richardson, 2002), the more recent development of communication studies has reframed resilience as the development of interactions and processes through narrative (Buzzanell, 2010, 2019). Whilst resilience has a long history and has been extensively studied within varying fields of study spanning ecology (Holling, 1973), social-technology, safety management (Hollnagel et al., 2006), disaster recovery (Norris et al., 2008b), a range of organisational dimensions (Lengnick-Hall & Beck, 2005; McCann & Selsky, 2012; Weick & Sutcliffe, 2001), and psychology (Masten, 2001), including positive psychology (Luthans et al., 2006), resilience within the field of communication remains under researched, for both systems and the individual. This is likely due to communication resilience being a relatively recent conceptualisation (Buzzanell, 2010) with studies in this construct being minimal, specifically within an organisational context.

The definitions of resilience broadly remain varied across fields, matched with an equally varying number of constructs and measures. For the purposes of this research the communication theory of resilience definition, and measure, by Buzzanell will be used. CTR is rooted in the belief that rather than a trait, "resilience is developed, sustained and grown through discourse, interactions and material consideration" (Buzzanell, 2010, p. 1). This definition is situated most closely with the research carried out here in studying resilience as an enacted communicative process within the organisational landscape.

Within the post-COVID-19 pandemic landscape, global systems have shifted (Hoang et al., 2021; McElwee et al., 2020; Panwar et al., 2022), where the desirability and need for

resilience has become ever more prominent. For both systems (Amadi-Echendu & Thopil, 2020; Burke et al., 2021; Kubatko et al., 2023; Linkov et al., 2021; Priyadarshini & Abhilash, 2021) and individuals (Dolan & Brykman, 2022; Kaye-Kauderer et al., 2021; Mokline & Ben Abdallah, 2021). One such sector that has been under researched is the healthcare sector in New Zealand, and the general practitioner practice specifically. Though minimal analysis of the resilience within the GP sector as an industry has been carried out (Bascand, 2020), communication resilience at an individual level within this sector remains to be studied.

To date there appears to be minimal, if any, research that correlates how psychological resilience and communicative resilience are related or if they correlate with each other. Further, there does not seem to have been research on how each of these resilience constructs are associated with organisational identity or organisational culture and how they are related to each other. The research carried out here identifies a gap and makes a novel contribution to the field in exploring the relationship between psychological and communication resilience, and the association between enacted resilience through communication as it pertains to organisational culture and identity, within the GP healthcare sector in New Zealand.

CHAPTER FIVE

GP Front-Line Workers, Resilience & Research Gaps

5.1 Introduction

Though extensive studies have looked at resilience, from a systems, organisational and psychological resilience, organisational culture, and identity perspectives, in comparison to other fields that have studied resilience in varying constructs, relatively little has been done on the communicative process of resilience. Whilst organisational culture and identity are known to be associated with employee behaviour on several important key indicators, the natural bridge of psychological resilience informing and predicting the communicative resilience process, has to date not been explored. The seemingly natural inquiry of how, and to what extent, psychological resilience predicts communication resilience leaves a rich landscape to address.

This chapter brings together previous chapters on organisational culture, identity, and psychological and communication resilience to integrate and inform a synthesis towards a conceptual model of enquiry in combination. This chapter specifically frames this research within the GP practice primary healthcare sector in New Zealand, in a post-COVID-19 landscape. It further identifies gaps in the literature on these constructs and highlights the justification for the present research that addresses some of these gaps. Lastly, this chapter puts forward research questions based on the identified literature gaps.

A wide range of evidence has emerged that front-line workers in health care, such as GP doctors and nurses, suffered higher deterioration in psychological health during and after the COVID-19 pandemic compared to the general public (Chew et al., 2020; Shechter et al.,

2020). These front-line healthcare workers showed greater mental health deterioration with an increased rate of anxiety, burnout, depression, post-traumatic stress disorder (PTSD), with poorer mental health also impacting patient care and potentially increasing the risk of suicide (Reger et al., 2020; Serrano-Ripoll et al., 2020).

During crises and highly stressful times such as disasters, calamities and disease outbreaks, insufficient levels of resilience can leave individuals more prone to suffer adverse mental and psychological health and diminished coping capability (Duncan, 2020; Labrague et al., 2018). Research conducted during previous disease outbreaks such as SARS, Ebola and other chronic outbreaks has shown that healthcare workers who display higher psychological resilience in the face of these endemics and pandemics can continue caring for patients effectively, with psychological resilience playing a protective role against anxiety, burnout, depression, PTSD and potentially suicide, as well as declining patient care effectiveness (Baduge et al., 2018; De Brier et al., 2020). Findings during the COVID-19 pandemic have shown a similar pattern where healthcare workers with better mental health are safe guarded against anxiety, burnout, depression, PTSD and potentially suicide, as they display higher resilience (Blanco-Donoso et al., 2021; Chew et al., 2020). These studies have also consistently shown that factors such as social support, peer support, colleagues, family and friends help during these times of crises to sustain emotional balance and support individuals mental and psychological health in the face of threats, ill-health and other stress-inducing events (Nowicki et al., 2020). Similarly social support, family support and peer support from colleagues has been theorised in communication to be required in utilising networks towards enacted resilience as a process (Buzzanell, 2010). Despite an abundance of empirical studies on psychological resilience, there appears to be no studies to date that have synthesised and integrated this with communication resilience to explore the relationship between

psychological resources to establish mental resilience and the enacted process of communicating towards resilience.

5.2 General Practitioner doctors and COVID-19

Doctor burnout in general has been described as a global crises with fatigue and burnout contributing a significant risk to patient care, due to both a diminishing doctor pool as they retire and leave the profession as well as the significant burnt out mental state of those remaining (Sla, 2016; West et al., 2009). The resulting sustainability of the healthcare system in general has been raised under these circumstances as a result (Beech et al., 2019). Even before the COVID-19 pandemic the chronic stress and burnout burdening the primary care setting with doctor mental health had been highlighted across international literature (Association, 2019; Orton et al., 2012; Shanafelt et al., 2012). With primary care doctors showing a growing intention to leave the profession and increasing numbers retiring, this leaves those that remain at ever increasing pressures, putting them more at risk of burnout and also increasing the risk to patient care. This continuing shortage and significant projected increases in shortages to come, with this continuing trend, indicates an increasing likely crises point in primary care, at a global level (Beech et al., 2019; Walker et al., 2019).

The COVID-19 pandemic presented additional challenges globally for primary care GPs with rapid change, significantly increased infection risks due to direct contact with those patients who had succumbed to COVID-19, remote working in some cases, increased demand at unprecedented rates, reduction in norms and shortages in PPE and vaccines at times (Jefferson et al., 2022). Findings from previous disease outbreaks have shown multiple negative impacts on clinician psychological wellbeing, which is reflected in a 40% increase in mental health support sought during the pandemic (Badahdah et al., 2020; Du et al., 2020; Lai et al., 2020). An international integration and synthesis of expansive research for moderators

to stress for primary care doctors during COVID-19 revealed information seeking and social support from colleagues, friends and family as a significant moderator of stress that also contributed towards their wellbeing (Jefferson et al., 2022). Information seeking towards crafting normalcy and utilising networks has previously been conceptualised for the enacted process of communicating resilience (Buzzanell, 2010).

5.3 General Practitioner nurses and COVID-19

General practitioner nurses play a key role as primary care front-line staff. During COVID-19 they administered vaccinations, supported patient towards self-management of infection, mental and physical infection sequelae, ongoing symptoms from long COVID and continued to manage the ever increasing collateral damage of postponed general care (Flynn et al., 2020; Williams & Tsiligianni, 2020). Like doctors, nurses have had to deal with high workloads, rapidly changing conditions and persistent global uncertainty, similarly placing them at increased risks of burnout, anxiety, PTSD, mental injury and at risk of leaving the profession amongst growing shortages, culminating in significant harm to the individual, patient care and the profession (Greenberg, 2020; Walton et al., 2020). Adding to their unique stressors and workloads, primary care nurses continued seeing patients with a greater proportion remaining at face-to-face patient care during the pandemic compared to doctors, a reported 54% nurses compared to about 10% doctors consultations (Murphy et al., 2021). Reflecting on the common but also the distinct roles doctors and nurses play in primary care can contribute towards assessing and establishing GP strategies to support and retain these crucial staff. Though there is substantial literature on healthcare experiences during and following the pandemic, most of these have been in a hospital setting (Chandler-Jeanville et al., 2021; Murphy et al., 2021; Villar et al., 2021). Primary care nurses experienced differing

responsibilities as those compared within hospital settings and so could offer further varied insight to experiences during and after the pandemic. From studies that have looked at primary care nurses the most prominent stressor themes emerging highlighted feelings of being placed in physical and psychological risk due to shortages in PPE, compounded with a lack of time to prepare, rapidly changing clinical protocols and poor management support (Crowley et al., 2021; Gray & Sanders, 2020; Villar et al., 2021). Like their physician counterparts, these added stressors resulted in higher anxiety, depression, burnout and other negative mental health injuries (Crowley et al., 2021; Halcomb et al., 2020; Wanat et al., 2021).

5.4 Resilience in Primary Care Healthcare workers

Although the need to be resilient has gained increasing recognition within healthcare in general, in order to cope with increasing demands, difficult situations and to increase staff retention, resilience and its requirements within primary care remains relatively understudied (Luthar et al., 2000). Resilience in healthcare workers has predominantly been studied in relation to preventing burnout and dealing with workplace stress (Fertleman & Carroll, 2013). From a wider literature front, personal resilience expands past merely resilience to burnout to beyond survival in being able to make positive adaptions during adversity and drawing or developing on personal resources to do so (Jackson et al., 2007). Resilience within the workplace for primary healthcare workers could help protect workers from professional challenges such as difficult clinical issues or patients, organisational stressors like poor communication, administrative issues or interpersonal relationship conflicts or external stressors (Robertson et al., 2016), such as COVID-19 and its impact internally. Whilst some individuals may succumb to these ongoing and cumulative pressures to become overwhelmed, others will not only overcome these challenges but may also thrive in these circumstances. These latter individuals are those that display higher resilience, to be able to positively adapt

to challenges. Being able to implement strategies for building resilience may help support and combat and better prepare individuals for day-to-day stressors as well as future crises and disease outbreaks. Targeted interventions to build resilience could support not only improved mental health but also retain staff within the profession by building protective factors against the impact of chronic stress such as anxiety, burnout, depression, PTSD, diminished patient care and potential risk of suicide.

Communication plays a key role in resilience building through narrative construction, identity affirmation and social support (Buzzanell, 2010). CTR's emphasis on affirming identity anchors can promote GP practices in reinforcing their professional identities and roles to promote resilience (Buzzanell, 2010), which in turn reinforces and re-establishes organisational identity through congruence of aims and goals. CTR can then promote resilience among healthcare workers to help alignment of values for GP doctors and nurses to cope better in times of crises and adversity (Agarwal & Buzzanell, 2015). CTR's emphasis on communication processes can also improve team dynamics and collaboration, which in turn also enhances patient care (Bodenheimer & Sinsky, 2014). Communicative processes also promote organisational identity formation and re-establishment during times of disruption by narrative construction to shape the GP practices' organisational identity in creating shared stories, when sharing of how one is coping with colleagues, and meanings to redefine purposes and values in reframing, (Gioia & Chittipeddi, 1991), as would likely have been the case during COVID-19 and through the recovery period. This shared meaning through CTR processes would also contribute to the development and maintenance of the organisational culture within GP practices to maintain and reinforce cohesion for furthering resilience in high impact times (Smircich, 1983).

5.5 Research Gaps and Questions

As identified in the previous literature chapters, there has been minimal research on communication resilience within the organisational context. Communication resilience has been studied within national (Bean, 2018), community settings (Houston, 2018), family dynamics (Theiss, 2018), organisational settings (Buzzanell, 2018) and at the individual level (Afifi, 2018). No research has been done to date within the primary healthcare GP practice in New Zealand on how communication resilience is enacted through interpersonal means.

Primary care healthcare workers and resilience has also not been as extensively studied as their counterparts within the hospital setting (Grut et al., 2023; Schrimpf et al., 2023; Verhoeven et al., 2020). The research here explores and builds on current resilience literature by recruiting doctors and nurses from within GP practices in New Zealand as an exploratory study to establish the relationship between psychological resilience, communication resilience, organisational culture and identity.

In addition the interplay and relationship between psychological resilience and communication resilience, with the former providing the foundations for latter, has to date not been explored. This research contributes a synthesis to explore this interdisciplinary approach to resilience to inform and bridge the two fields.

And lastly, communication resilience has not to date been studied to establish its relationship to organisational culture and identity. We further the communication field and contribute an empirical exploration of these constructs to the literature.

Further, research that explores whether psychological resilience predicts communication resilience, and to what extent, has not been explored.

Therefore, this research seeks to fill the above gaps and to explore these constructs and the interplay between them, thus the first research question is posed:

RQ1: To what extent does psychological resilience predict communication resilience?

To date no research has explored the relationship and impact between psychological resilience and communication resilience. This research furthers and contributes to the communication literature by empirically exploring if and how psychological resilience predicts communication resilience.

RQ2: To what extent are communication resilience processes associated with organisational identity?

The process of enacting communication resilience has been linked to and informed by an individual's identity (Edwards, 2009; Mancini & Bonanno, 2006). Together with Buzzannell's CTR, and other groups related research has shown that individuals and organisations that collectively develop identity anchors, amongst other factors, by communicative processes, demonstrate greater resilience when undergoing adverse conditions and events (Afifi, 2018; Buzzanell, 2010; Buzzanell & Houston, 2018). To what extent communication resilience impacts, and how, employee identity has not yet been explored.

Organisational identity and culture are also closely linked. Hence this research also seeks to answer the following research question:

RQ3: To what extent are communication resilience processes associated with organisational culture?

This research will additionally address the link between communication resilience and culture. When an organisation is met with disruption and pressure, it is how the employees come together and behave that can make or break organisational resilience and survival. Specifically, it is the organisational culture that will enhance or erode the individuals resilience and dictate individual employee behaviour (Zellars et al., 2011). There appears to be no previous research examining the impact of communication resilience on organisational culture.

CHAPTER SIX

Methods

6.1 Introduction

This chapter outlines the quantitative research justification carried out here, methodology and analysis undertaken to answer the research questions. The chapter starts with an introduction to the axiology, research paradigm, methodology, ontology, and epistemology, followed by stating the researcher's standpoint for each. Research participant recruitment, demographics, procedures, data collection, methodology and data analysis undertaken are then described. The instruments to measure each construct are then discussed. This chapter concludes with a discussion of the confirmatory factor analysis used to validate each of the scales used in this study.

Having started my educational journey and subsequent career in the natural sciences, the natural tendency to observe, using quantitative data and analysis, and form deductive conclusions was engrained early on in this researcher's now inherent thought process. Embarking on research in the social sciences was a natural alignment given the pre-existing strong similarities between the natural and social scientific requirements and methodologies. Whilst the natural sciences look at things within the natural world at a more micro or molecular level and uses primarily deductive reasoning, the social sciences are more interested at the macro level of human interaction and often utilises inductive reasoning to form theories before testing them with deductive analysis.

The fundamental scientific curiosities and principles between the two follow the same three foundational principles of science. First, that the theory and hypothesis formed from this

must be testable. Here data is objectively collected through quantitative methods. Second, all research must be reproducible given the same parameters and methodologies by any other person. Third, causation is critical; rather than just correlation, allowing for describing and predicting subject matter through objective analysis (Croucher & Cronn-Mills, 2014). Though the research here does not directly answer to causation, it lays the initial foundations for future studies towards causation with empirical data for the association of the relevant constructs.

Research that looks to establish the lived experience would find value in subjective and qualitive methods where the interpretive views are given. For the natural and social scientist, generalisable findings that can be applied to the larger population as a whole are the types of problem these disciplines and approaches seek to find solutions and answers to. Here the samples collected are analysed using quantitative statistical inferences rather than qualitive interpretations of individuals.

As this research seeks to lay the foundations towards future generalisable conclusions and applications, drawing from a sample population, quantitative research and methodologies are applied to analyse the data to seek an objective truth, to be able to apply future causal laws and make data driven predictions. The objective, value free axiology is used to explain the relationships and associations of the researched constructs, so as to be able to draw generalised conclusions, to then be able to implement interventions for practical applications. As such the research presented here is based on a volunteer sample to empirically establish construct associations to lay preliminary future generalisable application. Generalisation can then be applied to a wider population for future adversities that organisations, societies, and nations may experience, and how psychological and communication resilience may be applied to better enable them to navigate through these times utilising these constructs. In contrast, qualitative methods draw on and analyse subjective lived experience realities which cannot provide

generalised conclusions and so does not allow for broader applications. Here an interpretive researcher would seek to draw subjective conclusions that cannot be generalised.

6.1.1 **Research Paradigm**

Scientific research paradigm consists of axiology, ontology, epistemology, and methodology, where the researcher takes a standpoint on each based on their own philosophical position and social scientific phenomenon viewpoint and so approach to the methodology used (Holden & Lynch, 2004). A paradigm is a model or world view one takes as a lens to describe an observable pattern held within defining limits. Each researcher is guided by their own approach when establishing the paradigm of the research they undertake (Žukauskas et al., 2018). It is the basis by which research strategy is decided, the research problem formulated. As well as the data collection, processing and analysis (Žukauskas et al., 2018). It was a call for greater alignment to scientific research within the social sciences that led to the acceleration and maturity in this field that has been established in current times beyond just philosophy (Mill, 1843).

Research paradigms, or the world view chosen by the researcher, is the development of research assumptions, within given knowledge and by its nature (Saunders et al., 2009). As research is born out of certain assumptions the researcher must make, a series of preliminary statements of reasoning, this will be based on the researcher's own pre-existing knowledge and insights (Žukauskas et al., 2018). Different researchers, in different fields, will have different sets of assumptions they a make about the same subject matter and their assumptions of the nature of truth, knowledge and its acquisition (Cohen et al., 2002). A large number of social scientists align with the determinism paradigm, where by people's behaviour is predominantly

seen as influenced by internal observable factors understood within the context of identifiable external causes (Croucher & Cronn-Mills, 2014).

Each researcher's own paradigm then allows them to generate ideas into knowledge within defined contexts, whichever one being that the researcher identifies with significantly impacting the paradigm presented (Doyle et al., 2009). There are four primary paradigms within which research is conducted; positivist, interpretivist, pragmatist, and realist (Žukauskas et al., 2018). Positivism claims there is a single truth that can be observed and analysed objectively. Interpretivists, or constructivism, claim the opposite where many truths can co-exist. Pragmatism is fact based where the truth is what is currently in action and always changing. Realists have an objective reality that is independent of perception (Žukauskas et al., 2018). Each paradigm in turn is constructed by the researcher based on differing epistemology (how we acquire knowledge about what we know), ontology (nature of perceived reality), axiology (the values we hold and judgements in relation to it) the methodologies the researcher will employ based on these factors that define their paradigm (Hanson et al., 2005).

It has been argued that the natural science's specialist methodologies that take a more disciplined approach and the orders applied to understanding research, are able to draw conclusions that are better suited to formulating 'innovations' and 'discoveries' compared to the social sciences when multi-paradigm characteristics are applied (Norkus, 2006). The research presented here therefore aligns itself with a single paradigm to better allow for novel discoveries within its chosen context. Giner et al. describe this scientific research not as a methodology but in the approach, process and implementation which directs the research in a particular direction (Gliner et al., 2011). The three ways in which order is obtained to the scientific research direction in understanding research paradigms is through epistemology, ontology and methodology (Easterby-Smith et al., 2008).

The research presented here takes a positivist paradigm approach as it seeks to establish findings from an objective viewpoint to draw generalisable conclusions.

6.1.2 Methodology

Methodology is the set of methods and rules on the principles, theories and values underlying the approach to the research that is carried out (Somekh & Lewin, 2005). It is the general approach and structure, influenced by the specific paradigm where the perceptive taken develops. Methodology is the research paradigm foundations where the method includes specific systematic ways, procedures and tools towards data collection and analysis (Mackenzie & Knipe, 2006). Put simply, it is the combination of techniques applied by the scientist to explore the different areas of studies (Žukauskas et al., 2018). Whilst it is the paradigm that raises the scientific problem to research, it is the method applied, whether qualitative or quantitative, that is used to answer or solve the problem identified, for a period of time (Kuhn, 1997).

This research employs the purist quantitative methods that are best aligned to the positivist paradigm, using surveys to measure the value free constructs. Positivism is directly related to objectivism where the key desirable is general information using large scale data collection (Cooper & Schindler, 2014).

6.1.3 Ontology

Ontology is the theory of existence and answering ‘what exists’ and is asserted via a particular scientific paradigm in conceptualising the nature of truth (Delanty & Strydom, 2003; Hitchcock & Hughes, 2002). It is the set of general assumptions made to perceive and understand the real nature of reality (Žukauskas et al., 2018). Ontology is based on the

assumptions the researcher makes about the nature of reality in being objective or subjective and are usually associated with real existence and operation matters with varying understandings about reality (Denzin, 1994). Differences in assumptions arise associated with varying reality construction techniques lead to different ontological standpoints. The most common ontological questions asked by the researcher are "what are the things in reality?" and "how do they happen?" (Denzin, 1994). The research carried out here takes the ontological view that reality is objective and is a single reality.

6.1.4 **Epistemology**

Epistemology is the general set of assumptions and parameters necessary in order to explore and question the nature between the researcher and the respondent to establish the relationship between them and can take varying forms of reality (Žukauskas et al., 2018). It is varying forms of knowledge about reality to ascertain the nature of relationships made through value distancing to find out what exists in reality and how they occur (Denzin, 1994). Epistemology is research which separates reasonable assurance from opinion by clarifying the possibilities of knowledge, the borders within which it exists, its origins and structure, rules applied and the ways that knowledge can be obtained, confirmed, and modified to establish the reality within which it exists (Wiersma, 2009). The epistemological viewpoint for this research is that the acquisition of knowledge can be measured objectively, hence best suited to quantitative methods, that are value free.

6.1.5 **Current research and Research Questions**

The research presented here utilises confirmatory analysis, correlation, and regression to answer three major questions, based on front-line GP doctors and nurses during the COVID-19 pandemic in New Zealand:

To what extent does psychological resilience predict communication resilience?

To what extent are communication resilience processes associated with organisational identity?

To what extent are communication resilience processes associated with organisational culture?

To answer these questions, a survey was designed with appropriately chosen scales to measure each of the constructs of Organisational Culture (OC), Organisational Identity (OI), Communication Resilience (CPR) and Psychological Resilience (RSA). This study recruited participants from New Zealand General Practitioner (GP) doctors and nurses. To date there has not been any studies that have sought to answer the above research questions among NZ GP doctors and nurses. The previous chapters two, three and four reviewed the literature on organisational culture, organisational identity and resilience respectively. The gaps in the research and justification for the research questions here were subsequently discussed in chapter five.

6.2 Participants and procedure

6.2.1 **Participants**

Participants were obtained through liaison with the clinical director of a large regional General Practice (GP) healthcare provider. The clinical director put out a call for volunteer participants within GP doctors and nurses to anonymously participate in the one-off, online survey. Participants were not asked to identify themselves in order to participate in the survey and were offered an anonymised copy of research findings if they provided their email address

at the end of the survey. The survey had to be filled to completion to be able to be submitted via the survey platform Survey Monkey. The clinical director also included the call for participants and survey link across several GP practice online platforms including newsletters and dedicated GP social media platforms, like Facebook, with repeat calls put out over three newsletter cycles in consecutive months. A call for participants was also put out across several internal nurse's networks via the national director of nursing.

A total of 223 completed surveys were collected over a three-month period (n=223). Individuals were recruited between December 2023 and February 2024. The survey consisted of 11 demographic questions, and 126 items to measure organisational culture, organisational identity, communication resilience and psychological resilience. All measures were distributed via the online survey in English.

Participants were asked 11 demographic questions of: age, gender, job-title, ethnicity, time in profession, time at current employer, region of employment, city of employment, if they qualified in NZ or overseas, where they qualified if overseas, and if they were front-line workers during the COVID-19 pandemic. Participants were only included if they answered 'yes' to the last question.

Of the 11 demographics only age and tenure were used for comparative purposes due to a lack of sample size difference for the remaining 10. There were insufficient male participants, $n = 20$ (9%), for comparative purposes, which were eliminated from final analysis. The final sample size analysed were females n = 203. Doctors were also similarly proportioned $n = 20$ (9%) with the remaining being nurses and were excluded from analysis due to insufficient sample size. The final sample size analysed were nurses $n = 203$. Ethnicity was also predominantly NZ European with non-NZ European $n = 48$ (21%) which did not show any statistical influence and so data was not ethnically segregated in analysis. Similarly time in profession, time in current employment, place of qualification, region and city of

employment did not show any statistical significance in difference and so were not segregated for analysis. The mean and standard deviations for age, tenure and time since qualifying are shown in Table 1 below for males and females respectively.

Table 1 Means, standard deviations and sample size of participants between male and females

Male	*M*	*SD*	*n*
Age	45.30	14.31	20
Time in profession	19.40	14.68	20
Current tenure	11.30	11.30	20

Female	*M*	*SD*	*n*
Age	44.76	12.19	203
Time in profession	19.31	12.67	203
Current tenure	8.92	9.37	203

6.2.2 **Procedure**

Ethics approval was obtained through the Massey University online application process and was risk assessed as low risk. Survey questions and demographics were constructed using Survey Monkey. Participants were recruited through online platforms with the link to the Survey Monkey questionnaire posted on Facebook, LinkedIn, and Instagram. Participants were all recruited from within New Zealand only.

6.2.3 **Increasing survey response rates**

It has been argued (Dillman, 2000) that in order to maximise response rates for survey participation and completion, respondent motivation should be based on social exchange theory (Maus, 1925). Social exchange theory, or social behaviour as exchange (Homans, 1958)

describes the actions contingent on the rewarding reactions from others where behaviour is exchanged voluntarily from motivated individuals in anticipation of the returns they are expecting to receive in exchange (Blau, 1959). The following was included as part of the social exchange motivation to increase response rates in a survey preceding introduction, "If you would like the overall findings to be shared with you, please provide your email address at the end of the survey."

It has been further suggested that a researcher should communicate three critical points to the respondents who participate; the reward, time to completion, and trust establishment. The reward included is mentioned above.

Time for completion was also included in the survey preceding introduction, with the following included, "The following survey will take approximately 25mins to complete." The survey was designed to be as easy as possible to fill in by accessing with a single click link at a time of the participants choosing, and as a one-off, online participation for complete data collection. As doctors and nurses may work varying shifts and locations, the flexibility and ease of access from anywhere at any time that was convenient to them was anticipated to increase participation.

Trust was anticipated to be built by making statements of confidentiality and the ability to withdraw at any time with the inclusion of the following, also in the survey preceding introduction, "Your participation in this study is greatly appreciated. You can withdraw from participating at any time. Results are anonymously submitted to the platform."

6.3 Data analysis

As 18 subscales were used in the research, organisational identity (1), organisational culture (6), Communication resilience (5), and psychological resilience (6), using the 10 cases of data per subscale sample size guide (Field, 2013), the research needed a sample size of at least 180 participants. As the total number of participants was 223, there was an adequate sample size to carry out correlation and regression studies. 20 male samples were excluded as the participants were predominantly female and representative comparisons could not be made. The sample size analysed was 203.

6.3.1 Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis (CFA) was run with full item scales. As the Psychological Resilience Adult Scale had not been previously tested in a New Zealand population, and in order to validate the other scales for this population, items were subjected to CFA and re-specified (identified and removed) if measures did not perform as designed (Byrne, 2001). Hypothesis testing preparation was carried out by conducting a CFA on the measures. CFA was run using AMOS maximum parameter estimate algorithms. The recommended standards of fit were used as follows: comparative fit index (CFI) $\geq$ .96, goodness of fit index (GFI) $\geq$ .90, and root mean square error approximation (RMSEA) $\leq$ .08 (Byrne, 2001).

Items were eliminated sequentially based on regression weights and standard residual error by reviewing the resulting matrix systematically at each elimination. Elimination was carried out and items removed that indicated the greatest source of statistical noise or error from the constructs. This was achieved by reviewing the standard residual error matrix to prioritise item removal that caused the least amount of significant residual error.

6.4 Instruments

6.4.1 Organisational Culture

An extended Organisational Culture Survey (OCS) from the original (Glaser et al., 1987) was used with 36 items that measure organisational rules, assumptions, beliefs, rituals, myths and values across six subscales; teamwork, morale, information flow, involvement, supervision, and meetings (Rubin et al., 1994). The instructions given preceding the questions for this OCS scale were *"Choose the number that best represents the extent to which the following statements apply to you".* This measure uses a five-point Likert-scale ranging from *to a very little extent* (1) to *to a very great extent* (5). Sample items include 'People I work with function as a team ', 'I get the information I need to do my task well', 'My opinions count in this practice', 'My manager is a good listener', 'Time in meetings is time well spent' and 'This practice respects its workers'. This extended OCS has previously shown reliability of Cronbach's α between .81 to .94, showing good to very high internal consistency (Schrodt, 2002). A one-factor, second-order model was tested in which a higher-order factor of 'organisational culture' pointed to six first-order factors (corresponding to the six organisational culture dimensions), which in turn pointed to the items assessing each of the six dimensions.

The modified OCS scale yielded a good model fit with Cronbach's α between .83 to .92 and χ^2 (174) = 274.62, $p < .0001$, CFI = .97, GFI = .90, RMSEA = .05.

6.4.2 Organisational Identity

The Organisational Identity Questionnaire (OIQ) (Cheney, 1983a) has 25 items consisting of three identifiable components of membership, loyalty and similarity that investigates the linkage between the "active process by which individuals link themselves to

elements in the social scene" (Cheney, 1983a, p. 342) of the organisation, showing a unidimensional measure. Items 18, 19 and 22 of this scale were reverse coded. The instructions given preceding the questions for this OIQ scale were *"Think of your role as a member of your workplace. For each item below select the answer that best represents your belief about or attitude toward the workplace."* This scale was scored using a seven-point Likert-scale ranging from *a very strong disagreement* (1) to *very strong agreement* (7). Sample items include 'I find it easy to identify with this practice'. 'I would probably continue working for my practice even if I didn't need the money', and 'I have a lot in common with others employed by this practice.' The OIQ has previously shown reliability of Cronbach's α .94 (Cheney, 1983a) and .96 (Potvin, 1991) which shows very high internal consistency. A one-factor second order model was tested in which the organisational identity construct pointed at the unidimensional items measuring it. Whilst this scale measure's organisational identity through the active process by which the individual links themselves with their organisation's values, identity and image through their own respective loyalty, similarity and membership, the OIC has been shown to be unidimensional with longitudinal and cross-sectional data (Miller et al., 2000).

The modified OIQ scale yielded a good model fit with Cronbach's α .88 and χ^2 (135) = 231.23, $p < .0001$, CFI = .96, GFI = .90, RMSEA = .06.

6.4.3 Communication Resilience Process

The Communication Resilience Process Scale (CRPS) has 32 items (Wilson et al., 2021). CRPS assess how individuals enact resilience through communication language choices and interactions over time. The enacted components of CPRS comprise of five identifiable components consisting of crafting normalcy, affirming identity anchors, maintaining and using social networks, constructing alternative logic and foregrounding productive action while

backgrounding negative feelings (Wilson et al., 2021). The instructions given preceding the questions for this CRPS scale were *"Think about the post-COVID-19 pandemic and how it has affected your daily life. Respond to each item on a 6-point scale (1 = Strongly Disagree, 6 = Strongly Agree) in terms of how well the item describes how you have responded since the pandemic."* A six-point Likert-scale was used to score responses ranging from *strongly disagree* (1) to *strongly agree* (6). Sample items include 'I try to keep life as normal as possible', 'I started to build new routines', 'I maintained key aspects of my identity amidst everything that was going on', 'I sought guidance from people I know', 'I found a different way to make sense of the difficult situation', and 'Despite how I was feeling, I chose to focus on things that were productive'. The CRPS has previously shown a reliability of Cronbach's α between .82 to .91 for the varying subscales (Wilson et al., 2021), showing good to very high internal consistency. A one-factor, second-order model was tested in which a higher-order factor of 'communication resilience' pointed to five first-order factors (corresponding to the five resilience processes), which in turn pointed to the items assessing each of the five processes.

The modified CRPS scale yielded an acceptable model fit with Cronbach's α between .73 to .81 for all but crafting normalcy which showed a Cronbach's α of .66 with poor internal consistency. χ^2 (160) = 244.21, $p < .0001$, CFI = .95, GFI = .90, RMSEA = .05.

6.4.4 Psychological Resilience Adult Scale

The Resilience Scale for Adults (RSA) has 33 items (Friborg et al., 2003) with identifiable components consisting of family cohesion, social competence, planned future, social resources, structure and positive self (Friborg et al., 2003). The instructions given preceding the questions for this RSA scale were *"Choose the number that best represents the*

extent to which the following statements apply to you." This measure uses a five-point Likert-scale ranging from *strongly disagree* (1) to *strongly agree* (5). Sample items include 'I feel very happy with my family', 'I'm good at meeting new people', 'I know how to reach my future goals', 'When needed, I always have someone who can help me', 'I prefer a plan before starting with new things', and 'I trust completely my judgements and decisions'. The RSA has previously shown a reliability of Cronbach's α between .83 to .90, showing good to very high internal consistency respectively, for four of the components and .67 for the component of 'structure', indicating poor internal consistency (Friborg et al., 2003). A one-factor second order model was tested in which the higher-order 'psychological resilience' construct pointed at the six subscales of psychological resources, with each subscale in turn pointing to the items measuring it.

The modified RSA scale yielded between acceptable to good internal consistency Cronbach's α between ,70 to .85 for four of the six sub-scales, with poor internal consistency for social competence and structure with Cronbach's α .65 and .48 respectively, and χ^2 (194) = 283.44, $p < .0001$, CFI = .95, GFI = .90, RMSEA = .05.

A summary of the CFA instruments is shown in Table 2 below, with the initial items fit values, items removed due to significant residual errors and items fit with problematic scales removed.

Table 2 CFA for instruments used

Confirmatory factor analysis of instruments

Instrument	Initial Fit GFI	Initial Fit RMSEA	Initial Fit CFI	Initial Fit χ^2	Items causing statistically significant residual error	Fit for problematic items removed GFI	Fit for problematic items removed RMSEA	Fit for problematic items removed CFI	Fit for problematic items removed χ^2
Organistional Identity	.81	.08	.89	$\chi^2(275, N= 223) = 662.71, p < .0001$	4, 6, 11, 13, 14, 19, 24	.90	.06	.96	$\chi^2(135, N= 223) = 231.23, p < .0001$
Organistional Culture	.75	.08	.90	$\chi^2(579, N= 223) = 1331.13, p < .0001$	2, 3, 6, 8, 14, 15, 22, 24, 25, 26, 27, 29, 31, 34, 36	.90	.05	.97	$\chi^2(174, N= 223) = 274.62, p < .0001$
Communication Resilience	.69	.09	.73	$\chi^2(454, N= 223) = 1351.55, p < .0001$	1, 2, 3, 4, 5, 12, 14, 19, 24, 26, 27, 32	.90	.05	.95	$\chi^2(160, N= 223) = 244.21, p < .0001$
Psychological Resilience	.77	.07	.84	$\chi^2(480, N= 223) = 1066.70, p < .0001$	5, 7, 10, 11, 16, 18, 21, 23, 24, 28, 29	.90	.05	.95	$\chi^2(194, N= 223) = 283.44, p < .0001$

6.5 Research analysis

6.5.1 **Correlation**

The research carried out was survey based using a 5-to-7-point Likert scale. This data is an interval scale as it is categorised, ranked in order and as the scales points are equidistant apart. Interval data correlation analysis is generally carried out using Pearson's correlation (Field, 2013, p. 344). To answer RQ1: To what extent does psychological resilience predict communication resilience? As two variable's relationship is explored, bivariate correlation was carried out using Pearson's correlation coefficient (r) two-tailed test with 95% confidence intervals. Pearson's correlation was used as it uses a standardised covariance allowing for correlation between two variables to be analysed and quantifies the relationship and strength between two variables. It provides direction of relationship as either negative or positive but does not establish causation.

6.5.2 **Regression**

Regression assesses the strength between variables as they are associated with each other using a linear model fit to predict generalisable predictions of future interactions between the variables in direction and strength. Multiple regression analysis was conducted as interval data was used to predict the outcome from given predictors as well and the strength of the relationship between them. To answer RQ2: To what extent are communication resilience processes associated with organisational identity? and RQ3: To what extent are communication resilience processes associated with organisational culture? Multiple regression was run for each factor predicting the respective variable.

CHAPTER SEVEN

Analysis and Results

7.1 Introduction

This chapter reports results of the thesis. This thesis posed three research questions:

RQ1: To what extent does psychological resilience predict communication resilience?

RQ2: To what extent does communication resilience impact organisational identity?

RQ3: To what extent are communication resilience processes associated with organisational culture?

Prior to answering the research questions, Pearson's product-moment correlations were conducted on all study variables (Field, 2013). As all data are interval level, Pearson's correlation is appropriate. The means and standard deviations for all study constructs are presented in Table 3 below, while the correlation results are presented in Table 4.

As multiple regression was conducted, the degree of multicollinearity was assessed with the Variance Inflation Factor (VIF). It has been stated by O'Brien, VIFs of 4 or higher indicate multicollinearity issues in the regression model (O'Brien, 2007). All models tested in this study, as shown in tables 5 through table 16 below, had a VIF under 3 and therefore indicated no multicollinearity issues for any of the models and fits tested.

Table 3 Table of means and standard deviations for variables

	M	*SD*	*n*
Identity	3.22	.79	203
Crafting normalcy	2.10	.69	203
Identity Anchors	2.10	.68	203
Networks	2.33	.82	203
Alternaitve logic	2.31	.70	203
Foregrounding actions	2.03	.68	203
Family cohesion	2.08	.73	203
Social competence	2.11	.65	203
Planned future	2.06	.68	203
Social resources	1.89	.61	203
Structure	1.90	.53	203
Positive self	2.01	.55	203
Teamwork	2.30	.74	203
Morale	2.56	1.00	203
Information	2.82	.88	203
Involvement	2.82	1.04	203
Supervision	2.44	1.22	203
Meetings	2.79	.88	203

Table 4 Pearson's correlation table of all variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Identity	-	.264**	0.128	0.105	.232**	.263**	.149*	0.1	.163*	.155*	.172*	.195**	.720**	.809**	.693**	.734**	.632**	.717**
Crafting normalcy		-	.306**	.322**	.583**	.497**	.153*	0.132	0.01	.142*	.193**	.150*	.309**	.327**	.306**	.300**	.202**	.295**
Identity Anchors			-	.533**	.577**	.614**	.327**	.264**	.338**	.369**	.217**	.440**	0.13	.170*	.205**	.209**	0.065	.247**
Networks				-	.470**	.507**	.477**	.333**	.201**	.469**	.187**	.345**	.171*	.218**	.201**	.223**	.171*	.168*
Alternaitve logic					-	.743**	.286**	.237**	0.13	.240**	.283**	.395**	.251**	.251**	.270**	.283**	0.134	.258**
Foregrounding actions						-	.335**	.298**	.213**	.353**	.307**	.463**	.214**	.262**	.268**	.303**	.153*	.259**
Family cohesion							-	.480**	.386**	.624**	.382**	.498**	0.125	.170*	.159*	.168*	0.113	.138*
Social competence								-	.433**	.614**	.438**	.493**	0.137	.139*	0.091	0.117	0.044	0.052
Planned future									-	.460**	.456**	.610**	.182**	.201**	.240**	.189**	.211**	.195**
Social resources										-	.455**	.545**	.181**	.198**	.184**	.212**	.141*	.154*
Structure											-	.583**	.161*	.151*	.166*	0.097	0.117	.167*
Positive self												-	.175*	.215**	.290**	.235**	0.121	.195**
Teamwork													-	.713**	.647**	.622**	.581**	.642**
Morale														-	.862**	.814**	.821**	.806**
Information															-	.793**	.728**	.801**
Involvement																-	.715**	.794**
Supervision																	-	.674**
Meetings																		-

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

7.2 Research Question One – To what extent does psychological resilience predict communication resilience?

This thesis uses multiple regression analyses to answer each research question. Regression assesses the strength between variables as predictors and outcomes using a linear model fit so as to predict generalisable predictions of future interactions between the variables in direction and strength. Multiple regression analysis was conducted as interval data were used to predict the outcome from given predictors as well and the strength of the relationship between them.

To answer RQ1, five multiple regressions were conducted. Each multiple regression predicted a separate factor of communication resilience. There are five factors of communication resilience: crafting normalcy, identity anchors, networks, alternative logic, and foregrounding actions. The following predictor variables were entered: Model 1) age and organisational tenure, and in Model 2) factors of psychological resilience: family cohesion, social competence, planned future, social resources, structure, and positive self. Results are shown in Tables 5 to 9 below.

For Table 5 in model 1, age and organisational tenure were entered (R^2 = .01). In model 2, family cohesion, social competence, planned future, social resources, structure, and positive self were added (R^2 = .07). This model was a significant improvement over model 1 (ΔF = 2.24, $p < .001$). As shown in model 2, in Table 5, planned future within psychological resilience had a significant negative impact on communication resilience normalcy (b = -.18, $p < .05$).

Table 5 Regression table for Psychological Resilience predicting Communication Resilience: normalcy

Regression Model Predicting Communication Resilience: Normalcy

Regressor	Model 1	Model 2	VIF
Intercept	2.03	1.66	
Tenure	-.14	.08	
Age	.09	-.06	
Family Support		.10	1.82
Social competence		.06	1.81
Planned future		-.18*	1.72
Social resources		-.03	2.25
Structure		.15	1.65
Positive self		.11	2.19
F	.67	1.85	
ΔF	.54	2.24**	
R^2	.01	.07	
R^2_{adj}	-.00	.03	

Note: * $p < .05$, ** $p < .001$.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2 = *multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 6 in model 1, age and organisational tenure were entered (R^2 = .01). In model 2, family cohesion, social competence, planned future, social resources, structure, and positive self were added (R^2 = .23). This model was a significant improvement over model 1 (ΔF = 9.64, p < .001). As shown in model 2, in Table 6, positive self within psychological resilience had a significant positive impact on communication resilience identity anchors (b = .34, p < .001).

Table 6 Regression table for Psychological Resilience predicting Communication Resilience: identity anchors

Regression Model Predicting Communication Resilience: Identity anchors

Regressor	Model 1	Model 2	VIF
Intercept	2.31	.92	
Tenure	.10	.02	
Age	-.12	-.01	
Family Support		.08	1.82
Social competence		-.03	1.81
Planned future		.10	1.72
Social resources		.17	2.25
Structure		-.11	1.65
Positive self		.34**	2.19
F	.46	7.37**	
ΔF	1.01	9.64**	
R^2	.01	.23	
R^2_{adj}	-.01	.20	

Note: * p < .05, ** p < .001.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2 = *multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 7 in model 1, age and organisational tenure were entered ($R^2 = .01$). In model 2, family cohesion, social competence, planned future, social resources, structure, and positive self were added ($R^2 = .29$). This model was a significant improvement over model 1 ($\Delta F = 13.01$, $p < .001$). As shown in model 2, in Table 7, family cohesion and social resources within psychological resilience had a significant positive impact on communication resilience networks ($b = .29$, $p < .001$) and ($b = .28$, $p < .05$) respectively.

Table 7 Regression table for Psychological Resilience predicting Communication Resilience: networks

Regression Model Predicting Communication Resilience: Networks

Regressor	Model 1	Model 2	VIF
Intercept	2.70	.97	
Tenure	.12	.03	
Age	-.17	-.02	
Family Support		.29**	1.82
Social competence		.04	1.81
Planned future		-.10	1.72
Social resources		.28*	2.25
Structure		-.11	1.65
Positive self		.16	2.19
F	.95	10.08**	
ΔF	.46	13.01**	
R^2	.01	.29	
R^2_{adj}	.00	.27	

Note: * $p < .05$, ** $p < .001$.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2 = *multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 8 in model 1, age and organisational tenure were entered ($R^2 = .00$). In model 2, family cohesion, social competence, planned future, social resources, structure, and positive self were added ($R^2 = .20$). This model was a significant improvement over model 1 ($\Delta F = 8.06$, $p < .001$). As shown in model 2, in Table 8, positive self within psychological resilience had a significant positive impact on communication resilience predicting logic ($b = .41$, $p < .001$).

Table 8 Regression table for Psychological Resilience predicting Communication Resilience: predicting logic

Regression Model Predicting Communication Resilience: Predicting logic

Regressor	Model 1	Model 2	VIF
Intercept	2.32	1.06	
Tenure	-.06	-.11	
Age	.02	.11	
Family Support		.14	1.82
Social competence		.05	1.81
Planned future		-.21	1.72
Social resources		-.04	2.25
Structure		-.08	1.65
Positive self		.41**	2.19
F	.18	6.10**	
ΔF	.01	8.06**	
R^2	.00	.20	
R^2_{adj}	-.01	.17	

Note: * $p < .05$, ** $p < .001$.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2 = *multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 9 in model 1, age and organisational tenure were entered (R^2 = .01). In model 2, family cohesion, social competence, planned future, social resources, structure, and positive self were added (R^2 = .26). This model was a significant improvement over model 1 (ΔF = 10.86, $p < .001$). As shown in model 2, in Table 9, positive self within psychological resilience had a significant positive impact on communication resilience foregrounding (b = .42, $p < .001$).

Table 9 Regression table for Psychological Resilience predicting Communication Resilience: foregrounding

Regression Model Predicting Communication Resilience: Foregrounding

Regressor	Model 1	Model 2	VIF
Intercept	2.14	.68	
Tenure	-.11	-.17	
Age	.00	.01	
Family Support		.10	1.82
Social competence		.04	1.81
Planned future		-.15	1.72
Social resources		-.09	2.25
Structure		.03	1.65
Positive self		.42**	2.19
F	1.11	8.51**	
ΔF	.98	10.86**	
R^2	.01	.26	
R^2_{adj}	.00	.23	

Note: * $p < .05$, ** $p < .001$.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2 = *multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

7.3 Research Question Two – To what extent are communication resilience processes associated with organisational identity?

To answer RQ2, a multiple regression was conducted. The multiple regression predicted organisational identity. Organisational identity was modelled as a single factor. The following predictor variables were entered: Model 1) age and organisational tenure, and in Model 2) factors of communication resilience: crafting normalcy, identity anchors, networks, alternative logic, and foregrounding actions. Results are shown in Table 9 below.

For Table 10 in model 1, age and organisational tenure were entered (R^2 = .03). In model 2, normalcy, identity anchors, networks, logic and foregrounding were added (R^2 = .12). This model was a significant improvement over model 1 (ΔF = 3.87, p < .001). As shown in model 2, in Table 10, normalcy within communication resilience had a significant positive impact on organisational identity (b = .17, p < .05).

Table 10 Regression table for Communication Resilience predicting Organisational Identity

Regression Model Predicting Organisational Identity

Regressor	Model 1	Model 2	VIF
Intercept	3.53	2.8	
Tenure	-.12	-.06	
Age	-.06	-.09	
Normalcy		.17*	1.63
Identity Anchors		-.04	1.87
Networks		-.05	1.5
Logic		.03	2.86
Foregrounding		.19	2.72
F	2.95	3.66**	
ΔF	1.99	3.87**	
R^2	.03	.12	
R^2_{adj}	.02	.09	

Note: * p < .05, ** p < .001.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2 = *multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

7.4 Research Question Three – To what extent are communication resilience processes associated with organisational culture?

To answer RQ3, six multiple regressions were conducted. Each multiple regression predicted a separate factor of organisational culture. There are six factors of organisational culture: teamwork, morale, information, involvement, supervision and meetings. The following predictor variables were entered: Model 1) age and organisational tenure, and in Model 2) factors of communication resilience: crafting normalcy, identity anchors, networks, alternative logic, and foregrounding actions. The following predictor variables were entered: Model 1) age and organisational tenure, and in Model 2) factors of communication resilience: crafting normalcy, identity anchors, networks, alternative logic, and foregrounding actions. Results are shown in Tables 11 to 16 below.

For Table 11 in model 1, age and organisational tenure were entered (R^2 = .01). In model 2, normalcy, identity anchors, networks, logic and foregrounding were added (R^2 = .14). This model was a significant improvement over model 1 (ΔF = 5.62, p < .001). As shown in model 2, in Table 11, normalcy within communication resilience had a significant positive impact on organisational culture morale (b = .26, p < .05).

Table 11 Regression table for Communication Resilience predicting Organisational Culture: morale

Regression Model Predicting Organisational Culture Morale

Regressor	Model 1	Model 2	VIF
Intercept	3.10	1.82	
Tenure	.01	.01	
Age	.01	.01	
Normalcy		.26*	1.63
Identity Anchors		-.02	1.87
Networks		.09	1.50
Logic		-.01	2.86
Foregrounding		.10	2.72
F	1.45	4.47**	
ΔF	.65	5.62**	
R^2	.01	.14	
R^2_{adj}	.00	.11	

Note: * p < .05, ** p < .001.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2=*multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 12 in model 1, age and organisational tenure were entered (R^2 = .01). In model 2, normalcy, identity anchors, networks, logic and foregrounding were added (R^2 = .13). This model was a significant improvement over model 1 (ΔF = 5.02, p < .001). As shown in model 2, in Table 12, normalcy within communication resilience had a significant positive impact on organisational culture information (b = .22, p < .05).

Table 12 Regression table for Communication Resilience predicting Organisational Culture: information

Regression Model Predicting Organisational Culture Information

Regressor	Model 1	Model 2	VIF
Intercept	.30	.38	
Tenure	.00	.04	
Age	-.12	-.12	
Normalcy		.22*	1.63
Identity Anchors		.04	1.87
Networks		.04	1.50
Logic		.04	2.86
Foregrounding		.08	2.72
F	1.29	3.99**	
ΔF	.52	5.02**	
R^2	.01	.13	
R^2_{adj}	.00	.09	

Note: * p < .05, ** p < .001.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2=*multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 13 in model 1, age and organisational tenure were entered (R^2 = .03). In model 2, normalcy, identity anchors, networks, logic and foregrounding were added (R^2 = .15). This model was a significant improvement over model 1 (ΔF = 5.55, p < .001). As shown in model 2, in Table 13, normalcy within communication resilience had a significant positive impact on organisational culture involvement (b = .19, p < .05).

Table 13 Regression table for Communication Resilience predicting Organisational Culture: involvement

Regression Model Predicting Organisational Culture Involvement

Regressor	Model 1	Model 2	VIF
Intercept	3.54	2.16	
Tenure	.01	.01	
Age	.01	.01	
Normalcy		.19*	1.63
Identity Anchors		.00	1.87
Networks		.01	1.50
Logic		.04	2.86
Foregrounding		.15	2.72
F	2.52	4.77**	
ΔF	1.84	5.55**	
R^2	.03	.15	
R^2_{adj}	.02	.12	

Note: * p < .05, ** p < .001.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2=*multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 14 in model 1, age and organisational tenure were entered ($R^2 = .02$). In model 2, normalcy, identity anchors, networks, logic and foregrounding were added ($R^2 = .08$). This model was a significant improvement over model 1 ($\Delta F = 2.46$, $p < .001$). As shown in model 2, in Table 14, normalcy within communication resilience had a significant positive impact on organisational culture supervision ($b = .17$, $p < .05$).

Table 14 Regression table for Communication Resilience predicting Organisational Culture: supervision

Regression Model Predicting Organisational Culture Supervision

Regressor	Model 1	Model 2	VIF
Intercept	3.30	2.38	
Tenure	.01	.01	
Age	.01	.01	
Normalcy		.17*	1.63
Identity Anchors		-1.04	1.87
Networks		1.48	1.50
Logic		-.26	2.86
Foregrounding		.75	2.72
F	2.32	2.44**	
ΔF	.53	2.46**	
R^2	.02	.08	
R^2_{adj}	.01	.05	

Note: * $p < .05$, ** $p < .001$.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2=*multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 15 in model 1, age and organisational tenure were entered (R^2 = .02). In model 2, normalcy, identity anchors, networks, logic and foregrounding were added (R^2 = .13). This model was a significant improvement over model 1 (ΔF = 5.09, p < .001). As shown in model 2, in Table 15, normalcy within communication resilience had a significant positive impact on organisational culture meetings (b = .22, p < .05).

Table 15 Regression table for Communication Resilience predicting Organisational Culture: meetings

Regression Model Predicting Organisational Culture Meetings

Regressor	Model 1	Model 2	VIF
Intercept	3.29	2.17	
Tenure	.01	.01	
Age	.01	.01	
Normalcy		.22*	1.63
Identity Anchors		.14	1.87
Networks		-.03	1.50
Logic		.02	2.86
Foregrounding		.06	2.72
F	1.76	4.19**	
ΔF	1.21	5.09**	
R^2	.02	.13	
R^2_{adj}	.01	.10	

Note: * p < .05, ** p < .001.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2=*multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

For Table 16 in model 1, age and organisational tenure were entered (R^2 = .00). In model 2, normalcy, identity anchors, networks, logic and foregrounding were added (R^2 = .11). This model was a significant improvement over model 1 (ΔF = 4.61, p < .001). As shown in model 2, in Table 16, normalcy within communication resilience had a significant positive impact on organisational culture teamwork (b = .24, p < .05).

Table 16 Regression table for Communication Resilience predicting Organisational Culture: teamwork

Regression Model Predicting Organisational Culture Teamwork

Regressor	Model 1	Model 2	VIF
Intercept	2.47	1.64	
Tenure	.01	.01	
Age	.01	.01	
Normalcy		.24*	1.63
Identity Anchors		-.04	1.87
Networks		.06	1.50
Logic		.10	2.86
Foregrounding		.02	2.72
F	.38	3.41*	
ΔF	.08	4.61**	
R^2	.00	.11	
R^2_{adj}	-.01	.08	

Note: * p < .05, ** p < .001.

F = *F distribution variable*

ΔF = *degrees of freedom*

R^2=*multiple correlation coefficient*

R^2_{adj} = *adjusted* R^2

CHAPTER EIGHT

Discussion

8.1 Introduction

This chapter discusses the research findings, implications, limitations, and future directions. The research carried out here makes two novel contributions to existing communication literature. First, this research broadens the field of communication resilience with empirical correlations between communication resilience enacted and psychological resilience resources. This is the first quantitative research done on an interdisciplinary basis to bridge the relationship between these two key resilience constructs. Enacting resilience via communication, and personal resources that enable establishing psychological resilience. Second, this research furthers the communication resilience field, in particular within the organisational culture and identity literature, with quantitative research that explores the relationship between enacted communication resilience processes and its impact on organisational culture and identity. Further research requirements are indicated throughout the respective sections.

All four scales and constructs of their respective mean measurements of psychological resilience (RSA), communication resilience, (CRPS), organisational identity (OI) and organisational culture (OC), as depicted in table 3, showed lower ratings and so construct fulfilment in this post COVID-19 recovery period compared to other previous studies. Where higher results in ratings are indicative of having more of the constructs measured for each of psychological resilience, communication resilience, organisational identity and organisational culture respectively.

The whole construct means from table 3 for each of RSA = 2.01, CRPS = 2.17, OI = 3.22 and OC = 2.15. Specifically communication resilience scale produced relatively low means, as shown in table 3, for the CRPS scale and respective subscales of crafting normalcy and identity anchors at 2.10, utilising networks 2.33, alternate logics 2.31 and foregrounding positive events 2.03, as compared to previous studies where averages have been 4.0 or higher (Wilson et al., 2021, Boumis et al., 2023). Other scale means have also previously been shown to be higher with RSA = 5.29 and 5.32 (Hjemdal, 2011), OI = 3.9 or higher (Albert & Whetten, 1985, Mael & Ashforth, 1992, Dutton et al., 1994) and OC = 3.5, 3.9 and 4.1 (Glaser et al., 1987, Sikorska-Simmons, 2005). None of these higher mean resulting studies were conducted during crises or crises recovery periods. None of these latter studies where within the healthcare industry. These two key criteria most likely account for the significantly lower means obtained during and following a global pandemic with a recovery period spanning years and within one of the hardest hit industries during this crises period.

New Zealand also had a prolonged hard lock down period experienced over 2 years, whereas most of the rest of the world only had a few months of this imposed isolation from extended family and friends to draw social resources and support from. This would likely lead to a diminishing of PsyCap and a resilience pool of social resources from which to draw from. In addition, the healthcare industry did not have the opportunity recover from the intensity and high virulent and workload as during COVID-19 all elective procedures were put on hold for extended periods that still have not fully recovered in catching up with current requirements in addition. Since COVID-19 there has been little relief in workload recovery period as most healthcare workers went from COVID-19 crises fallout to managing and being overburdened with backlog clearing of procedures and other requirements from pre-COVID-19 times. As NZ had a 2 year back log to content with, which would have likely resulted in further cumulative

and deteriorated psychological resilience reserves from which to draw on to and put towards enacted communicative resilience, measured here by CRPS, in combination three has little if not any opportunity to recoup psychological resources whilst still having them consumed and overburdened. Yielding low averages in ability to enact the process of resilience.

This is supported in both theoretical models put forward in this study, of psychological resources being a requirement to construct and enact communication resilience, figure 1, as well as the primary sense making that is synthesised from psychological resources, via most likely information gathering, to also maintained and organisational culture and identity, figure 2. In the event of COVID-19, the strongest psychological resources shown to impact communication resilience enactment were positive self, family cohesion and social resources, table 17. With prolonged physical segregation from loved ones, frequent fragmented and sometimes conflicting information, and physical, emotional and psychological exhaustion, front-line workers experienced during this time, these psychological resources would have depleted over time with little to no opportunity for replenishment but with continuing high demand to consuming them. This would not only have led to low and compromised psychological resources to draw upon to allow enactment of communication resilience, through information gathering to synthesis normalcy and sense making, but also compromised and deteriorating organisational identity and culture, as depicted in figure 2. That is, if there are insufficient psychological resources available, or that are depleted faster than can be replenished, than the ability and opportunity for information gathering is likely compromised, which then compromises sense making ability, which in turn leads to low enacted communication resilience, organisation identity and organisational culture maintenance or establishment.

This research establishes a novel finding between psychological and communication resilience in indicating specific prediction capability using psychological resilience sub-constructs to predict specific communication enactments in corresponding sub-constructs. It also contributes a deeper predictability capability between specific sub-constructs of the process of resilience through communication for both organisational identity and culture facets.

Specifically, this research shows a predominantly positive predictability application from the resources that enable psychological resilience to specific facets of enacting resilience via the communication process. A single negative predictability facet for each respectively also adds to the novel exploration of utilising resources towards psychological resilience and enacting them through communication resilience. As these two constructs are not the same dimensions of the many forms of resilience, they were not expected to be directly related in predicting each other. This expectation is confirmed here as only some sub-constructs show significance in predictability and correlation. The process of enacting resilience through communication also showed predictability for organisation identity and culture for specific sub-factors respectively.

Empirically this research provides evidence of developing interventions and support strategies to enhance psychological and communication resilience with specific targeted foci within each construct. Utilising the psychological resilience resources as measured in this research of family cohesion, social competence, planned future, social resources, structure and positive self-image, more effective strategies can be applied to the enacted communication resilience processes of crafting normalcy, identity anchors, networks, alternative logic and foregrounding positive actions as they correlate to each sub-construct respectively. Potentially enabling more effective and efficient strategies and implementations and allowing stronger support and better resource utilisation with these targeted sub-constructs utilised to help

support and develop resilience for employees. Targeted strategies within enacted communication resilience are also associated with and can enhance employee identity and organisational culture for a more holistic approach to stronger resilience across the employee identity – organisation culture axis through the process of resilience enactment.

The factor structures and reliability for the Resilience Scale for Adults (RSA), Communication Resilience Process Scale (CRPS), Organisational Identity Questionnaire (OIQ) and extended Organisational Culture Survey (OCS) were all successfully replicated, and subscales validated and confirmed for each respectively for the New Zealand cohort of GP nurses during and post-COVID-19, having excluded males and doctors due to insufficient sample sizes.

The research was limited to the New Zealand cohort of doctors and nurses within GP practices post-COVID-19. Given the ongoing desire and need for stronger employee resilience and organisational identity and culture in the continued face of global uncertainties and crises, further studies need to be done across various industries and countries to offer more generalisable and applicable strategies and interventions to support this targeted use of predictability application between drawing on resources for psychological resilience and enacting the process of resilience through communication.

8.2 Summary of Findings

The relationship, pathway and the significance of Psychological Resilience and Communication Process Resilience has to date not been studied. The Communication Process Resilience Scale is also a relatively new construct (Wilson et al., 2021) and so has not been

extensively researched against organisational culture or identity. This research serves to increase this dual novel exploration to further both the interdisciplinary bridging of psychological resource requirements and communication process enactment for resilience. In addition, the research contributes to furthering the communication field in exploring how enacted communication resilience interacts with and predicts organisational culture and identity respectively.

8.2.1 Psychological Prediction of Communication Resilience

Though psychological resilience has had a long history of research into adaptive factors from at least the early 1970s (Anthony, 1974), in contrast communication resilience began developing about 40 years later within a completely divergent field in 2010 (Buzzanell, 2010). At the time of writing, the relationship between two constructs has not been directly studied.

Individuals who can maintain predominantly normal functionality in the face of chronic stress and adversity are said to be psychologically resilient (Egeland et al., 1993; Rutter, 1985; Zimrin, 1986). Several longitudinal studies have shown key factors, both internal and external, help overcome adversity to help support and establish psychological resilience in people (Cederblad, 1996; Werner, 1993; Werner & Smith, 2001). Resilient people are generally more flexible than more vulnerable people and they tend to cope by drawing on internal or environmental protective resources that can be broadly categorised as; psychological/dispositional attributes, family support and cohesion and external support systems (Rutter, 1987; Werner, 1993; Werner, 2014). These are seen as the most significant determinants to healthy adjustment in the face of chronic stressors.

The Resilience Scale for Adults (RSA) (Friborg et al., 2003) was developed out of the call in Positive Psychology (Seligman & Csikszentmihalyi, 2000) to help refocus on protective

qualities in the face of adversity and life challenges rather than the post WWII focus on mental illnesses within psychiatry and psychology (Seligman, 1974). It is a measure of central protective resources that establish resilience during adversity to maintain healthy adjustments (Friborg et al., 2003).

The RSA scale used here (Friborg et al., 2003) measured different positive aspects of psychological resilience as a multidimensional construct encompassing the three main categories of dispositional attributes, family cohesion/warmth and external support systems (Cicchetti & Garmezy, 1993; Rutter, 1987; Werner, 1987). The first category of dispositional attributes is comprised of the three dimensions: 'social competence', 'personal structure' and 'positive self'. 'Social competence' measures extraversion, social adeptness, cheerful mood, an ability to initiate activities, good communication skills and flexibility in social matters. 'Personal structure' measures the ability to uphold daily plans, routines and organisational skill (Friborg et al., 2003).

The two dimensions of psychological resilience 'social competence' and 'personal structure' did not show any significance in predicting communication resilience. The dimension of 'positive self' showed the highest significance in positively predicting the communication resilience dimensions of 'Identity Anchors', 'Predicting Logic' and 'Foregrounding' with a significance of $p < .001$. 'Family cohesion' also positively predicted the communication resilience dimension of 'networks' with a significance of $p < .001$. 'Social resources' positively predicted the communication resilience dimension of 'networks; with a significance of $p < .05$. The psychological dimension of 'planned future' negatively predicted communication resilience with a significance of $p < .05$, shown in Table 17 below.

Table 17 Table of significance of Psychological Resilience sub-scales predicting Communication Resilience sub-scales

Psych. Res. Predictor	Sig. Res. Predicts Comms.	Significance level
Planned future	- Crafting Normalcy	$p < .05$
Social resources	+ Networks	$p < .05$
Family cohesion	+ Networks	$p < .001$
Positive self	+ Identity anchor	$p < .001$
Positive self	+ Alternative logic	$p < .001$
Positive self	+ Foregrounding	$p < .001$

In this study the RSA scale sub-constructs of 'structure' and 'social competence' did not show any significant predictability on any of the sub-scales of the CRP scale, Table 17. 'Positive Self' predicated the greatest number of CRP sub-scales as well showed the most significance in positively predicting 'Identity Anchors', 'Alternate Logic' and 'Foregrounding Actions' with $p < .001$ each. 'Family Cohesion' also positively predicted 'Networks' at $p < .001$.

Positive Self and Identity Anchors, Alternative Logic, Foregrounding

Positive self is a measure of personal competence, within the RSA (Friborg et al., 2003). Another concept for belief in one's own abilities with a confidence to succeed is proposed as self-efficacy within the construct of psychological capital (PsyCap) (Luthans et al., 2007). Positive self within RSA may be a similar or the same as self-efficacy within the construct of PsyCap, where the latter scale also consists of optimism, defined as having a positive explanatory style . Together, the belief in one's own abilities to succeed and using a positive explanatory style may in combination result in a 'Positive Self'.

Positive self being the strongest predictor of most of CRP may be due to Internal Locus of Control. Internal locus of control is the degree to which people believe they have control and influence over their own lives and events that occur, as opposed to external factors and influences that act on them that they cannot control (Rotter, 1954). The construct questions pertaining to 'Positive Self' all display an internal locus of control in influencing or reframing in a positive dimension i.e. 'I strongly believe in my abilities', 'I know how to solve my personal problems' for internal locus of control and 'I accept events that I cannot influence', 'In difficult periods I can thrive on something good' for positive reframing.

A higher internal locus of control is considered highly important for resilient outcomes (Cederblad et al., 1994; Werner, 1993). Positive reframing has been shown to contribute to resilience in people during COVID-19 (Lafarge et al., 2022). Alternative logic consists of two aspects within communication resilience: reframing and humour. Of the five reframing questions within alternative logic, four retained validity and were included in this study. Of the humour component of alternative logic, two of the four questions were discarded to maintain validity. Most of the alternative logic verified for this study cohort and conditions were

accounted for from reframing. This is supported by the previous findings of positive reframing resulting in comparatively higher resilience in people during COVID-19 (Lafarge et al., 2022).

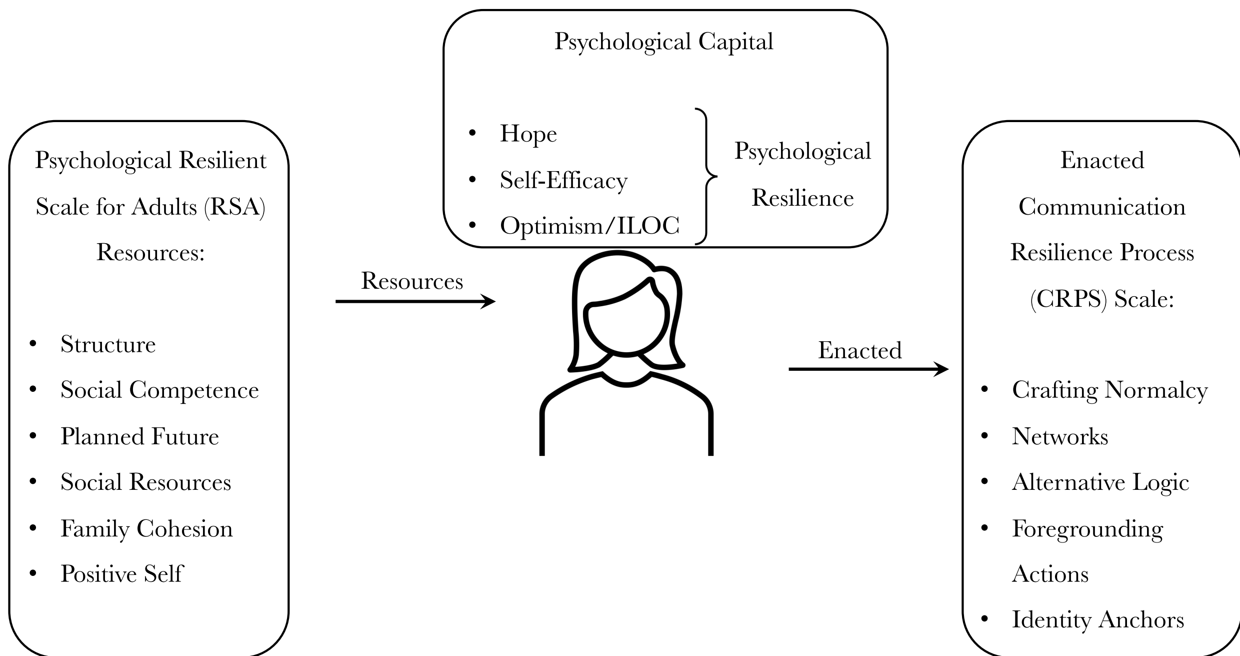
Psychologically resilient people draw heavily on favourable dispositions and attitudes, like internal locus of control (Kronborg et al., 2017; Munoz et al., 2017), and specifically a positive relationship between internal locus of control and COVID-19 survivors and psychological resilience (Matulessy et al., 2024), to maintain mental health and foster resilience when faced with adversity. Additionally, internal locus of control may be very similar to the concept of optimism through the ‘optimistic explanatory style’ that resilient people use to explain causes of internal and external control (Kamen & Seligman, 1987; Peterson, 2002; Schulman et al., 1993). The optimistic explanatory style is made of three elements that optimistic people use to establish resilience; *permanence* of time in belief of negative events, optimists believe bad and good events are passing, *pervasiveness* of events in life domains impacting other domains, optimists can compartmentalise bad and good events, and *personalisation* in internal or external responsibility for bad and good events (Seligman, 2006; Shatte et al., 1999). It is the latter personalisation explanatory style that may be the same or like the internal locus of control construct.

Resilient people also tend to have a positive self-image, closely aligned with the psychological resilience dimension ‘Positive Self’, display optimism for the future (Cederblad et al., 1994; Werner & Smith, 2001), and tend to have a strong ability to structure their lives (Clausen, 1995). In combination these factors help maintain mental health and foster resilience when faced with adversity. Studies have shown a positive correlation between a positive self-image, such as self-esteem and self-efficacy, and having an internal focus of control (Judge et al., 1998; Steele et al., 1993). Studies have also shown a positive correlation between hope and internal locus of control (Munoz et al., 2017). Together attributes such as hope, self-efficacy,

and optimism have all shown positive correlations with an internal locus of control and resilience. Hope, self-efficacy, psychological resilience and optimism together form psychological capital (PsyCap) (Luthans & Youssef, 2004; Luthans et al., 2007). PsyCap has been shown to have a stronger influence on resilience than internal locus of control during COVID-19 (Alat et al., 2023).

Psychological resilience may be built by utilising psychological resources as set out in RSA, with positive self and family cohesion being stronger predictors of communication resilience, as shown in this study, compared to the structure, social competence, future planning or social resources. These resources may then be used to establish psychological capital to form an internal locus of control to then enact the process of communication resilience through crafting normalcy, identity anchors, networks, alternative logic and foregrounding actions. Shown in Figure 1 below.

Figure 1 Theoretical model of proposed utilisation of psychological resilience as established by the RSA, how it may establish resilience, via PsyCap, and then be enacted through the CRP



Whilst RSA positive-self is stated to be self-competence (Friborg et al., 2003), this may have congruence with self-efficacy (Maddux et al., 1986). Both competence and efficacy contribute to goal pursuit and attainment, both promote behavioural engagement, learning and skill acquisition and both are processes in an end outcome supported by persistence that develop skills over time and experience. They also both establish positive feedback loops in reinforcing each other as competence is perceived, efficacy is gained which reinforces further competency being pursued and so greater efficacy achieved (Bandura, 1997; Deci & Ryan, 1985).

Self-efficacy has previously been shown to directly influence salient identity (Brenner et al., 2018). Self-efficacy may also be closely aligned to positive-self as self-competence

(Friborg et al., 2003). Taken together with CRPS's 'identity anchor', defined as "performing salient identities and values that may be challenged by, provide meaning during, and help guide responses to disruption" (Wilson et al., 2021, p. 480), the findings of this research of 'Positive self' strongly predicting 'Identity Anchors' with a positive significance of $p < .001$ is in line with previous findings. Whether positive self/self-competency is congruent with, or impacts self-efficacy, to predict identity anchors remains to be clarified via future research

Family Cohesion, Social Resources and Networks

For individuals to 'bounce forward', or display resilience, especially post-disaster such as COVID-19, relies on sharing information and interacting successfully to facilitate overall adaptation (Houston, 2018). To bounce forward, or to make positive adaptation towards resilience, requires not just the return to original states prior to the crises but also adjusting to the new reality that has been shaped by the crises or adverse events. The resilience of the individual not only relies on their own psychological resources but also on those community capabilities they draw on, knowledge of unfolding events and coping strategies from wider social groups and family members (Acosta et al., 2017). Resilience from wider social networks contributes not only by adaptations to the adversity as a collective but also by being able to anticipate and plan for events before they happen (Brand & Jax, 2007), knowledge of which the individual gains via interpersonal communication towards building their own resilience and adaption.

Resilience is not merely an individual adaptation to crises or adversity but also draws on the ability of a collective of people, via social or familial interactions, who are able to interact successfully to facilitate overall adaptions through interpersonal communication

(Houston, 2018). Various adaptive capacities contribute to the process of resilience amongst social groups and towards the recovery of the required positive adaptations needed to bounce forward, including information communication, community competence and social capital (Norris et al., 2008a), connection and caring, transformative potential, disaster management, resources and information and communication (Pfefferbaum et al., 2015).

The commonality of interpersonal communication remains a core construct required for wider resilience processes and interactions, which interacts with individual resilience capability (Houston et al., 2017). Family cohesion in early years of development, with feelings of closeness and a sense of belonging developed between members, establishes an individual's ability to self-regulate, adapt, communicate, develop listening boundaries and develop healthy relationships, as well as a strong sense of identity, including in later adulthood (Daniels & Bryan, 2021). These factors help build networks and other social connections required for resilience.

The novel research data presented here revealed a stronger positive relationship between family cohesion, as compared to social resources, in predicting networks. These empirical findings offer deeper insight and further our understanding of family cohesion. The findings of family and social support requirements for resilience as presented here are in line with previous findings.

Resilience requires the individual to adapt to their environment, with those that are able to do so, utilising resources around them despite adversity or crises (Ungar et al., 2013). Some of those resources that promote resilience and act as protective factors are social connections such as community, friends and neighbours, and family (Ungar et al., 2013). Family cohesion is a subset of family environment, where there is a commitment to the family system where the

family is able to provide affection, encouragement, empathy, compassion and concern among each other and where support and encouragement is provided to each other (Moss & Moos, 2009). Strong family cohesion has been linked to positive outcomes such as a positive self-view and lower depression and anxiety (DiClemente et al., 2018). Family cohesion may act as a protective factor leading to resilience due to the self-efficacy and confidence individuals gain from cohesion in the home with strong supportive family dynamics and environment (Simpson, 2010). Self-efficacy and confidence resulting from strong family cohesion may account for the stronger prediction of utilising networks to enact the process of resilience of family cohesion and networks. In addition, self-efficacy and confidence may allow for greater social interaction and integration to utilise social resources towards enhancing networks further.

Family cohesion has been found to mediate the positive impact of social support on contributing to resilience where facilitating family cohesion by providing social support may be beneficial in dealing with chronic stressors to maintain resilience (Lei & Kantor, 2022). Teamwork and feelings of belonging, that come from family cohesion, social support and networks, also play protective roles in developing resilience and are shown to correlate to resilience (McClure et al., 2008) Strong family cohesion has also been linked to greater resilience following traumatic events (Daniels & Bryan, 2021). Sense making of stressful and traumatic events whilst nurturing protective beliefs are crucial parts of resilient adaptation within the family dynamics that comes from family cohesion. In addition facilitating discussions of these stressful experiences of each family member and co-constructing a coherent and meaningful narrative facilitates this resilience (Saltzman et al., 2013). Family based narratives provide a structured opportunity to utilise interpersonal communication dialogues to share individual narratives, assemble divergent storylines into a shared family narrative. This allows family cohesion to be enhanced and family members capacity for sense

making of stressful experiences to be shared and adopt a common belief system that supports adaption and growth (Saltzman et al., 2013).

Resilience at the individual level requires not just psychological resilience, but also the capability of those individuals to interact within their social and family groups to share and exchange information about the unfolding crises and events that can interact successfully to facilitate adaptation as required (Houston, 2018).

The results of this current research add to our understanding of family cohesion by highlighting the novel empirical findings that the psychological resource of family cohesion strongly predicts enacted communication resilience process by utilising networks. Family cohesion more strongly predicted capability in utilising networks when compared to social resources in communication resilience process enactment.

Planned Future and Crafting Normalcy

The COVID-19 pandemic upended normal existence on a global scale, which resulted in both economic as well as psychological uncertainties unlike any other. However, people differed widely in how they responded to these new and uncertain times, with some experiencing significant mental distress (Killgore et al., 2020; Varma et al., 2021) and some being able to withstand detrimental consequences to show resilience (Killgore et al., 2020; Manchia et al., 2022; Matiz et al., 2020). The pandemic also led to significant uncertainty about the future (Freeston et al., 2020; Galaitsi et al., 2021; Gilead & Dishon, 2022). The mismatch between past expectations, present realities and an unpredictable future has previously been shown to produce feelings of stress, anxiety, and powerlessness (Cahill & Leccardi, 2020). The

expectations of previous known stability in the face of new and uncertain disruptions, in extent as well as duration, leaves a sense of vulnerability and uncertainty for what the future may hold and how to create stability in the face of unknowns (Logan & Guikema, 2020). Looking to the past for patterns to replicate previously known stability was now met with thwarted expectations for being able to continue with those pathways to generate previously known expectations of outcomes (Wadi et al., 2020). As individuals looked between the present and future in trying to establish future progressions against previously known conditions, strategies and outcomes, a sense of being caught in an uncontrollable change which could not be clearly defined or duration known occurred (Cahill & Leccardi, 2020). A further exacerbation of an unprecedented uncertainty has been a lack of available language by which to relay and communicate the impact of the multifactorial set of unknowns impacting individuals and society (Logan & Guikema, 2020). In essence, past experiences in the face of the current unprecedented present created a more uncertain future for which to plan for, or face.

Individuals make sense of their past, present and futures by narratives to construct their realities to understand time and events as they transpire or have transpired as well as what is to come, through this progression (Ricoeur, 1984). Disruptive experiences, such as the COVID-19 pandemic, can make this sense making through narratives towards cohesion and logic building disrupted (Frank, 2013). But it is also this disruption in logic and sense making that offers the opportunity and pathway to craft new normalcies as one reflects and forms new representations of the disruptive experience through narratives to enact resilience through reconstructing normalcy (Buzzanell, 2017, 2018). As individuals construct a new normal through a narrative process they also formulate discursive foundations for rebuilding normalcy in the present as well as to understand the unfolding future through their storied past (Betts et al., 2022). As an individual makes sense of disruptive events in accounting through narratives,

they construct *anticipatory resilience* as a system of reasoning towards communicatively constituted story logic, for which to make sense of their future normal as only fragmented lessons about the future may unfold at a time (Betts et al., 2022). This research supports that only looking to the future to craft normalcy post-crises, where mass disruption across global economic and health sectors is encountered, is significant towards communicative resilience as a planned future as a psychological resource being negatively related to crafting normalcy as a communicative resilience process.

These findings are in line with the current research here which showed a significant negative prediction between ‘planned future’ and ‘crafting normalcy’ with $p < .05$. In the face of the unprecedented COVID-19 pandemic and global shifts in significant uncertainty across economic and health impacts, coupled with a possible unavailable language in which to adequately communicate the unfolding and uncertain landscape, establishing normalcy for the future may have been thwarted by the juxtaposition of the uncertain present with the unavailability of the past to draw on for future stability predictability. ‘Planned future’ which all consisted of ‘future’ goal setting i.e. ‘I know how to reach my future goals’, ‘I know how to accomplish my goals’, ‘My goals for the future are well thought through’, was negatively related to ‘crafting normalcy’ which were all comprised of forming a new normal, i.e. ‘I started to do new things that over time became ordinary’, ‘I adjusted my daily habits to the new circumstances’, and ‘I adjusted my routines in light of what happened’. In other words, the past could not be relied on to establish a ‘normal’ future. Of the original eight ‘Crafting normalcy’ sub construct questions, all the questions pertaining to keeping the past ‘normal’ routines were discarded for factor validity in this post-COVID-19 cohort, with only questions that were relevant to establishing a new normal in present conditions holding validity. Crafting normalcy within CRPS is defined as “getting back to a sense of the prior normal and/or creating a new

normal" (Wilson et al., 2021, p. 480). When the 'prior normal' no longer exists and 'a new normal' cannot be conceived with accuracy in the face of multifactorial uncertainties, enacted resilience with these strategies cannot be carried out, with the negative prediction between 'planned future' and 'crafting normalcy' being supported as the research here indicates.

The fractured nexus between previous certainty and future planning in present unknowns, coupled with the widespread emerging uncertainties and impacts, the loss of security and continuity would require new ways of thinking about the present in relation to the future and how multifactorial impacts may affect it in a constrained sense making ability with continued unknowns. This new sense making requirement and constant constraints in the unknown could potentially even require new strategies for resilience enactment that future research should seek to explore.

8.2.2 Communication Resilience Predicting Organisational Culture

To date there does not appear to be published empirical studies on communication resilience and organisational culture. The CRP sub-scales of identity anchors, networks, using alternative logic, and foregrounding positive actions did not show any significance when predicting organisational culture against its sub-scales' morale, information, involvement, supervision, meetings and networks. Only CRP's crafting normalcy positively predicted all the OC's sub-scales with a significance of $p < .05$ for each, as depicted in Table 18 below. For the enactment of communication as a process for resilience only crafting normalcy appears to be relevant in predicting organisational culture with any significance. Further, it was only the questions related to establishing new normals that retained validity in the cohort of doctors and nurses post-COVID-19 in New Zealand. None of the crafting normalcy questions pertaining to continuing with past normal routines were valid within this research i.e. 'I try to keep life as

normal as possible', 'I continue to do the things I normally would', 'I make an effort to keep up with my daily routines', and 'I try to keep busy doing what I normally do' did not hold for validity post-crises COVID-19 and were eliminated. This may indicate that the communicative resilience process enacted post-crises disruption, such as post-COVID-19 era, relies significantly on crafting normalcy towards establishing a new normal to positively influence interactions with the dimensions of organisational culture of morale, information sharing, involvement, supervision, meetings and teamwork.

Table 18 Table of significance of Communication Resilience sub-scales predicting Organisational Culture sub-scales

Comm. Res. Predictor	Sig. Predicts Org. Culture	Significance level
Crafting Normalcy	+ Morale	$p < .05$
Crafting Normalcy	+ Information	$p < .05$
Crafting Normalcy	+ Involvement	$p < .05$
Crafting Normalcy	+ Supervision	$p < .05$
Crafting Normalcy	+ Meetings	$p < .05$
Crafting Normalcy	+ Teamwork	$p < .05$

Communication plays a key role in shaping the workplace environment and more specifically the culture (Gautama So et al., 2018; Sebastião et al., 2017; Vazirani & Mohapatra, 2012). A communication perspective on resilience acknowledges that resilience is an ongoing process that is developed, sustained and enhanced through discourse and so is dynamic and evolving over time and events into patterns of communication (Buzzanell, 2010). During and following times of challenge, adversity or crises, such as COVID-19, it is typically what people do and say to try to establish their lives back that often results in establishing resilience (Buzzanell, 2010). During these times the re-establishment of a sense of normalcy is both an ongoing process and a perceived desirable outcome. Normalcy discourse and the performing of the process of normalcy, requires the implicit and explicit establishment of a system of meaning to enable the maintenance of regularities in life where normalcy is crafted through interpersonal communication and maintaining rituals (Buzzanell, 2010). Crafting normalcy may be the primary and initial communicative process in establishing resilience to 'bounce forward' and positively adapt to a new normalcy in life that is generated through talk-in-interaction. Our research shows that post-COVID-19 it was only the generation of establishing a new reality in life normalcy that held validity, rather than being able to rely on past experiences and events in establishing new normals.

Organisational culture has previously been shown to rely heavily on communicative processes and shared assumptions that are learned by the members as "it solves its problems of external adaptation and internal integration" (Schein, 2004, p. 18). Crafting normalcy has previously been said to be the initial, and potentially the primary, process of resilience through communicative means (Buzzanell, 2010). The research findings presented here are the first empirical findings that support and integrate the relationship as stated above. The findings presented here show crafting normalcy corresponds strongly all facets of organisational

culture; morale, information, involvement, supervision, meetings and networks. A further novel finding presented here shows that during times of crises, such as the COVID-19 pandemic and recovery period, the predictability of how well organisational culture is established is through a system of *new* sense making to establish meaning, which is most strongly predicted by interpersonal communication for crafting normalcy. This sense making of the 'new' normal is likely to maintain the regularities of life through disruption. This is in contrast to stable times where *maintaining* rituals is used to establish normalcy whereas during crises, crafting normalcy is synthesised through establishing *new* rituals.

Rituals mark new beginnings, significant transitions or milestones separating one state of mind from the next (Brooks et al., 2016). Rituals also differ fundamentally from routines in that the former lacks a specific purpose, rather they are carried out to connect people from one moment to another and prepare us for what is next in the routine and give the reason and next requirement, with the goal of being prepared (Keswin, 2021). Rituals support individuals in decreasing anxiety, improving performance and improving intention focus (Keswin, 2021). Daily and weekly rituals, including engaging with other groups, such as work colleagues, can act as supportive rituals adopted to create a sense of belonging and togetherness and aid to restore a sense of control when feelings of powerlessness may unfold as the result of external events (Berinato, 2020), such as COVID-19. Medical staff experienced disrupted rituals during and after the pandemic which in turn effected the sense of belonging within and between members to weaken organisational culture and clinical settings (Griner et al., 2021).

Prior to COVID-19, most clinical routines had been ritualised, from in-person clinical and administrative information sharing meetings at the start of the day or week, to positive motivation and notes during scheduled interactions established as a routine which was ritualised (Griner et al., 2021). Suddenly having these supports and rituals disrupted and ripped

away with isolation, social distancing, PPE restrictions, the uncertain duration and severity of the pandemic, just as the most challenging work and professional crises impacted, created unexpected voids in lost rituals that helped establish flow, confidence and predictability in 'what's next' in the expected routine at work (Berinato, 2020).

New rituals emerged just as suddenly as the old ones disappeared, whether with elbow bumps or smiling with eyes with masks on to greet colleagues and patients whilst purposefully establishing eye contact to do so, or more social cohesion disruption through tele-consults, emails for colleague consulting and/or video call meetings (Murphy, 2020). Some rituals emerged through situation-induced evolution, others were novel, providing staff with a new found sense of security, higher purpose and ways to reconnect with others by new means as old rituals were disrupted to leave uncertainty in its wake and 'new normals' were established to take back a sense of control from the seemingly uncontrollable, unpredictable fallout of the pandemic (Griner et al., 2021; Keswin, 2021).

These new ritual establishments were a way of coping, sense making and establishing a new normal, where new information sharing, new practise emergence, communicating new normalcies, both clinical and social, in the context of new requirements and landscape, helped rebuild the social cohesion lost through social distancing, isolation and restricted interpersonal interactions that helped form, cohere and maintain organisational culture. New normals were crafted through new sense making to re-establish organisational culture.

The pandemic not only established new normals but also served to dissolve several obstacles to cohesion that may have existed due to people being entrenched in old rituals. Department meetings increased in frequency as video calls removed the limitations of having to congress in one location for meetings and people could remotely come together and see

colleagues, they had not seen regularly pre-COVID-19. Medical staff were redeployed and rotated to more critical need locations throughout the pandemic and recovery period. This helped form new professional relationships and cohesions of wider organisational culture. People consciously took the time to acknowledge one another, colleagues and patients, which they had taken for granted previously. Previous resources taken for granted were now appreciated, and respected, for the often life preserving and taken for granted roles they play. A leading of newly evolved and established rituals is necessary to establish and sustain new rituals and the new normal that they play a pivotal role in establishing through shared sense making.

This research makes salient only crafting normalcy holds any significance for communication resilience process enactment in predicting organisational culture. The current research also further supports Buzzanell's proposal that crafting normalcy may be the primary and first communicative process that is enacted to bring a new normalcy to life, which is embedded in present realities and generated through interpersonal discourse (Buzzanell, 2010). New normalcies are crafted through talk and maintaining rituals (Buzzanell, 2010). Rituals are an integral part of organisational culture (Schein, 1990) where culture is created through symbols, artefacts, beliefs and rituals (Glaser et al., 1987). These are categorised to establish themes and patterns to develop the rituals carried, stories told and beliefs, where developing culture has been shown to fall into six categories that are central to constructing organisational culture, around which rituals develop and stories are told (Glaser et al., 1987). Thes six categories comprise employee involvement, teamwork and conflict, the flow of information, morale, supervisor feedback and effectiveness of meetings (Glaser et al., 1987).

The findings in the research support the arguments that crafting normalcy may be the first and the primary communication resilience process as only crafting normalcy showed any

significance in predicting organisational culture. The findings also support the novel insight that crafting normalcy is established through a central role of ritual establishment, which is central to developing all six facets of organisational culture. Rituals then may help establish normalcy for the individual while also developing organisational culture involvement, teamwork, information flow, morale, supervision and meeting effectiveness, with each being created through talk as the processes are developed and maintained to 'new normals' required post-crises and generated and maintained through talk-in-action.

8.2.3 Communication Resilience Predicting Organisational Identity

An individual's reality and interpretation of their surroundings is constructed through narratives "The stories people tell form the foundations of their identities" (Betts et al., 2022, p. 211). In addition, organisational identity and organisational culture are closely aligned, given that organisational identity is proposed to be as much of a continuous process as it is an outcome where the individual's perception of the organisational culture may influence levels of the individual's identity with the culture (Cheney & Tompkins, 1987). With this close alignment between organisational culture and organisational identity shown in various studies, it stands to reason that if crafting normalcy significantly predicts all dimensions of organisational culture equally, then crafting normalcy is also associated equally with this closely aligned construct of organisational identity. In support of this reasoning, it is supported in this research that crafting normalcy within communication resilience enactment through the processes of narrative also equally positively predicts each with a significance of $p < .05$.

Cheney postulated that the individual–organisation relationship towards identity begins in understanding rhetoric (Cheney, 1983b). The organisation will typically facilitate identity process through communicating values, goals, and information (Cheney, 1983b). In times of

disruption, instability or change, people often experience these uncertain times as a threat to their identity (Albert & Whetten, 1985). Barker and Tomkins found that an individual's identity congruence with the organisation's values and goals tended to be maintained and more strongly established with their team mates rather than the company as a whole through information sharing and sense making (Barker & Tompkins, 1994). Social identity is recognised as the stronger and most influential of several points of identity for an individual within an organisation (Ashforth & Mael, 1989; Haslam et al., 2017).

A shared identity is constructed and reconstructed as members interact with internal and external stakeholders of the organisation to produce a shared frame to interpret and act upon events (Dutton & Dukerich, 1991; Gioia et al., 2000). Leaders then strive to mould the organisational member's identity through sense giving rhetoric, symbols and modelling behaviour (Gioia et al., 2013). Members then interpret these meanings through a sensemaking narrative to construct their identity in the context of the reality and within the organisational modelling, symbols and rhetoric received (Ashforth & Schinoff, 2016).

During the unfolding COVID-19 pandemic, GPs and nurses within clinics have been at the coal face and in the front-line throughout to sustain success in fighting the virus (Cook et al., 2021), in New Zealand and globally. In 2020, COVID-19 quickly spread and gathered momentum across the globe to leave significant morbidity and mortality in its wake. The unforeseen accelerated spread required medical staff in particular being confronted with the sudden haste in reality of personal risk and life disruption like never before. Although international applause was held for New Zealand in their national and cohesive response to the pandemic with New Zealand being ranked first with the most effective response in 'go hard go fast' approach to eliminate rather than flatten the spread of the virus, (Dziedzic, 2021), the impact on the medical workforce did not reflect this outward perception of New Zealand being

world leading (Cook et al., 2021). Those within the industry raised concerns at the lack of workforce safety incorporated into advisory group policies (Weston, 2020). In addition, the very real threat to life was persistent for front-line medical workers. Despite the Ministry of Health's assurances of there being sufficient personal protective equipment including masks, face shields and gloves this was not the reality many health professionals faced (Te Hononga, 2021). This fast moving, conflicted information and complex context required medical staff, including GP practice doctors and nurses to continuously reframe and make sense of new and emerging realities, at the cost of significant cognitive and emotional labour for these front-line staff (Te Hononga, 2021).

Explicit efforts towards sense making are made when the current state of the reality is perceived to dramatically differ from that of the expected state where meaning-making and action are intertwined aspects of sensemaking (Weick et al., 2005). Sense making is required when our usual actions and activities face significant disruptions where the need to adapt in ways that may be outside the existing repertoire and knowledge is required, often through experimentation with alternative actions that then need to be reviewed and revised to what works in the new reality as foundations shift from the old to the new way of doing things (Ancona, 2012).

Many medical team leaders quantified and communicated across the community to track and offer greater transparency and preparedness to front-line staff, such as tracking real time PPE consumption rates, availability, staff numbers exposed, in quarantine and available for duty and ventilator availability (Aquilia et al., 2020). Gaining broader knowledge of the COVID-19 crises helped front-line medical staff gain perceptive and inform their sense making requirements in a rapidly shifting world. Medical leaders in this way supported their team to

adapt to novel circumstances. This requirement to transition from a previously known landscape to a new yet unknown requirement pivots on a transitional state known as liminality.

Liminality is a three-tiered process involving separating from the previously known, a destabilising disorientating period where a person's status is ambiguous socially and structurally in a liminal period, followed by a sense-making reassimilation taking unfolding events and knowledge into a 'new normal' (Van Gennep, 1960). This is a non-linear process informed by both intrinsic and extrinsic factors (Van Gennep, 1960). In this period of flux, sense-making and restabilising is liminality, the sense of community towards a shared identity with one's peers within an organisation can provide solidarity and foster resilience (Aquilia et al., 2020). Liminality may be the same construct as the communication process of resilience of crafting normalcy, where this communicative resilience is a process of reintegrating with disruption in life which is dynamic, integrated and unfolding through events towards establishing a new normalcy through a system of sense-making and meaning where new normals are created through interpersonal communication (Buzzanell, 2010).

This research supports this sense making through destabilising times to be informed by collaborating with peers for sense making as a way of crafting normalcy which then also strengthens a sense of organisational identity that results from member identity that is established during this time. This is depicted in Table 19 below where crafting normalcy significantly positively predicts organisational identity with $p < .05$.

Table 19 Table of significance of Communication Resilience sub-scales predicting Organisational Identity

Comm. Res. Predictor	Sig. Predicts Org. Identity	Significance level
Crafting Normalcy	+ Org. identity	$p < .05$

In addition, the sharing of information during crises also contribute to this sense-making requirement where previous realities can no longer be relied upon to establish new normal and will likely contribute to this liminality state in constructing new normal from one's peers as events unfold and information is shared through the work environment on the infolding pandemic and coping strategies developed and required.

8.3 Theoretical Implications

Theoretically, these findings offer a more specific focus and pathway to both understanding how psychological resources are utilised and then actioned for enacted communication processes. Whilst numerous studies across various fields have repeatedly shown that social networks and support enhances psychological wellness and overall resilience with greater quality of life, no research to date appears to have offered any empirical findings to relate the specific pathway that this may occur through. This research is novel by highlighting that the wider social networks may contribute to resilience primarily through knowledge sharing via interpersonal and intrapersonal communication to establish sense

making to craft normalcy, which may be the foundational basis for not only psychological and communication resilience but also congruence establishment towards assimilation for organisational culture and identity formation.

RQ1 asked "To what extent does psychological resilience predict communication resilience?" Out of the six key psychological resources for resilience 'Positive Self' predicted three out of five communication resilience sub-scales with the most significance at $p < .001$, with 'Positive Self' predicting the greatest number of CRP sub-scales as well with $p < .001$ each. 'Family Cohesion' also showed a significant positive predictability of 'Networks' at $p < .001$, as depicted in Table 17.

This research supports crafting normalcy as the primary communication resilience requirement, which may be primarily enacted through the individual's explanatory style to utilise social network information exchange through work, family and friend networks which is integrated and interpreted through an individual's explanatory style. This explanatory style, or locus of control, is likely also related to their positive self and social competence ability and structure establishment, which may likely dictate how effectively they are able to utilise their networks to structure normalcy in turn. Family cohesion appears to play a greater role than social resources in contributing to communication resilience, as depicted previously in Table 17 and the theoretical proposed interactions shown in Figure 1.

The complementary constructs psychological resilience and communication resilience as a process may have their antecedents in an individual's psychological capital (PsyCap). PsyCap consists of hope, optimism, self-efficacy and resilience, although resilience has been said to be both an outcome and a requirement of PsyCap (Burhanuddin et al., 2019). In combination or the specific combination of optimism, which may be closely aligned or be the

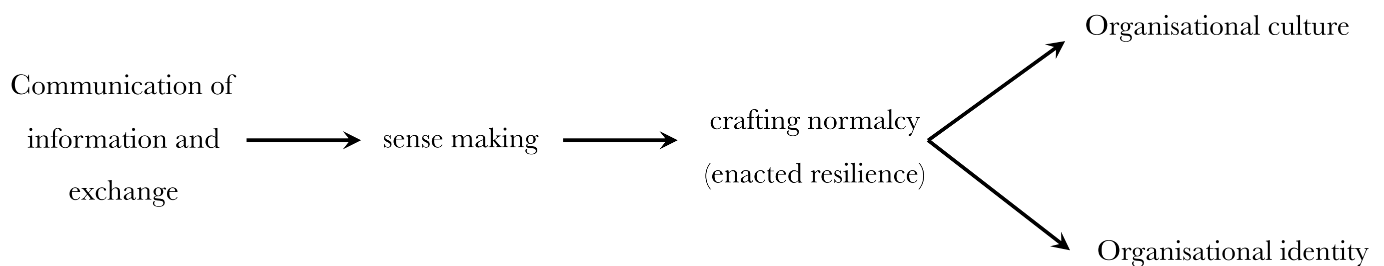
same as explanatory style, that is locus of control, may then be the central requirement in the communication resilience process towards enacting resilience.

RQ2 asked "To what extent are communication resilience processes associated with organisational identity?" Of the five-communication resilience sub-scales, only crafting normalcy was associated with all factors of organisational culture; morale, information, involvement, supervision, meetings and networks, with a significance of $p < .05$. Shown in Table 18.

RQ3 asked "To what extent are communication resilience processes associated with organisational culture?" Of the five-communication resilience sub-scales, only crafting normalcy was significantly positively associated with all organisational identity with $p < .05$, as shown in Table 19.

Crafting normalcy as a sub-construct of communication resilience enactment process also predicts a member's organisational culture assimilation through sense making, possibly by way of rituals. Crafting normalcy also significantly impacts organisational identity assimilation through member information exchange and assimilation towards sense making. It is likely communication of information and exchanging information plays a key role in sense-making during crises and recovery to develop and establish a new normal that is part of the resilience enactment. This key role of sense-making is shared with the self and with colleagues to establish new rituals and to re-establish and/or establish new organisational culture aspects to evolve with changing landscapes. This key role of sense making with colleagues as adaptation information is communicated and exchanged concurrently and likely contributes to identity congruence for organisational identity establishment and re-establishment to evolving landscapes through crises and recovery, depicted in Figure 2 below.

Figure 2 Interaction of information exchange, sense-making towards the communication process resilience primary facet of crafting normalcy, to concurrently establish organisational identity and culture through re-establishing colleague social dynamics post COVID



8.4 Practical Implications

Practical implications of this research offer a more directed resilience intervention foundation for both organisations and individuals alike to employ towards building resilience, organisational culture strengthening and identity formation. Sense making could be the key to all three desirable individual and organisational needs through crafting normalcy to not only enact resilience towards positive adaption but also make sense of their organisational environment to strengthen the culture and concurrently build identity for identity congruence.

This research argues that sense making is likely the primary mechanism not only towards crafting normalcy, but also to establishing organisational culture and identity. As an antecedence to sense making, positive explanatory style coaching, to reframe the locus of control, is likely to enhance communicative process resilience enactment through crafting normalcy. Coaching programmes to reframe favourable explanatory styles could also be

adopted as a foundational intervention towards organisational culture and identity, in addition to building resilience. Interventions and strategies to build positive explanatory styles and support sense making as part of organisational development strategies will likely play a key role during crises recovery to not only establish communication resilience through crafting normalcy but also concurrently enhance organisational identity and culture .

Coaching to establish positive self-image for the individual may allow more effective resource utilisation towards enacted communication resilience during times of crises. Crises often leads to increased uncertainty and distress due to shifting dynamics in the landscape and the subsequent multiple unknowns. The psychological resource of positive self may aid other resources being utilised towards sense-making in this shifting landscape of uncertainty. Sense-making also appears to concurrently aid re-establishing organisational culture and identity, which may help form cohesion when most likely, in times of crises.

In addition, during times of business as usual, organisational culture and identity can be strengthened with interventions and coaching of positive self-foundational requirements to build both psychological resilience and better communication resilience through crafting normalcy out of sense making for enhanced dual individual and organisational benefits of individual mental and physical health and organisational desirables towards key performance indicators when culture is strengthened. In essence, organisational culture and identity can both be concurrently enhanced and strengthened through sense making interventions, which establish and craft normalcy, which also builds positive adaption towards resilience, both psychological and communicative. This could have its foundational intervention directed at reframing an individual's locus of control to enhance and build a positive self. Thus offering significantly more focused and far-reaching benefits at both the individual and organisational level with foundational interventions with far reaching benefits.

8.5 Limitations

This research contributed several novel findings. First, it is the first empirical interdisciplinary study to bridge psychological resilience resources and communication enacted resilience, and the mechanism involved to utilise the wider resources towards the enacted process. Second, it is the first empirical study showing that it may be primarily crafting normalcy through sense making that is the primary mechanism to invoke resilience. Third, it is the first empirical study to show that crafting normalcy, through sense making wholly predicts organisational culture and identity.

However, there are limitations that must be addressed. The research presented here compromises a cohort of primarily nurses within GP clinics. The research was also carried out within New Zealand only and was focused on post-COVID-19 recovery. The transferability and generalisation of this study is therefore limited to female nurses and post-crises events. The research is also limited in the cross-sectional design and so causality establishment. Future research should explore the applicability and therefore transferability of these findings to other demographics, industries, geographies, and cultures.

Although recruitment for participants was an open call across varying platforms, for both doctors and nurses across GP clinics in New Zealand, primarily only female nurses participated in the study to completion. In addition, it is likely individuals of a certain mind-set would have self-enrolled for this research, introducing participant bias, which may not be representative of general populations. A more uniform population should also be encouraged and actively recruited to provide more uniform demographic data from participants in future research. Last, it is likely that in research on resilience post-COVID, participants who did not have sufficient resilience during and immediately post-COVID, may have left the profession and were not

captured in the research process. The research findings may then be further biased towards those that had or developed higher resilience due to their access to resources, innate resilience and capability that this research has shown to contribute towards building and utilising resilience. Whilst those who may have had lower resilience resources, innate capability or simply burnt out, and left the profession, would not have been captured here.

Further research needs to be carried with larger cohorts, across geographical locations, cultural context and industries in order to make the findings presented here generalisable. Further studies should also examine the research dynamics presented here during stable as well as other times of adversity across variable economic, health, political, and other adversity and crises impacts.

8.6 Future Research

Future research should be done to confirm reproducibility of these findings. Second, further research across demographics, geographical locations and industries needs to be carried out to further the generalisability of these findings. Third, future research should also compare these constructs in times of stability as well as adversity and crises of varying forms.

There are several interdisciplinary psychological and communication resilience constructs presented here that need further research to confirm and establish the requirements, interactions and pathway utilised for psychological resources that contribute to the process of enacted communication resilience, that have been theoretically presented. Future research should directly compare and measure positive self/self-competency as measured within the Resilience Scale for Adults (RSA), with self-efficacy as measured within Psychological Capital

(PsyCap) scale, to establish how these interact with each other and if they are congruent constructs, as theoretically proposed in figure 1. Both positive self and self-efficacy should be measured against the Communication Resilience Process Scale's (CRPS) sub-scale of identity anchors, alternative logic and foregrounding, as shown in Table 17 to confirm the significant predictive capability of each within the communication resilience scale. And if they are congruent constructs to confirm equal significance with the latter scale as theorised in figure1. In turn the primary facet/s and pathway of PsyCap can then be related further to communication resilience crafting normalcy, as the proposed primary sense making mechanism towards resilience, and also be empirically compared to the other communication resilience facets of, identity anchors, networks, alternative logic and foregrounding actions

Another congruence relationship to verify empirically is optimism within the scale of psychological capital and internal locus of control. Both these constructs refer to a positive explanatory style which has been shown to support resilient outcomes. These may be the same construct utilised in differing fields and should be measured directly against each other as RSA and CRPS measures respectively to establish the relationship, pathway of interaction, as well as congruence of these sub-scales to each other. This theoretical relationship is also highlighted as a possible psychological to communication process pathway in Figure 1. The pathway between physiological resources as depicted in the RSA scale and PsyCap should also be further empirically explored as an antecedent to building more effective and stronger communication resilience crafting normalcy which is supported in the research here as the primary communication resilience requirement, through sense making.

With regard to bridging and verifying the relationship in empirical data between psychological resilience RSA and communication process CRPS to confirm the construct congruence as well as a full construct requirements and interaction pathway, the full RSA

should be directly measured against PsyCap and CRPS to establish which, or if all sub-scales within each contribute to the interactions and relationship of available psychological resources through to enacted processes of communication for resilience.

Lastly, future research should empirically replicate the findings presented here using CRP and OC and Identity to confirm and validate the direct relationship between crafting normalcy within the former, being identified as the primary mechanism through sense making towards resilience, and the latter two in their entirety.

It is both in the interests of the whole organisation as well as the individual within to enhance resilience. Disruption, challenges and unforeseen crises continue to be part of our everyday lives that has repeatedly been shown to impact desirable business outcomes as well as individual mental and physical health with negative impact. Resilience then becomes increasingly salient as a desirable characteristic for both the individual as well as a business benefit.

The research presented here offers several novel findings using an interdisciplinary approach for a richer and deeper understanding of what and how resilience is both established, through personal and social psychological resources, potentially constructed psychologically, and then enacted further via intra and interpersonal communication processes. These findings offer a more targeted and effective intervention strategy that has a dual enhancement for the individual and the organisations. These strategies for intervention further not only enhance resilience capability for both but also simultaneously enhance and support greater organisational culture and identity congruence within the same strategies, offering a multi-pronged and more effective utilisation of resources and overall enhancement from a single point of implementation.

8.7 Reference List

Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*, *34*(3), 347-356. https://doi.org/10.1177/002224379703400304

Abbott, A. (1988). *The system of professions: An essay on the expert division of labor*. Chicago University Press.

Abimbola, T., & Vallaster, C. (2007). Brand, organisational identity and reputation in SMEs: an overview. *Qualitative Market Research, 10*(4), 341-348. https://doi.org/10.1108/13522750710819685

Acosta, J. D., Chandra, A., & Madrigano, J. (2017). An agenda to advance integrative resilience research and practice: Key themes from a resilience roundtable. *Rand Health Quarterly*, *7*(1). https://doi.org/10.7249/rr1683

Afifi, T., & Afifi, W. (2015). *Uncertainty, information management, and disclosure decisions: Theories and applications*. Routledge.

Afifi, T., Granger, D., Ersig, A., Tsalikian, E., Shahnazi, A., Davis, S., Scranton, A. (2019). Testing the theory of resilience and relational load (TRRL) in families with type I diabetes. *Health communication*, *34*(10), 1107-1119. https://doi.org/10.1080/10410236.2018.1461585

Afifi, T. D. (2018). Individual/relational resilience. *Journal of Applied Communication Research*, *46*(1), 5-9. https://doi.org/10.1080/00909882.2018.1426707

Afifi, T. D., Haughton, C., & Mazur, A. P. (2021). The theory of resilience and relational load: Implications for research and practice. In *Engaging theories in interpersonal communication* (pp. 342-353). Routledge.

Afifi, T. D., Merrill, A. F., & Davis, S. (2016). The theory of resilience and relational load. *Personal Relationships*, *23*(4), 663-683. https://doi.org/10.1007/978-3-319-49425-8_852

Agarwal, J., Osiyevskyy, O., & Feldman, P. M. (2014). Corporate reputation measurement: Alternative factor structures, nomological validity, and organizational outcomes. *Journal of Business Ethics*, *130*(2), 485-506. https://doi.org/10.1007/s10551-014-2232-6

Ahn, J. M., Mortara, L., & Minshall, T. (2018). Dynamic capabilities and economic crises: has openness enhanced a firm's performance in an economic downturn? *Industrial and Corporate Change*, *27*(1), 49-63. https://doi.org/10.1093/icc/dtx048

Ainsworth, M. D. S. (1978). The Bowlby-Ainsworth attachment theory. *Behavioral and Brain Sciences*, *1*(3), 436-438. https://doi.org/10.1017/s0140525x00075828

Alat, P., Das, S. S., Arora, A., & Jha, A. K. (2023). Mental health during COVID-19 lockdown in India: Role of psychological capital and internal locus of control. *Current Psychology*, *42*(3), 1923-1935. https://doi.org/10.1007/s12144-021-01516-x

Albert, S., & Whetten, D. (1985). Organizational identity. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behaviour* (pp. 263-295). JAI Press.

Alvesson, M. (1990). On the popularity of organizational culture. *Acta Sociologica*, *33*(1), 31-49. https://doi.org/10.1177/000169939003300103

Alvesson, M. (2004). Organizational culture and discourse. *The SAGE Handbook of Organizational Discourse*, 317-336. https://doi.org/10.4135/9781848608122.n15

Alvesson, M., & Berg, P. (1991). *Corporate culture and organizational symbolism: An overview*. de Gruyter.

Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, *39*(5), 1154-1184. https://doi.org/10.2307/256995

Amadi-Echendu, J., & Thopil, G. A. (2020). Resilience is paramount for managing socio-technological systems during and post-covid-19. *IEEE Engineering Management Review*, *48*(3), 118-128. https://doi.org/10.1109/emr.2020.3013712

Ancona, D. (2012). Sensemaking: Framing and acting in the unknown. In S. Snook, N. Nohria, & R. Khurana (EDs.), *The handbook for teaching leadership* (pp. 198-217). Sage.

Andersson, T., Cäker, M., Tengblad, S., & Wickelgren, M. (2019). Building traits for organizational resilience through balancing organizational structures. *Scandinavian Journal of Management*, *35*(1), 36-45. https://doi.org/10.1016/j.scaman.2019.01.001

Anthony, E. J., & Cohler, B. J. (1987). *The invulnerable child*. Guilford Press.

Aquilia, A., Grimley, K., Jacobs, B., Kosturko, M., Mansfield, J., Mathers, C., Parniawski, P., Wood, L., & Niederhauser, V. (2020). Nursing leadership during COVID-19: Enhancing patient, family and workforce experience. *Patient Experience Journal*, *7*(2), 136-143. https://doi.org/10.35680/2372-0247.1482

Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identity in organizations: An examination of four fundamental questions. *Journal of Management*, *34*(3), 325-374. https://doi.org/10.1177/0149206308316059

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *The Academy of Management Review*, *14*(1), 20-39. https://doi.org/10.2307/258189

Ashforth, B. E., & Mael, F. A. (1996). Organizational Identity and Strategy as a Context for the Individual. *Advances in Strategic Management*, *13*, 19-64.

Ashforth, B. E., & Schinoff, B. S. (2016). Identity under construction: How individuals come to define themselves in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, *3*(1), 111-137. https://doi.org/10.1146/annurev-orgpsych-041015-062322

Ayed, N., Toner, S., & Priebe, S. (2018). Conceptualizing resilience in adult mental health literature: A systematic review and narrative synthesis. *Psychology and Psychotherapy: Theory, Research and Practice*, *92*(3), 299-341. https://doi.org/10.1111/papt.12185

Badahdah, A. M., Khamis, F., & Mahyijari, N. A. (2020). The psychological well-being of doctors during COVID-19 outbreak in Oman. *Psychiatry Research*, *289*, 113053. https://doi.org/10.1016/j.psychres.2020.113053

Baduge, M. S. P., Morphet, J., & Moss, C. (2018). Emergency nurses' and department preparedness for an Ebola outbreak: A (narrative) literature review. *International Emergency Nursing*, *38*, 41-49. https://doi.org/10.1016/j.ienj.2017.12.002

Baker, M. A., Sands, K. E., Huang, S. S., Kleinman, K., Septimus, E. J., Varma, N., Blanchard, J., Poland, R. E., Coady, M. H., Yokoe, D. S., Fraker, S., Froman, A., Moody, J., Goldin, L., Isaacs, A., Kleja, K., Korwek, K. M., Stelling, J., & Clark, A. (2021). The impact of coronavirus disease 2019 (COVID-19) on healthcare-associated infections. *Clinical Infectious Diseases*, *74*(10), 1748-1754. https://doi.org/10.1093/cid/ciab688

Balmer, J. M. (1995). Corporate branding and connoisseurship. *Journal of General Management*, *21*(1), 24-46. https://doi.org/10.1177/030630709502100102

Balmer, J. M., & Gray, E. R. (1999). Corporate identity and corporate communications: Creating a competitive advantage. *Corporate Communications: An International Journal*, *4*(4), 171-177. https://doi.org/10.1108/eum0000000007299

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.

Bantz, C. R., & Pepper, G. L. (1993). *Understanding organizations: Interpreting organizational communication cultures*. University of South Carolina Press.

Barker, J. R., & K. TOMPKINS, P. (1994). Identity in the self-managing organization characteristics of target and tenure. *Human Communication Research*, *21*(2), 223-240. https://doi.org/10.1111/j.1468-2958.1994.tb00346.x

Barrett, C. B., & Constas, M. A. (2014). Toward a theory of resilience for international development applications. *Proceedings of the National Academy of Sciences*, *111*(40), 14625-14630. https://doi.org/10.1073/pnas.1320880111

Barton, M. A., Sutcliffe, K. M., Vogus, T. J., & DeWitt, T. (2015). Performing under uncertainty: Contextualized engagement in wildland firefighting. *Journal of Contingencies and Crisis Management*, *23*(2), 74-83. https://doi.org/10.1111/1468-5973.12076

Baumeister, R. F. (2002). Ego depletion and self-control failure: An energy model of the self's executive function. *Self and Identity*, *1*(2), 129-136. https://doi.org/10.1080/152988602317319302

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529. https://doi.org/10.1037//0033-2909.117.3.497

Bean, H. (2018). National resilience. *Journal of Applied Communication Research*, *46*(1), 23-25. https://doi.org/10.1080/00909882.2018.1426709

Beech, J., Bottery, S., Charlesworth, A., Evans, H., Gershlick, B., Hemmings, N., Murray, R. (2019). *Closing the gap: Key areas for action on the health and care workforce*. Nuffield Trust.

Bennis, W. G. (1969). *Organization development: Its nature, origins, and prospects*. Addison-Wesley Publishing Company.

Berinato, S. (2020, April 3). The restorative power of ritual. *Harvard Business Review*, 2-5. https://hbr.org/2020/04/the-restorative-power-of-ritual

Betts, T., Hintz, E. A., & Buzzanell, P. M. (2021). Emplotting anticipatory resilience: An antenarrative extension of the communication theory of resilience. *Communication Monographs*, *89*(2), 211-234. https://doi.org/10.1080/03637751.2021.1971272

Bisel, R. S., Messersmith, A. S., & Keyton, J. (2009). Understanding organizational culture and communication through a gyroscope metaphor. *Journal of Management Education*, *34*(3), 342-366. https://doi.org/10.1177/1052562909340879

Blanco-Donoso, L. M., Moreno-Jiménez, J., Amutio, A., Gallego-Alberto, L., Moreno-Jiménez, B., & Garrosa, E. (2020). Stressors, job resources, fear of contagion, and secondary traumatic stress among nursing home workers in face of the COVID-19: The case of Spain. *Journal of Applied Gerontology*, *40*(3), 244-256. https://doi.org/10.1177/0733464820964153

Blau, P. (2017). *Exchange and power in social life*. Routledge.

Block, J. H., & Block, J. (2014). The role of ego-control and ego-resiliency in the organization of behavior. In *Development of cognition, affect, and social relations* (pp. 39-101). Psychology Press.

Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. ***Journal of Personality and Social Psychology***, ***70***(2), 349-361. https://doi.org/10.1037//0022-3514.70.2.349

Bodin, P., & Winman, B. (2004). Resilience and other stability concepts in ecology: Notes on their origin, validity and usefulness. *ESS Bulletin, 2*, 33-43.

Boje, D. (2001). Narrative methods for organizational & communication research. *Narrative Methods for Organizational & Communication Research*, 1-160. https://doi.org/10.4135/9781849209496

Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, *59*(1), 20-28. https://doi.org/10.1037/0003-066x.59.1.20

Bonanno, G. A. (2005). Clarifying and extending the construct of adult resilience. *American Psychologist*, *60*(3), 265-267. https://doi.org/10.1037/0003-066x.60.3.265b

Borekci, D., Rofcanin, Y., & Sahin, M. (2014). Effects of organizational culture and organizational resilience over subcontractor riskiness. *European Business Review*, *26*(1), 2-22. https://doi.org/10.1108/ebr-07-2013-0099

Boumis, J. K., Kuang, K., Wilson, S. R., Hintz, E. A., & Buzzanell, P. M. (2023). Family communication patterns predict anticipatory resilience and the enactment of resilience processes. Journal of Family Communication, 23(1), 22-40. https://doi.org/10.1080/15267431.2023.2172021

Brand, F. S., & Jax, K. (2007). Focusing the Meaning(s) of resilience: Resilience as a descriptive concept and a boundary object. *Ecology and Society*, *12*(1). https://doi.org/10.5751/es-02029-120123

Brenner, P. S., Serpe, R. T., & Stryker, S. (2017). Role-specific self-efficacy as precedent and product of the identity model. *Sociological Perspectives*, *61*(1), 57-80. https://doi.org/10.1177/0731121417697306

Bridges, W. (1996). Jobshift: How to prosper in a workplace without jobs. *American Journal of Health-System Pharmacy*, *53*(21), 2671-2671. https://doi.org/10.1093/ajhp/53.21.2671

Broms, H., & Gahmberg, H. (1983). Communication to self in organizations and cultures. *Administrative Science Quarterly*, *28*(3), 482-495. https://doi.org/10.2307/2392254

Brooks, A. W., Schroeder, J., Risen, J. L., Gino, F., Galinsky, A. D., Norton, M. I., & Schweitzer, M. E. (2016). Retracted: Don't stop believing: Rituals improve performance by decreasing anxiety. *Organizational Behavior and Human Decision Processes*, *137*, 71-85. https://doi.org/10.1016/j.obhdp.2016.07.004

Browning, L., & Morris, G. H. (2012a). *Narrative theory and organizational life: Ideas and applications*. Taylor & Francis

Browning, L., & Morris, G. H. (2012b). *Stories of life in the workplace: An open architecture for organizational narratology*. Routledge.

Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, *18*(1), 1-21. https://doi.org/10.1086/448619

Bryman, A. (2013). *Leadership and organizations (RLE: Organizations)*. Routledge.

Burge, T. (1979). Individualism and the mental. *Midwest Studies in Philosophy*, *4*, 73-121. https://doi.org/10.1111/j.1475-4975.1979.tb00374.x

Burhanuddin, N. A., Ahmad, N. A., Said, R. R., & Asimiran, S. (2019). A systematic review of the psychological capital (PsyCap) research development: Implementation and gaps. *International Journal of Academic Research in Progressive Education and Development*, *8*(3). 133-150. https://doi.org/10.6007/ijarped/v8-i3/6304

Burke, S., Parker, S., Fleming, P., Barry, S., & Thomas, S. (2021). Building health system resilience through policy development in response to COVID-19 in Ireland: From shock to reform. *The Lancet Regional Health - Europe*, *9*, 100223. https://doi.org/10.1016/j.lanepe.2021.100223

Burnard, K., & Bhamra, R. (2011). Organisational resilience: Development of a conceptual framework for organisational responses. *International Journal of Production Research*, *49*(18), 5581-5599. https://doi.org/10.1080/00207543.2011.563827

Burns, D. D. (2012). *Feeling good: The new mood therapy*. HarperCollins.

Buzzanell, P. M. (2010). Resilience: Talking, resisting, and imagining new normalcies into being. *Journal of Communication*, *60*(1), 1-14. https://doi.org/10.1111/j.1460-2466.2009.01469.x

Buzzanell, P. M. (2017). Communication theory of resilience. *Engaging Theories in Family Communication*, 98-109. https://doi.org/10.4324/9781315204321-9

Buzzanell, P. M. (2018). Organizing resilience as adaptive-transformational tensions. *Journal of Applied Communication Research*, *46*(1), 14-18. https://doi.org/10.1080/00909882.2018.1426711

Buzzanell, P. M. (2019). "Communication Theory of Resilience in Everyday Talk, Interactions, and Network Structures". *Communication Faculty Publications*. 983. https://digitalcommons.usf.edu/spe_facpub/983

Buzzanell, P. M., & Houston, J. B. (2018). Communication and resilience: Multilevel applications and insights. *Journal of Applied Communication Research*, *46*(1), 1-4. https://doi.org/10.1080/00909882.2017.1412086

Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts. Applications, and programming*. Taylor & Francis.

Cahill, H., & Leccardi, C. (2020). Reframing resilience. *Perspectives on Children and Young People*, 67-81. https://doi.org/10.1007/978-981-15-3365-5_5

Callero, P. L. (1986). Putting the social in prosocial behavior: An interactionist approach to altruism. *Humboldt Journal of Social Relations*, 15-32. http://www.jstor.org/stable/23262657

Camillus, J. C. (2008). Strategy as a wicked problem. *Harvard Business Review*, *86*(5), 98-101.

Camillus, J. C. (2011). Organisational identity and the business environment: The strategic connection. *International Journal of Business Environment*, *4*(4), 306-314. https://doi.org/10.1504/ijbe.2011.043645

Cappelen, H., & Lepore, E. (2008). *Insensitive semantics: A defense of semantic minimalism and speech act pluralism*. John Wiley & Sons.

Carbaugh, D. (1988). Comments on "culture"; in communication inquiry. *Communication Reports, 1*(1), 38-41. https://doi.org/10.1080/08934218809367460

Carlone, D., & Taylor, B. (1998). Organizational communication and cultural studies: A review essay. *Communication Theory*, *8*(3), 337-367. https://doi.org/10.1111/j.1468-2885.1998.tb00224.x

Carpenter, S., Arrow, K., Barrett, S., Biggs, R., Brock, W., Crépin, A., Engström, G., Folke, C., Hughes, T., Kautsky, N., Li, C., McCarney, G., Meng, K., Mäler, K., Polasky, S., Scheffer, M., Shogren, J., Sterner, T., Vincent, J., … Zeeuw, A. (2012). General resilience to cope with extreme events. *Sustainability*, *4*(12), 3248-3259. https://doi.org/10.3390/su4123248

Carr, M. J., Steeg, S., Webb, R. T., Kapur, N., Chew-Graham, C. A., Abel, K. M., Hope, H., Pierce, M., & Ashcroft, D. M. (2021). Effects of the COVID-19 pandemic on primary care-recorded mental illness and self-harm episodes in the UK: A population-based cohort study. *The Lancet Public Health*, *6*(2), e124-e135. https://doi.org/10.1016/s2468-2667(20)30288-7

Carston, R. (2008). *Thoughts and utterances: The pragmatics of explicit communication*. John Wiley & Sons.

Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues*, *54*(2), 245-266. https://doi.org/10.1111/0022-4537.641998064

Caza, A., Bagozzi, R. P., Woolley, L., Levy, L., & Barker Caza, B. (2010). Psychological capital and authentic leadership. *Asia-Pacific Journal of Business Administration*, *2*(1), 53-70. https://doi.org/10.1108/17574321011028972

Caza, B. B., & Milton, L. P. (2012). Resilience at work: Building capacity in the face of adversity. In G. M. & k. S. Cameraon (Eds), *Oxford handbook of positive organizational scholarship*, (pp. 895-908). Oxford University Press.

Cederblad, M. (1996). Fifty years of epidemiologic studies in child and adolescent psychiatry in Sweden. *Nordic Journal of Psychiatry*, *50*(sup36), 55-66. https://doi.org/10.3109/08039489609104315

Cederblad, M., Dahlin, L., Hagnell, O., & Hansson, K. (1994). Salutogenic childhood factors reported by middle-aged individuals. *European Archives of Psychiatry and Clinical Neuroscience*, *244*(1), 1-11. https://doi.org/10.1007/bf02279805

Cevik, M., Baral, S. D., Crozier, A., & Cassell, J. A. (2021). Support for self-isolation is critical in covid-19 response. *British Medical Journal, 372,* n224. https://doi.org/10.1136/bmj.n224

Chandler-Jeanville, S., Nohra, R. G., Loizeau, V., Lartigue-Malgouyres, C., Zintchem, R., Naudin, D., & Rothan-Tondeur, M. (2021). Perceptions and experiences of the COVID-19 pandemic amongst frontline nurses and their relatives in France in six paradoxes: A qualitative study. *International Journal of Environmental Research and Public Health*, *18*(13), 6977. https://doi.org/10.3390/ijerph18136977

Chaput, M., Brummans, B. H., & Cooren, F. (2011). The role of organizational identity in the communicative Constitution of an organization: A study of Consubstantialization in a young political party. *Management Communication Quarterly*, *25*(2), 252-282. https://doi.org/10.1177/0893318910386719

Chatterjee, K., Chatterjee, K., Kumar, A., & Shankar, S. (2020). Healthcare impact of COVID-19 epidemic in India: A stochastic mathematical model. *Medical Journal Armed Forces India*, *76*(2), 147-155. https://doi.org/10.1016/j.mjafi.2020.03.022

Cheney, G. (1983a). On the various and changing meanings of organizational membership: A field study of organizational identity. *Communication Monographs*, *50*(4), 342-362. https://doi.org/10.1080/03637758309390174

Cheney, G. (1983b). The rhetoric of identity and the study of organizational communication. *Quarterly Journal of Speech*, *69*(2), 143-158. https://doi.org/10.1080/00335638309383643

Cheney, G., & Christensen, L. T. (2001). Organizational identity: Linkages between internal and external communication. In M. J. Hatch & M. Schultz (Eds.), *The New Handbook of Organizational Communication*, (pp. 231-269). Oxford University Press.

Cheney, G., Christensen, L. T., & Dailey, S. (2014). Communicating identity and identity in and around organizations. In L. L. Putnam & D. K. Mumby (Eds.), *The SAGE handbook of organizational communication: Advances in theory, research, and methods* (pp. 695-716). Sage Publications.

Cheney, G., Christensen, L. T., Zorn Jr, T. E., & Ganesh, S. (2010). *Organizational communication in an age of globalization: Issues, reflections, practices*. Waveland Press.

Cheney, G., & Lee Ashcraft, K. (2007). Considering "The professional" in communication studies: Implications for theory and research within and beyond the boundaries of organizational communication. *Communication Theory*, *17*(2), 146-175. https://doi.org/10.1111/j.1468-2885.2007.00290.x

Cheney, G., May, S., & Munshi, D. (2011). *The polyphony of corporate social responsibility*. Routledge.

Cheney, G., & Tompkins, P. K. (1987). Coming to terms with organizational identity and commitment. *Central States Speech Journal*, *38*(1), 1-15. https://doi.org/10.1080/10510978709368225

Cheshire, A., Ridge, D., Hughes, J., Peters, D., Panagioti, M., Simon, C., & Lewith, G. (2017). Influences on GP coping and resilience: A qualitative study in primary care. *British Journal of General Practice*, *67*(659), e428-e436. https://doi.org/10.3399/bjgp17x690893

Chew, Q. H., Chia, F. L., Ng, W. K., Lee, W. C., Tan, P. L., Wong, C. S., Puah, S. H., Shelat, V. G., Seah, E. D., Huey, C. W., Phua, E. J., & Sim, K. (2020). Perceived stress, stigma, traumatic stress levels and coping responses amongst residents in training across multiple specialties during COVID-19 pandemic—A longitudinal study. *International Journal of Environmental Research and Public Health*, *17*(18), 6572. https://doi.org/10.3390/ijerph17186572

Choo, C. (1996). The knowing organization: How organizations use information to construct meaning, create knowledge and make decisions. *International Journal of Information Management*, *16*(5), 329-340. https://doi.org/10.1016/0268-4012(96)00020-5

Chowdhury, M. A., Hossain, N., Kashem, M. A., Shahid, M. A., & Alam, A. (2020). Immune response in COVID-19: A review. *Journal of Infection and Public Health*, *13*(11), 1619-1629. https://doi.org/10.1016/j.jiph.2020.07.001

Christensen, L. T. (1997). Marketing as auto-communication. *Consumption Markets & Culture*, *1*(3), 197-227. https://doi.org/10.1080/10253866.1997.9670299

Christensen, L. T., & Askegaard, S. (2001). Corporate identity and corporate image revisited - a semiotic perspective. *European Journal of Marketing*, *35*(3/4), 292-315. https://doi.org/10.1108/03090560110381814

Cicchetti, D., & Garmezy, N. (1993). Prospects and promises in the study of resilience. *Development and Psychopathology*, *5*(4), 497-502. https://doi.org/10.1017/s0954579400006118

Clair, R. P. (1998). *Organizing silence: A world of possibilities*. State University of New York Press.

Clair, R. P., & Kunkel, A. W. (1998). "Unrealistic realities": Child abuse and the aesthetic resolution. *Communication Monographs*, *65*(1), 24-46. https://doi.org/10.1080/03637759809376433

Clausen, J. A. (1995). *American lives: Looking back at the children of the Great Depression*. Univ of California Press.

Clauss-Ehlers, C. S. (2008). Sociocultural factors, resilience, and coping: Support for a culturally sensitive measure of resilience. *Journal of Applied Developmental Psychology*, *29*(3), 197-212. https://doi.org/10.1016/j.appdev.2008.02.004

Cohen, L., Manion, L., & Morrison, K. (2002). *Research methods in education*. Routledge.

Cobb, E. P. (2022). Management of psychosocial hazards as part of an occupational health and safety management system. *Managing Psychosocial Hazards and Work-Related Stress in Today's Work Environment*, 149-155. https://doi.org/10.4324/9781003187349-21

Cook, C., Brunton, M., Chapman, M., & Roskruge, M. (2021). Frontline nurses' sensemaking during the initial phase of the COVID-19 pandemic in 2020 Aotearoa New Zealand. *Nursing Praxis Aotearoa New Zealand*, *37*(3), 41-52. https://doi.org/10.36951/27034542.2021.034

Cooper, D. R., & Schindler, P. (2014). *Business research methods*. McGraw-Hill.

Coopman, S. J., & Meidlinger, K. B. (2000). Power, hierarchy, and change. *Management Communication Quarterly*, *13*(4), 567-625. https://doi.org/10.1177/0893318900134002

Corley, K. G., Harquail, C. V., Pratt, M. G., Glynn, M. A., Fiol, C. M., & Hatch, M. J. (2006). Guiding organizational identity through aged adolescence. *Journal of Management Inquiry*, *15*(2), 85-99. https://doi.org/10.1177/1056492605285930

Cowen, E. L., Wyman, P. A., Work, W. C., & Iker, M. R. (1995). A preventive intervention for enhancing resilience among highly stressed urban children. *The Journal of Primary Prevention*, *15*(3), 247-260. https://doi.org/10.1007/bf02197474

Cozolino, L. (2014). *The Neuroscience of Human Relationships 2e: Attachment And The Developing Social Brain*. WW Norton & Company.

Croucher, S. M., & Cronn-Mills, D. (2014). *Understanding communication research methods: A theoretical and practical approach*. Routledge.

Crowley, T., Kitshoff, D., De Lange-Cloete, F., Baron, J., De Lange, S., Young, C., Esterhuizen, T., & Couper, I. (2021). Primary care nurses' preparedness for COVID-19 in the Western Cape province, South Africa. *African Journal of Primary Health Care & Family Medicine*, *13*(1), 1-8. https://doi.org/10.4102/phcfm.v13i1.2879

Daniels, A. D., & Bryan, J. (2021). Resilience despite complex trauma: Family environment and family cohesion as protective factors. *The Family Journal*, *29*(3), 336-345. https://doi.org/10.1177/10664807211000719

Davis, M. C., Luecken, L., & Lemery-Chalfant, K. (2009). Resilience in common life: Introduction to the special issue. *Journal of Personality*, *77*(6), 1637-1644. https://doi.org/10.1111/j.1467-6494.2009.00595.x

De Brier, N., Stroobants, S., Vandekerckhove, P., & De Buck, E. (2020). Factors affecting mental health of health care workers during coronavirus disease outbreaks (SARS, mers & COVID-19): A rapid systematic review. *PLOS ONE*, *15*(12), e0244052. https://doi.org/10.1371/journal.pone.0244052

Deal, T. E., & Kennedy, A. A. (1983). Corporate cultures: The rites and rituals of corporate life. *Business Horizons*, *26*(2), 82-85. https://doi.org/10.1016/0007-6813(83)90092-7

Debora Riantoputra, C. (2009). Know thyself: Examining factors that influence the activation of organizational identity concepts in top managers' minds. *Group & Organization Management*, *35*(1), 8-38. https://doi.org/10.1177/1059601109354804

Deci, E. L., & Ryan, R. M. (1985). Conceptualizations of intrinsic motivation and self-determination. *Intrinsic Motivation and Self-Determination in Human Behavior*, 11-40. https://doi.org/10.1007/978-1-4899-2271-7_2

Deetz, S. (1992). *Democracy in an age of corporate colonization: Developments in communication and the politics of everyday life*. SUNY Press.

Deetz, S. (n.d.). Critical theory. In S. MAy & D. K. Mumby (Eds.), *Engaging organizational communication theory & research: Multiple perspectives* (85-112). Sage.

Delanty, G., & Strydom, P. (2003). Philosophies of social science: The classic and contemporary readings. PhilPapers.

DeLongis, A., Coyne, J. C., Dakof, G., Folkman, S., & Lazarus, R. S. (1982). Relationship of daily hassles, uplifts, and major life events to health status. *Health Psychology*, *1*(2), 119-136. https://doi.org/10.1037/0278-6133.1.2.119

Denzin, N. (1994). *Handbook of qualitative research*. Sage.

Deshields, T. L., Heiland, M. F., Kracen, A. C., & Dua, P. (2015). Resilience in adults with cancer: Development of a conceptual model. *Psycho-Oncology*, *25*(1), 11-18. https://doi.org/10.1002/pon.3800

Di Monte, C., Monaco, S., Mariani, R., & Di Trani, M. (2020). From resilience to burnout: Psychological features of Italian general practitioners during COVID-19 emergency. *Frontiers in Psychology*, *11*. 567201. https://doi.org/10.3389/fpsyg.2020.567201

DiClemente, C. M., Rice, C. M., Quimby, D., Richards, M. H., Grimes, C. T., Morency, M. M., White, C. D., Miller, K. M., & Pica, J. A. (2016). Resilience in urban African American adolescents: The protective enhancing effects of neighborhood, family, and school cohesion following violence exposure. *The Journal of Early Adolescence*, *38*(9), 1286-1321. https://doi.org/10.1177/0272431616675974

DiFazio, L. T., Curran, T., Bilaniuk, J. W., Adams, J. M., Durling-Grover, R., Kong, K., & Nemeth, Z. H. (2020). The impact of the COVID-19 pandemic on hospital admissions for trauma and acute care surgery. *The American Surgeon*, *86*(8), 901-903. https://doi.org/10.1177/0003134820939904

Dillman, D. (2000). *Mail and internet survey: The tailored design method*. John Willey & Sons. In: Inc.

Dolan, S. L., & Brykman, K. M. (2022). The use of dopamine to enhance resilience in a post covid-19 era. *European Business Review*, 1-14.

Doliński, D. (2018). Is psychology still a science of behaviour? *Social Psychological Bulletin*, *13*(2), e25025. https://doi.org/10.5964/spb.v13i2.25025

Dougherty, D. (2001). Sexual harassment as [Dys]Functional process: A feminist standpoint analysis. *Journal of Applied Communication Research*, *29*(4), 372-402. https://doi.org/10.1080/00909880128116

Downs, C. W., Clampitt, P. G., & Pfeiffer, A. L. (1988). Communication and organizational outcomes. In G. M. Goldhaber & G. A. Barnett (Eds), *Handbook of organizational communication*, (pp. 171-211). Sage.

Doyle, L., Brady, A., & Byrne, G. (2009). An overview of mixed methods research. *Journal of Research in Nursing*, *14*(2), 175-185. https://doi.org/10.1177/1744987108093962

Du, J., Dong, L., Wang, T., Yuan, C., Fu, R., Zhang, L., Liu, B., Zhang, M., Yin, Y., Qin, J., Bouey, J., Zhao, M., & Li, X. (2020). Psychological symptoms among frontline healthcare workers during COVID-19 outbreak in Wuhan. *General Hospital Psychiatry*, *67*, 144-145. https://doi.org/10.1016/j.genhosppsych.2020.03.011

Duchek, S. (2019). Organizational resilience: A capability-based conceptualization. *Business Research*, *13*(1), 215-246. https://doi.org/10.1007/s40685-019-0085-7

Duncan, D. L. (2020). What the COVID-19 pandemic tells us about the need to develop resilience in the nursing workforce. *Nursing Management*, *27*(3), 22-27. https://doi.org/10.7748/nm.2020.e1933

Dunne, J. (1995). Beyond sovereignty and deconstruction: The storied self. *Philosophy & Social Criticism*, *21*(5-6), 137-157. https://doi.org/10.1177/0191453795021005-611

Durkheim, E. (2023). The division of labour in society. In *Social theory Re-wired* (pp. 15-34). Routledge.

Dutta, D. (2019). Communicating resilience in actual and imagined boundaries: Narrative plots and meanings of retention in organizations. *Journal of Applied Communication Research*, *47*(4), 401-419. https://doi.org/10.1080/00909882.2019.1658888

Dutton, J. E., & Dukerich, J. M. (1991). Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal*, *34*(3), 517-554. https://doi.org/10.2307/256405

Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identity. *Administrative Science Quarterly*, *39*(2), 239-263. https://doi.org/10.2307/2393235

Dziedzic, S. (2021). New Zealand tops Lowy Institute list as country with best response to coronavirus, Australia sits eighth. *ABC News*, *28*.

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt brace Jovanovich college publishers. *Psychology & Marketing*, *12*(5), 459-466. https://doi.org/10.1002/mar.4220120509

Easterby-Smith, M., Thorpe, R., Jackson, P., & Lowe, A. (2008). Management research: theory and practice. *Sage Publications Ltd., London, UK*, *101*, 210.

Eastwick, P. W., & Finkel, E. J. (2008). The attachment system in fledgling relationships: An activating role for attachment anxiety. *Journal of Personality and Social Psychology*, *95*(3), 628-647. https://doi.org/10.1037/0022-3514.95.3.628

Edwards, J. (2009). *Language and identity: An introduction*. Cambridge University Press.

Egeland, B., Carlson, E., & Sroufe, L. A. (1993). Resilience as process. *Development and Psychopathology*, *5*(4), 517-528. https://doi.org/10.1017/s0954579400006131

Eisenberg, E. M. (1984). Ambiguity as strategy in organizational communication. *Communication Monographs*, *51*(3), 227-242. https://doi.org/10.1080/03637758409390197

Eisenberg, E. M., Murphy, A., & Andrews, L. (1998). Openness and decision making in the search for a university Provost. *Communication Monographs*, *65*(1), 1-23. https://doi.org/10.1080/03637759809376432

Eisenberg, E. M., & Riley, P. (2001). Organizational culture. *The New Handbook of Organizational Communication*, 291-322. https://doi.org/10.4135/9781412986243.n9

Elsbach, K. D., & Bhattacharya, C. B. (2001). Defining who you are by what you're not: Organizational Disidentity and the national rifle association. *Organization Science*, *12*(4), 393-413. https://doi.org/10.1287/orsc.12.4.393.10638

Endress, M. (2015). The social Constructedness of resilience. *Social Sciences*, *4*(3), 533-545. https://doi.org/10.3390/socsci4030533

Fairhurst, G. T. (2001). Dualisms in leadership research. In F. M. Jablin & L. L. Putnam (Eds.), *The New Handbook of Organizational Communication*, (pp. 379-439). Sage.

Fairhurst, G. T. (2004). Organizations as discursive constructions. *Communication Theory*, *14*(1), 5-26. https://doi.org/10.1093/ct/14.1.5

Fairhurst, G. T., & Cooren, F. (2004). Organizational language in use: Interaction analysis, conversation analysis and speech act schematics. *The SAGE Handbook of Organizational Discourse*, 131-152. https://doi.org/10.4135/9781848608122.n6

Farace, R. V., Monge, P. R., & Russell, H. M. (1977). *Communicating and organizing* (Vol. 1077). Addison-Wesley Reading, MA.

Feeney, B. C., & Collins, N. L. (2014). A theoretical perspective on the importance of social connections for thriving. *Mechanisms of social connection: From brain to group*, 291-314. https://doi.org/10.1037/14250-017

Feeney, B. C., & Lemay, E. P. (2012). Surviving relationship threats. *Personality and Social Psychology Bulletin*, *38*(8), 1004-1017. https://doi.org/10.1177/0146167212442971

Ferris, G. R., Hochwarter, W. A., Buckley, M. R., Harrell-Cook, G., & Frink, D. D. (1999). Human resources management: Some new directions. *Journal of Management*, *25*(3), 385-415. https://doi.org/10.1177/014920639902500306

Fertleman, C., & Carroll, W. (2013). Protecting students and promoting resilience. *BMJ*, *347*(sep02 3), f5266-f5266. https://doi.org/10.1136/bmj.f5266

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.

Fisher, W. R. (1984). Narration as a human communication paradigm: The case of public moral argument. *Communication Monographs, 51*(1), 1-22. https://doi.org/10.1080/03637758409390180

Fisher, W. R. (1989). Clarifying the narrative paradigm. *Communication Monographs*, *56*(1), 55-58. https://doi.org/10.1080/03637758909390249

Fleming, P. (2005). Metaphors of resistance. *Management Communication Quarterly*, *19*(1), 45-66. https://doi.org/10.1177/0893318905276559

Fletcher, D., & Sarkar, M. (2013). Psychological resilience. *European Psychologist*, *18*(1), 12-23. https://doi.org/10.1027/1016-9040/a000124

Floyd, K. (2008). A review of:"Communicating Affection: Interpersonal behavior and social context." *Southern Communication Journal,* 73(1), 102-103. https://doi.org/10.1080/10417940701821624

Flynn, D., Moloney, E., Bhattarai, N., Scott, J., Breckons, M., Avery, L., & Moy, N. (2020). COVID-19 pandemic in the United Kingdom. *Health Policy and Technology*, *9*(4), 673-691. https://doi.org/10.1016/j.hlpt.2020.08.003

Foucault, M. (1984). *The foucault reader*. Pantheon.

Frank, A. W. (1995). The wounded storyteller. https://doi.org/10.7208/chicago/9780226260037.001.0001

Frank, A. W. (2013). *The wounded storyteller: Body, illness & ethics*. University of Chicago Press.

Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality & Social Psychology*, *84*(2), 365-376. https://doi.org/10.1037//0022-3514.84.2.365

Freeston, M., Tiplady, A., Mawn, L., Bottesi, G., & Thwaites, S. (2020). Towards a model of uncertainty distress in the context of coronavirus (COVID-19). *The Cognitive Behaviour Therapist*, *13*. https://doi.org/10.1017/s1754470x2000029x

Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: What are the central protective resources behind healthy adjustment? *International Journal of Methods in Psychiatric Research*, *12*(2), 65-76. https://doi.org/10.1002/mpr.143

Frost, P. J., Moore, L. F., Louis, M. R., Lundberg, C. C., & Martin, J. (1991). Reframing organizational culture. *Journal of Organizational Behavior*, *16*(5), 498-499. https://doi.org/10.1002/job.4030160510

Fu, W., & Deshpande, S. P. (2013). The impact of caring climate, job satisfaction, and organizational commitment on job performance of employees in a China's insurance company. *Journal of Business Ethics*, *124*(2), 339-349. https://doi.org/10.1007/s10551-013-1876-y

Gadamer, H.-G. (2013). *Truth and method*. A&C Black.

Gagné, M. (2014). *The Oxford handbook of work engagement, motivation, and self-determination theory*. Oxford University Press.

Galaitsi, S., Kurth, M., & Linkov, I. (2021). Resilience: Directions for an uncertain future following the COVID-19 pandemic. *GeoHealth*, *5*(11). https://doi.org/10.1029/2021gh000447.

Galante, J., Dufour, G., Vainre, M., Wagner, A. P., Stochl, J., Benton, A., Lathia, N., Howarth, E., & Jones, P. B. (2018). A mindfulness-based intervention to increase resilience to stress in university students (the mindful student study): A pragmatic randomised controlled trial. *The Lancet Public Health*, *3*(2), e72-e81. https://doi.org/10.1016/s2468-2667(17)30231-1

Gallo, L. C., & Matthews, K. A. (2003). Understanding the association between socioeconomic status and physical health: Do negative emotions play a role? *Psychological Bulletin*, *129*(1), 10-51. https://doi.org/10.1037//0033-2909.129.1.10

Ganesh, S. (2003). Organizational narcissism. *Management Communication Quarterly*, *16*(4), 558-594. https://doi.org/10.1177/0893318903252539

Gardner, D. G., & Pierce, J. L. (1998). Self-esteem and self-efficacy within the organizational context. *Group & Organization Management*, *23*(1), 48-70. https://doi.org/10.1177/1059601198231004

Garmezy, N., & Masten, A. (1990). The adaptation of children to a stressful world: Mastery of fear. In L. E. Arnold (Ed.), *Childhood stress* (pp. 460–473). John Wiley & Sons.

Gautama So, I., Djunggara, A. A., Fahrobi, R., Simamora, B. H., & Ruangkanjanases, A. (2018). Effect of Organisational Communication and Culture on Employee Motivation and Its Impact on Employee Performance. *Pertanika Journal of Social Sciences & Humanities*, *26*(2). 1133-1142.

Geertz, C. (1973). *The interpretation of cultures* (Vol. 5043). Basic books.

Giddens, A. (1979). *Central problems in social theory: Action, structure, and contradiction in social analysis* (Vol. 241). Univ of California Press.

Gilead, T., & Dishon, G. (2021). Rethinking future uncertainty in the shadow of COVID 19: Education, change, complexity and adaptability. *Educational Philosophy and Theory*, *54*(6), 822-833. https://doi.org/10.1080/00131857.2021.1920395

Gilly, M. C., & Wolfinbarger, M. (1998). Advertising's internal audience. *Journal of Marketing*, *62*(1), 69-88. https://doi.org/10.1177/002224299806200107

Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sense giving in strategic change initiation. *Strategic Management Journal*, *12*(6), 433-448. https://doi.org/10.1002/smj.4250120604

Gioia, D. A., Patvardhan, S. D., Hamilton, A. L., & Corley, K. G. (2013). Organizational identity formation and change. *Academy of Management Annals*, *7*(1), 123-193. https://doi.org/10.5465/19416520.2013.762225

Gioia, D. A., Schultz, M., & Corley, K. G. (2000). Organizational identity, image, and adaptive instability. *The Academy of Management Review*, *25*(1), 63-81. https://doi.org/10.2307/259263

Gladwin, T. N., & Hofstede, G. (1981). Culture's consequences: International differences in work-related values. *The Academy of Management Review*, *6*(4), 681. https://doi.org/10.2307/257651

Glaser, S. R., Zamanou, S., & Hacker, K. (1987). Measuring and interpreting organizational culture. *Management Communication Quarterly*, *1*(2), 173-198. https://doi.org/10.1177/0893318987001002003

Gliner, J. A., Morgan, G. A., & Leech, N. L. (2011). *Research methods in applied settings: An integrated approach to design and analysis*. Routledge.

Glynn, M. A. (1998). Individuals' need for organizational identity (nOID): Speculations on individual differences in the propensity to identify. *Identity in organizations: Building theory through conversations*, 209-272. https://doi.org/10.4135/9781452231495.n7

Goldfarb, E. V. (2020). Participant stress in the COVID-19 era and beyond. *Nature Reviews Neuroscience*, *21*(12), 663-664. https://doi.org/10.1038/s41583-020-00388-7

Gonçalves, L., Navarro, J., & Sala, R. (2019). Spanish validation of the benchmark resilience tool (short-form version) to evaluate organisational resilience. *Safety Science*, *111*, 94-101. https://doi.org/10.1016/j.ssci.2018.09.015

Gossett, L. (2002). Kept at arm's length: Questioning the organizational desirability of member identity. *Communication Monographs*, *69*(4), 385-404. https://doi.org/10.1080/03637750216548

Gossett, L. M. (2006). Falling between the cracks. *Management Communication Quarterly*, *19*(3), 376-415. https://doi.org/10.1177/0893318905280327

Gover, L., & Duxbury, L. (2018). Inside the onion: Understanding what enhances and inhibits organizational resilience. *The Journal of Applied Behavioral Science*, *54*(4), 477-501. https://doi.org/10.1177/0021886318797597

Gray, R., & Sanders, C. (2020). A reflection on the impact of COVID-19 on primary care in the United Kingdom. *Journal of Interprofessional Care*, *34*(5), 672-678. https://doi.org/10.1080/13561820.2020.1823948

Greenberg, N. (2020). Mental health of health-care workers in the COVID-19 era. *Nature Reviews Nephrology*, *16*(8), 425-426. https://doi.org/10.1038/s41581-020-0314-5

Greene, R., & Conrad, A. (2002). Resiliency: An integrated approach to practice, policy, and research. *American Journal of Orthopsychiatry*, *72*(4), 596-599. https://doi.org/10.1037//0002-9432.72.4.596

Griner, T., Souza, M., Girard, A., Hain, P., High, H., & Williams, M. (2021). COVID-19's impact on nurses' workplace rituals. *Nurse Leader*, *19*(4), 425-430. https://doi.org/10.1016/j.mnl.2021.06.008

Grund, N. E. (1996). Reputation: Realizing value from the corporate ImageReputation: Realizing value from the corporate image by FombrunCharles J., Boston, MA: Harvard business school press, 1996—432. *Academy of Management Perspectives*, *10*(1), 99-101. https://doi.org/10.5465/ame.1996.9603293245

Grut, M., De Wildt, G., Clarke, J., Greenfield, S., & Russell, A. (2023). Primary health care during the COVID-19 pandemic: A qualitative exploration of the challenges and changes in practice experienced by GPs and GP trainees. *PLOS ONE*, *18*(2), e0280733. https://doi.org/10.1371/journal.pone.0280733

Gupta, N., Dhamija, S., Patil, J., & Chaudhari, B. (2021). Impact of COVID-19 pandemic on healthcare workers. *Industrial Psychiatry Journal*, *30*(Suppl 1), S282-S284. https://doi.org/10.4103/0972-6748.328830

Habermas, J. (1990). *The philosophical discourse of modernity: Twelve lectures*. MIT Press.

Hagedorn, S. (2004). My father, the "Wounded storyteller": A Postchaos narrative. *Qualitative Inquiry*, *10*(3), 463-474. https://doi.org/10.1177/1077800403261851

Halcomb, E., Williams, A., Ashley, C., McInnes, S., Stephen, C., Calma, K., & James, S. (2020). The support needs of Australian primary health care nurses during the COVID-19 pandemic. *Journal of Nursing Management*, *28*(7), 1553-1560. https://doi.org/10.1111/jonm.13108

Hall, E. T. (1976). *Beyond culture*. Anchor.

Hanson, W. E., Creswell, J. W., Clark, V. L., Petska, K. S., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology*, *52*(2), 224-235. https://doi.org/10.1037/0022-0167.52.2.224

Harigopal, K. (1995). *Organizational stress: A study of role conflict*. Universities Press.

Harré R., Secord P. F. (1973). The explanation of social behaviour. Oxford. *Psychological Medicine*, *3*(3), 396-396. https://doi.org/10.1017/s0033291700049795

Harrison, T. R., Yang, F., Anderson, D., Morgan, S. E., Wendorf Muhamad, J., Talavera, E., Schaefer Solle, N., Lee, D., Caban-Martinez, A. J., & Kobetz, E. (2017). Resilience, culture change, and cancer risk reduction in a fire rescue organization: Clean gear as the new badge of honor. *Journal of Contingencies and Crisis Management*, *25*(3), 171-181. https://doi.org/10.1111/1468-5973.12182

Hartmann, S., Weiss, M., Newman, A., & Hoegl, M. (2019). Resilience in the workplace: A multilevel review and synthesis. *Applied Psychology*, *69*(3), 913-959. https://doi.org/10.1111/apps.12191

Haslam, S. A., Cornelissen, J. P., & Werner, M. D. (2017). Metatheories and metaphors of organizational identity: Integrating social constructionist, social identity, and social actor perspectives within a social interactionist model. *International Journal of Management Reviews*, *19*(3), 318-336. https://doi.org/10.1111/ijmr.12150

Haslam, S. A., Postmes, T., & Ellemers, N. (2003). More than a metaphor: Organizational identity makes organizational life possible. *British Journal of Management*, *14*(4), 357-369. https://doi.org/10.1111/j.1467-8551.2003.00384.x

Hatch, M. J., & Schultz, M. (1997). Relations between organizational culture, identity and image. *European Journal of Marketing*, *31*(5/6), 356-365. https://doi.org/10.1108/eb060636

Hatch, M. J., & Schultz, M. (2002). The dynamics of organizational identity. *Human Relations*, *55*(8), 989-1018. https://doi.org/10.1177/0018726702055008181

Hecht, M. L. (1993). A research odyssey: Toward the development of a communication theory of identity. *Communication Monographs*, *60*(1), 76-82. https://doi.org/10.1080/03637759309376297

Herbane, B. (2018). Rethinking organizational resilience and strategic renewal in SMEs. *Entrepreneurship & Regional Development*, *31*(5-6), 476-495. https://doi.org/10.1080/08985626.2018.1541594

Hintz, E. A., Betts, T., & Buzzanell, P. M. (2021). Caring for patients without personal protective equipment (PPE): Material conditions as multidimensional cascading triggers for resilience processes. *Health Communication*, *38*(2), 371-380. https://doi.org/10.1080/10410236.2021.1953727

Hirst, G., Van Dick, R., & Van Knippenberg, D. (2009). A social identity perspective on leadership and employee creativity. *Journal of Organizational Behavior*, *30*(7), 963-982. https://doi.org/10.1002/job.600

Hitchcock, G., & Hughes, D. (2002). *Research and the teacher: A qualitative introduction to school-based research*. Routledge.

Hoang, A. T., Nguyen, X. P., Le, A. T., Huynh, T. T., & Pham, V. V. (2021). COVID-19 and the global shift progress to clean energy. *Journal of Energy Resources Technology*, *143*(9). 094701. https://doi.org/10.1115/1.4050779

Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5). Sage.

Hogg, M. A., & Terry, D. J. (2014). Social identity processes in organizational contexts. *Psychology Press*, 1-12. https://doi.org/10.4324/9781315800530

Holden, M. T., & Lynch, P. (2004). Choosing the appropriate methodology: Understanding research philosophy. *The Marketing Review*, *4*(4), 397-409. https://doi.org/10.1362/1469347042772428

Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, *4*(1), 1-23. https://doi.org/10.1146/annurev.es.04.110173.000245

Holling, C. S. (1996). Engineering resilience versus ecological resilience. *Engineering within ecological constraints*, *31*(1996), 32. https://doi.org/10.17226/4919

Hollnagel, E., Woods, D. D., & Leveson, N. (2006). *Resilience engineering: Concepts and precepts*. Ashgate Publishing, Ltd.

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, *63*(6), 597-606. https://doi.org/10.1086/222355

Horstman, H. K. (2018). Young adult women's narrative resilience in relation to mother-daughter communicated narrative sense-making and well-being. *Journal of Social and Personal Relationships*, *36*(4), 1146-1167. https://doi.org/10.1177/0265407518756543

Houston, J. B. (2018). Community resilience and communication: Dynamic interconnections between and among individuals, families, and organizations. *Journal of Applied Communication Research*, *46*(1), 19-22. https://doi.org/10.1080/00909882.2018.1426704

Houston, J. B., Spialek, M. L., First, J., Stevens, J., & First, N. L. (2017). Individual perceptions of community resilience following the 2011 Joplin tornado. *Journal of Contingencies and Crisis Management*, *25*(4), 354-363. https://doi.org/10.1111/1468-5973.12171

Humphreys, M., & Brown, A. D. (2017). Narratives of organizational identity and identity: A case study of hegemony and resistance. *The Aesthetic Turn in Management*, 279-305. https://doi.org/10.4324/9781351147965-13

Hutchinson, S. L., Afifi, T., & Krause, S. (2007). The family that plays together fares better. *Journal of Divorce & Remarriage*, *46*(3-4), 21-48. https://doi.org/10.1300/j087v46n03_03

Jablin, F. M., & Sias, P. M. (2001). Communication competence. In F. M. JAblin & L. L. Putnam (Eds.), *The new handbook of organizational communication: Advances in theory, research, and methods*, (pp. 819-864). Sage.

Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of Advanced Nursing*, *60*(1), 1-9. https://doi.org/10.1111/j.1365-2648.2007.04412.x

Jacques, E. (1951). The changing culture of a factory (industrial relations). Routledge.

Jameson, D. A. (2001). Narrative discourse and management action. *Journal of Business Communication*, *38*(4), 476-511. https://doi.org/10.1177/002194360103800404

Jefferson, L., Golder, S., Heathcote, C., Avila, A. C., Dale, V., Essex, H., Van der Feltz Cornelis, C., McHugh, E., Moe-Byrne, T., & Bloor, K. (2022). GP wellbeing during the COVID-19 pandemic: A systematic review. *British Journal of General Practice*, *72*(718), e325-e333. https://doi.org/10.3399/bjgp.2021.0680

Johnson, B. M. (1977). *Communication: The process of organizing*. Allyn and Bacon.

Judge, T., Erez, A., & Bono, J. (1998). The power of being positive: The relation between positive self-concept and job performance. *Human Performance*, *11*(2), 167-187. https://doi.org/10.1207/s15327043hup1102&3_4

Jung, E., & Hecht, M. L. (2004). Elaborating the communication theory of identity: Identity gaps and communication outcomes. *Communication Quarterly*, *52*(3), 265-283. https://doi.org/10.1080/01463370409370197

Jung, E., & Hecht, M. L. (2008). Identity gaps and level of depression among Korean immigrants. *Health Communication*, *23*(4), 313-325. https://doi.org/10.1080/10410230802229688

Jung, K. (2015). *Sources of organizational resilience during the 2012 Korean typhoons: An institutional collective action framework*. University of North Texas.

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). Organizational stress: Studies in role conflict and ambiguity. *Administrative Science Quarterly*, *10*(1), 125. https://doi.org/10.2307/2391654

Kamen, L. P., & Seligman, M. E. (1987). Explanatory style and health. *Current Psychology*, *6*(3), 207-218. https://doi.org/10.1007/bf02686648

Katz, S. (1966). *The Social Psychology of Organizations*. Wiley.

Kaye, A. D., Okeagu, C. N., Pham, A. D., Silva, R. A., Hurley, J. J., Arron, B. L., Sarfraz, N., Lee, H. N., Ghali, G., Gamble, J. W., Liu, H., Urman, R. D., & Cornett, E. M. (2021). Economic impact of COVID-19 pandemic on healthcare facilities and systems: International perspectives. *Best Practice & Research Clinical Anaesthesiology*, *35*(3), 293-306. https://doi.org/10.1016/j.bpa.2020.11.009

Kaye-Kauderer, H., Feingold, J. H., Feder, A., Southwick, S., & Charney, D. (2021). Resilience in the age of COVID-19. *BJPsych Advances*, *27*(3), 166-178. https://doi.org/10.1192/bja.2021.5

Kellas, J. K. (2021). Communicated narrative sense-making theory. *Engaging Theories in Interpersonal Communication*, 117-129. https://doi.org/10.4324/9781003195511-11

Kelloway, E. K., Penney, S. A., & Dimoff, J. K. (2017). Leading the psychologically healthy workplace. *Leading to Occupational Health and Safety: How Leadership Behaviours Impact Organizational Safety and Wellbeing*, 113-127. https://doi.org/10.1002/9781394259250.ch6

Kendall, P. C., & Hollon, S. D. (1979). Cognitive-behavioral interventions: Overview and current status. *Cognitive-Behavioral Interventions*, **1-**9. https://doi.org/10.1016/b978-0-12-404480-7.50007-1

Kenny, K., Whittle, A., & Willmott, H. (2011). *Understanding identity and organizations*. 1-216. Sage.

Keswin, E. (2021). *Rituals roadmap: The human way to transform everyday routines into workplace magic*. McGraw Hill.

Keyes, B., McCombe, G., Broughan, J., Frawley, T., Guerandel, A., Gulati, G., Kelly, B. D., Osborne, B., O'Connor, K., & Cullen, W. (2022). Enhancing GP care of mental health disorders post-COVID-19: A scoping review of interventions and outcomes. *Irish Journal of Psychological Medicine*, *40*(3), 470-486. https://doi.org/10.1017/ipm.2022.17

Keyton, J. (2010). *Communication and organizational culture: A key to understanding work experiences*. Sage.

Khan, A., Khan, N., & Shafiq, M. (2021). The economic impact of COVID-19 from a global perspective. *Contemporary Economics*, *15*(1), 64-75. https://doi.org/10.5709/ce.1897-9254.436

Killgore, W. D., Cloonan, S. A., Taylor, E. C., & Dailey, N. S. (2020). Loneliness: A signature mental health concern in the era of COVID-19. *Psychiatry Research*, *290*, 113117. https://doi.org/10.1016/j.psychres.2020.113117

King, D. D., Newman, A., & Luthans, F. (2015). Not if, but when we need resilience in the workplace. *Journal of Organizational Behavior*, *37*(5), 782-786. https://doi.org/10.1002/job.2063

Kirkman, B. L., Lowe, K. B., & Gibson, C. B. (2006). A quarter century of culture's consequences: A review of empirical research incorporating Hofstede's cultural values framework. *Journal of International Business Studies*, *37*(3), 285-320. https://doi.org/10.1057/palgrave.jibs.8400202

Klein, H. J., & Weaver, N. A. (2000). The effectiveness of an organizational-level orientation training program in the socialization of new hires. *Personnel Psychology*, *53*(1), 47-66. https://doi.org/10.1111/j.1744-6570.2000.tb00193.x

Koslowski, T. G., & Longstaff, P. H. (2014). Resilience undefined: A framework for interdisciplinary communication and application to real-world problems. *Lecture Notes in Social Networks*, 3-20. https://doi.org/10.1007/978-3-319-08819-8_1

Kossek, E. E., & Perrigino, M. B. (2016). Resilience: A review using a grounded integrated occupational approach. *Academy of Management Annals*, *10*(1), 00-00. https://doi.org/10.5465/19416520.2016.1159878

Kotter, J. P. (2012). *Leading change*. Harvard Business Press.

Kovacs, E., Tandari-Kovacs, M., & Kozak, A. (2019). Challenges in health workforce planning: Caring for a healthy health workforce. *Innovations in Global Mental Health*, 1-28. https://doi.org/10.1007/978-3-319-70134-9_78-1

Kronborg, L., Plunkett, M., Gamble, N., & Kaman, Y. (2017). Control and resilience: The importance of an internal focus to maintain resilience in academically able students. *Gifted and Talented International*, *32*(1), 59-74. https://doi.org/10.1080/15332276.2018.1435378

Kubatko, O., Merritt, R., Duane, S., & Piven, V. (2023). The impact of the COVID-19 pandemic on global food system resilience. *Mechanism of an Economic Regulation*, *1*(99), 144-148. https://doi.org/10.32782/mer.2023.99.22

Kuhn, T. (2006). A ‘Demented work ethic’ and a ‘Lifestyle firm’: Discourse, identity, and workplace time commitments. *Organization Studies*, *27*(9), 1339-1358. https://doi.org/10.1177/0170840606067249

Kuhn, T., & Nelson, N. (2002). Reengineering identity. *Management Communication Quarterly*, *16*(1), 5-38. https://doi.org/10.1177/0893318902161001

Kuhn, T. S. (1997). *The structure of scientific revolutions* (Vol. 962). University of Chicago Press.

Kunde, J. (2000). Corporate religion. *Corporate Religion*, 109-181. https://doi.org/10.1007/978-3-322-82284-0_4

Labrague, L., Hammad, K., Gloe, D., McEnroe-Petitte, D., Fronda, D., Obeidat, A., Leocadio, M., Cayaban, A., & Mirafuentes, E. (2017). Disaster preparedness among nurses: A systematic review of literature. *International Nursing Review*, *65*(1), 41-53. https://doi.org/10.1111/inr.12369

Lafarge, C., Milani, R., Cahill, S., & Görzig, A. (2022). 2020 COVID-19-Related lockdown: The relationships between coping strategies, psychological adjustment and resilience among a non-clinical sample of British adults. *Adversity and Resilience Science*, *3*(4), 297-307. https://doi.org/10.1007/s42844-022-00079-5

Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open*, *3*(3), e203976. https://doi.org/10.1001/jamanetworkopen.2020.3976

Lasswell, H. D. (1935). World politics and personal insecurity. *Political Science Quarterly*, *50*(2), 278-281. https://doi.org/10.2307/2143754

Lather, A. S., Kumar, A., & Jain, S. (2012). Perception of Work Culture and its Impact on Performance in DMRC. *Indian Journal of Marketing*, *42*(8), 27-33.

Lehmiller, J. J., & Agnew, C. R. (2006). Marginalized relationships: The impact of social disapproval on romantic relationship commitment. *Personality and Social Psychology Bulletin*, *32*(1), 40-51. https://doi.org/10.1177/0146167205278710

Lei, X., & Kantor, J. (2020). Social support and family quality of life in Chinese families of children with autism spectrum disorder: The mediating role of family cohesion and adaptability. *International Journal of Developmental Disabilities*, *68*(4), 454-461. https://doi.org/10.1080/20473869.2020.1803706

Leiter, M. P., & Bakker, A. B. (2010). Work engagement: introduction. *Work engagement: A handbook of essential theory and research*, *1*(9).

Lengnick-Hall, C. A., & Beck, T. E. (2005). Adaptive fit versus robust transformation: How organizations respond to environmental change. *Journal of Management*, *31*(5), 738-757. https://doi.org/10.1177/0149206305279367

Leonardi, P. M., & Jackson, M. H. (2009). Technological grounding: Enrolling technology as a discursive resource to justify cultural change in organizations. *Science, technology, & human values*, *34*(3), 393-418. https://doi.org/10.1177/0162243908328771

Leung, K., & Bond, M. H. (1989). On the empirical identity of dimensions for cross-cultural comparisons. *Journal of Cross-Cultural Psychology*, *20*(2), 133-151. https://doi.org/10.1177/0022022189202002

Lim, D. H., Hur, H., Ho, Y., Yoo, S., & Yoon, S. W. (2020). Workforce resilience: Integrative review for human resource development. *Performance Improvement Quarterly*, *33*(1), 77-101. https://doi.org/10.1002/piq.21318

Linde, C. (2009). *Working the past: Narrative and institutional memory*. Oxford University Press.

Linkov, I., Trump, B. D., Golan, M., & Keisler, J. M. (2021). Enhancing resilience in Post-COVID societies: By design or by intervention? *Environmental Science & Technology*, *55*(8), 4202-4204. https://doi.org/10.1021/acs.est.1c00444

Linnenluecke, M. K. (2015). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews*, *19*(1), 4-30. https://doi.org/10.1111/ijmr.12076

Linnenluecke, M. K., & Griffiths, A. (2013). The 2009 Victorian bushfires. *Organization & Environment*, *26*(4), 386-411. https://doi.org/10.1177/1086026613508126

Littlejohn, S. W., & Foss, K. A. (2010). *Theories of human communication*. Waveland press.

Logan, T. M., & Guikema, S. D. (2020). Reframing resilience: Equitable access to essential services. *Risk Analysis*, *40*(8), 1538-1553. https://doi.org/10.1111/risa.13492

Lorenz, D. F. (2010). The diversity of resilience: Contributions from a social science perspective. *Natural Hazards*, *67*(1), 7-24. https://doi.org/10.1007/s11069-010-9654-y

Lotman, J. M., & Lotman, Y. (1990). *Universe of the mind: A semiotic theory of culture*. Indiana University Press.

Luhmann, N. (1990). *Essays on self-reference*. Columbia University Press.

Luthans, F. (2002). Positive psychology approach to OB. In F. Luthans (Ed)*, Organizational behavior,* (pp. 286-322). McGraw-Hill.

Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. *Human Resource Development Review*, *5*(1), 25-44. https://doi.org/10.1177/1534484305285335

Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, *33*(2), 143-160. https://doi.org/10.1016/j.orgdyn.2004.01.003

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). Psychological capital: Investing and developing positive organizational behavior. *Positive Organizational Behavior*, 9-24. https://doi.org/10.4135/9781446212752.n2

Luthans, F., Youssef, C. M., & Avolio, B. J. (2015). *Psychological capital and beyond*. Oxford University Press.

Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, *12*(4), 857-885. https://doi.org/10.1017/s0954579400004156Luthar, S. S., Cicchetti, D., &

Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development*, *71*(3), 543-562.

Luthar, S. S., Sawyer, J. A., & Brown, P. J. (2006). Conceptual issues in studies of resilience. *Annals of the New York Academy of Sciences*, *1094*(1), 105-115. https://doi.org/10.1196/annals.1376.009

Macdonald, K. M. (1995). The Sociology of the Professions. Sage.

Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in educational research*, *16*(2), 193-205.

Mackenzie, W. J. M. (1978). *Political identity*. Manchester University Press.

Maddux, J. E., Norton, L. W., & Stoltenberg, C. D. (1986). Self-efficacy expectancy, outcome expectancy, and outcome value: Relative effects on behavioral intentions. *Journal of Personality and Social Psychology*, *51*(4), 783-789. https://doi.org/10.1037//0022-3514.51.4.783

Maeda, E., & Hecht, M. L. (2012). Identity search: Interpersonal relationships and relational identities of always-single Japanese women over time. *Western Journal of Communication*, *76*(1), 44-64. https://doi.org/10.1080/10570314.2012.637539

Mael, F., & Ashforth, B. E. (1992). Alumni and their Alma mater: A partial test of the reformulated model of organizational identity. *Journal of Organizational Behavior*, *13*(2), 103-123. https://doi.org/10.1002/job.4030130202

Mafabi, S., Munene, J., & Ntayi, J. (2012). Knowledge management and organisational resilience. *Journal of Strategy and Management*, *5*(1), 57-80. https://doi.org/10.1108/17554251211200455

Mafabi, S., Munene, J. C., & Ahiauzu, A. (2013). Organisational resilience: Testing the interaction effect of knowledge management and creative climate. *Journal of Organizational Psychology*, *13*(1/2), 70-82.

Mahoney, J. L., & Bergman, L. R. (2002). Conceptual and methodological considerations in a developmental approach to the study of positive adaptation. *Journal of Applied Developmental Psychology*, *23*(2), 195-217. https://doi.org/10.1016/s0193-3973(02)00104-1

Manchia, M., Gathier, A. W., Yapici-Eser, H., Schmidt, M. V., De Quervain, D., Van Amelsvoort, T., Bisson, J. I., Cryan, J. F., Howes, O. D., Pinto, L., Van der Wee, N. J., Domschke, K., Branchi, I., & Vinkers, C. H. (2022). The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: A critical review across waves. *European Neuropsychopharmacology*, *55*, 22-83. https://doi.org/10.1016/j.euroneuro.2021.10.864

Mancini, A. D., & Bonanno, G. A. (2006). Resilience in the face of potential trauma: Clinical practices and illustrations. *Journal of Clinical Psychology*, *62*(8), 971-985. https://doi.org/10.1002/jclp.20283

Mancini, A. D., & Bonanno, G. A. (2009). Predictors and parameters of resilience to loss: Toward an individual differences model. *Journal of Personality*, *77*(6), 1805-1832. https://doi.org/10.1111/j.1467-6494.2009.00601.x

Mansson, D. H., Floyd, K., & Soliz, J. (2017). Affectionate communication is associated with emotional and relational resources in the grandparent-grandchild relationship. *Journal of Intergenerational Relationships*, *15*(2), 85-103. https://doi.org/10.1080/15350770.2017.1294007

Marks, M. L. (1982). Merging human resources: A review of current research. *Mergers and Acquisitions*, *17*(2), 38-44.

Martin, J. (1992). *Cultures in organizations: Three perspectives*. Oxford University Press.

Martin-Breen, P., & Anderies, J. M. (2011). Resilience: A literature review.Bellagio Initiative. https://opendocs.ids.ac.uk/articles/report/Resilience_A_Literature_Review/26441968

Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity: Challenges and prospects. In *Educational resilience in inner city America: Challenges and prospects* (pp. 3-25). Routledge.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*(3), 227-238. https://doi.org/10.1037//0003-066x.56.3.227

Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, *19*(3), 921-930. https://doi.org/10.1017/s0954579407000442

Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, *2*(4), 425-444. https://doi.org/10.1017/s0954579400005812

Masten, A. S., Hubbard, J. J., Gest, S. D., Tellegen, A., Garmezy, N., & Ramirez, M. (1999). Competence in the context of adversity: Pathways to resilience and maladaptation fromchildhood to late adolescence. *Development and Psychopathology*, *11*(1), 143-169. https://doi.org/10.1017/s0954579499001996

Masten, A. S., & Obradović, J. (2006). Competence and resilience in development. *Annals of the New York Academy of Sciences*, *1094*(1), 13-27. https://doi.org/10.1196/annals.1376.003

Masten, A. S., & Reed, M. J. (2001). Resilience in development. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology*, (pp. 74-88). Oxford University Press.

Matiz, A., Fabbro, F., Paschetto, A., Cantone, D., Paolone, A. R., & Crescentini, C. (2020). Positive impact of mindfulness meditation on mental health of female teachers during the COVID-19 outbreak in Italy. *International Journal of Environmental Research and Public Health*, *17*(18), 6450. https://doi.org/10.3390/ijerph17186450

Matulessy, A., Noviekayati, I., Efendy, M., Puspitasari, D., & Safitri, A. M. (2024). Resilience of COVID-19 survivors: The role of internal locus of control and social support. *International Journal of Innovative Research and Scientific Studies*, *7*(2), 764-771. https://doi.org/10.53894/ijirss.v7i2.2884

Maus, M. (1925). The gift: Forms and functions of exchange in archaic societies. *New York*.

Mayo, E. (1924). The basis of industrial psychology. *Bulletin of the Taylor Society*, *9*(6), 249-259.

McAninch, K. G., Basinger, E. D., Delaney, A. L., & Wehrman, E. C. (2022). Integrating relational turbulence theory and the theory of resilience and relational load to investigate the relationships of couples with chronic illness. *Communication Quarterly*, *71*(1), 1-21. https://doi.org/10.1080/01463373.2022.2100267

McCann, J., & Selsky, J. W. (2012). *Mastering turbulence: The essential capabilities of agile and resilient individuals, teams and organizations*. John Wiley & Sons.

McCarthy, G., & Benhabib, S. (1988). Critique, norm, and utopia: A study of the foundations of critical theory. *Contemporary Sociology*, *17*(1), 120. https://doi.org/10.2307/2069484

McCarthy, J. F. (2008). Short stories at work. *Group & Organization Management*, *33*(2), 163-193. https://doi.org/10.1177/1059601108314582

McClure, F. H., Chavez, D. V., Agars, M. D., Peacock, M. J., & Matosian, A. (2007). Resilience in sexually abused women: Risk and protective factors. *Journal of Family Violence*, *23*(2), 81-88. https://doi.org/10.1007/s10896-007-9129-4

McDonald, N. (2017). Organisational resilience and industrial risk. In *Resilience Engineering* (pp. 155-180). CRC Press.

McElwee, P., Turnout, E., Chiroleu-Assouline, M., Clapp, J., Isenhour, C., Jackson, T., Kelemen, E., Miller, D. C., Rusch, G., Spangenberg, J. H., Waldron, A., Baumgartner, R. J., Bleys, B., Howard, M. W., Mungatana, E., Ngo, H., Ring, I., & Santos, R. (2020). Ensuring a Post-COVID economic agenda tackles global biodiversity loss. *One Earth*, *3*(4), 448-461. https://doi.org/10.1016/j.oneear.2020.09.011

McEwen, B. S. (1998). Stress, adaptation, and disease: Allostasis and Allostatic load. Annals of the New York Academy of Sciences, 840(1), 33-44. https://doi.org/10.1111/j.1749-6632.1998.tb09546.x

McManus, S., Seville, E., Vargo, J., & Brunsdon, D. (2008). Facilitated process for improving organizational resilience. *Natural Hazards Review*, *9*(2), 81-90. https://doi.org/10.1061/(asce)1527-6988(2008)9:2(81)

Medina-Jimenez, V., Bermudez-Rojas, M. D., Murillo-Bargas, H., Rivera-Camarillo, A. C., Muñoz-Acosta, J., Ramirez-Abarca, T. G., Esparza-Valencia, D. M., Angeles-Torres, A. C., Lara-Avila, L., Hernandez-Muñoz, V. A., Madrigal-Tejeda, F. J.,

Estudillo-Jimenez, G. E., Jacobo-Enciso, L. M., Torres-Torres, J., Espino-y-Sosa, S., Baltazar-Martinez, M., Villanueva-Calleja, J., Nava-Sanchez, A. E., Mendoza-Carrera, C. E., … Martinez-Portilla, R. J. (2020). The impact of the COVID-19 pandemic on depression and stress levels in pregnant women: A national survey during the COVID-19 pandemic in Mexico. *The Journal of Maternal-Fetal & Neonatal Medicine*, *35*(23), 4438-4441. https://doi.org/10.1080/14767058.2020.1851675

Melián-Alzola, L., Fernández-Monroy, M., & Hidalgo-Peñate, M. (2020). Hotels in contexts of uncertainty: Measuring organisational resilience. *Tourism Management Perspectives*, *36*, 100747. https://doi.org/10.1016/j.tmp.2020.100747

Meneghel, I., Salanova, M., & Martínez, I. M. (2014). Feeling good makes us stronger: How team resilience mediates the effect of positive emotions on team performance. *Journal of Happiness Studies***,** *17***(**1), 239-255. https://doi.org/10.1007/s10902-014-9592-6

Mian, A., Al-Asad, S., & Khan, S. (2020). Mental health burden of COVID-19. *Family Practice*, *38*(2), 194-196. https://doi.org/10.1093/fampra/cmaa100

Mill, J. S. (1843). *A system of logic.* Parker and Sons.
Miller, V. D., Allen, M., Casey, M. K., & Johnson, J. R. (2000). Reconsidering the organizational identification questionnaire. *Management Communication Quarterly***,** *13*(4), 626-658. https://doi.org/10.1177/0893318900134003

Miller, K., & Barbour, J. (2014). *Organizational communication: Approaches and processes*. Cengage Learning.

Mizuno, Y., Wartelsteiner, F., & Frajo-Apor, B. (2016). Resilience research in schizophrenia. *Current Opinion in Psychiatry*, *29*(3), 218-223. https://doi.org/10.1097/yco.0000000000000248

Mokline, B., & Ben Abdallah, M. A. (2021). Individual resilience in the organization in the face of crisis: Study of the concept in the context of COVID-19. *Global Journal of Flexible Systems Management*, *22*(3), 219-231. https://doi.org/10.1007/s40171-021-00273-x

Morgan, G. (1997). *Images of organization*. Sage.

Morley, D., Shockley-Zalabak, P., & Cesaria, R. (2002). Organizational influence processes: Perceptions of values, communication and effectiveness. *Studies in Communication Sciences*, *2*(1), 69-104.

Moss, R., & Moos, B. (2009). *Family Environment Scale. Manual and sampler set: Development, applications and research*. Mind Garden Inc.

Moynihan, R., Sanders, S., Michaleff, Z. A., Scott, A. M., Clark, J., To, E. J., Jones, M., Kitchener, E., Fox, M., Johansson, M., Lang, E., Duggan, A., Scott, I., & Albarqouni, L. (2021). Impact of COVID-19 pandemic on utilisation of healthcare

services: A systematic review. *BMJ Open*, *11*(3), e045343. https://doi.org/10.1136/bmjopen-2020-045343

Mumby, D. K. (2005). Theorizing resistance in organization studies. *Management Communication Quarterly*, *19*(1), 19-44. https://doi.org/10.1177/0893318905276558

Mumby, D. K. (2012). *Organizational communication: A critical approach* (Vol. VIII). Sage.

Munoz, R. T., Brady, S., & Brown, V. (2017). The psychology of resilience: A model of the relationship of locus of control to hope among survivors of intimate partner violence. *Traumatology*, *23*(1), 102-111. https://doi.org/10.1037/trm0000102

Murphy, J. (2020). How to Smize (Smile With Your Eyes) When You're Wearing a Mask. *Wall Str J*, 1-6.

Murphy, M., Scott, L. J., Salisbury, C., Turner, A., Scott, A., Denholm, R., Lewis, R., Iyer, G., Macleod, J., & Horwood, J. (2021). Implementation of remote consulting in UK primary care following the COVID-19 pandemic: A mixed-methods longitudinal study. *British Journal of General Practice*, *71*(704), e166-e177. https://doi.org/10.3399/bjgp.2020.0948

Myers, K. K., & Oetzel, J. G. (2003). Exploring the dimensions of organizational assimilation: Creating and validating a measure. *Communication Quarterly*, *51*(4), 438-457. https://doi.org/10.1080/01463370309370166

Neff, K. (2011). Examining the components of self-compassion and psychological functioning**.** *PsycEXTRA Dataset***.** https://doi.org/10.1037/e527772014-669

Nisbet, R. A. (1970). Community. In sn. *The Sociological Tradition*, 47-106.

Noakes, S. (2014). The role of political science in China: Intellectuals and authoritarian resilience. *Political Science Quarterly*, *129*(2), 239-260. https://doi.org/10.1002/polq.12179

Nordby, H. (2000). *Concept possession and incorrect understanding* University of Oxford Press.

Nordby, H. (2014). Management communication in leadership relations: A philosophical model of understanding and contextual agreement. *Philosophy of Management*, *13*(2), 75-100. https://doi.org/10.5840/pom201413212

Nordby, H. (2021). Communication and organizational culture. *A closer look at organizational culture in action/ed. by SD Göker.-London: IntechOpen*, 95-110. DOI: 10.5772/intechopen.92318

Norkus, Zenonas (2006). Epistemological Assumptions of the Forecasts of the Natural Scientific Progress. *Problemos 69*, 9-26.

Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2007). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, *41*(1-2), 127-150. https://doi.org/10.1007/s10464-007-9156-6

Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2007). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, *41*(1-2), 127-150. https://doi.org/10.1007/s10464-007-9156-6

Novia, M., & Faisal, A. (2021). The influence of organizational culture, communication and work satisfaction on organizational commitments: A case study of lecturers at Yayasan Pendidikan Borobudur. *International Journal of Business, Economics and Management*, *8*(4), 307-317. https://doi.org/10.18488/journal.62.2021.84.307.317

Nowicki, G. J., Ślusarska, B., Tucholska, K., Naylor, K., Chrzan-Rodak, A., & Niedorys, B. (2020). The severity of traumatic stress associated with COVID-19 pandemic, perception of support, sense of security, and sense of meaning in life among nurses: Research protocol and preliminary results from Poland. *International Journal of Environmental Research and Public Health*, *17*(18), 6491. https://doi.org/10.3390/ijerph17186491

Officer, T., Imlach, F., McKinlay, E., Kennedy, J., Pledger, M., Russell, L., Churchward, M., Cumming, J., & McBride-Henry, K. (2022). COVID-19 pandemic lockdown and wellbeing: Experiences from Aotearoa New Zealand in 2020. *International Journal of Environmental Research and Public Health*, *19*(4), 2269. https://doi.org/10.3390/ijerph19042269

O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity*, *41*(5), 673-690. https://doi.org/10.1007/s11135-006-9018-6

O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identity, and internalization on prosocial behavior. *Journal of Applied Psychology*, *71*(3), 492-499. https://doi.org/10.1037//0021-9010.71.3.492

O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, *34*(3), 487-516. https://doi.org/10.2307/256404

Olins, W. (1990). Corporate identity: Making business strategy visible through design. Harvard Business Review Press.

Opler, M. E., Kluckhohn, F. R., & Strodtbeck, F. L. (1961). Variations in value orientations. *Ethnohistory*, *8*(4), 428. https://doi.org/10.2307/480364

Ortiz-de-Mandojana, N., & Bansal, P. (2015). The long-term benefits of organizational resilience through sustainable business practices. *Strategic Management Journal*, *37*(8), 1615-1631. https://doi.org/10.1002/smj.2410

Orton, P., Orton, C., & Pereira Gray, D. (2012). Depersonalised doctors: A cross-sectional study of 564 doctors, 760 consultations and 1876 patient reports in UK general practice. *BMJ Open*, *2*(1), e000274. https://doi.org/10.1136/bmjopen-2011-000274

Pacanowsky, M. E., & O'Donnell-Trujillo, N. (1982). Communication and organizational cultures. *Western Journal of Speech Communication*, *46*(2), 115-130. https://doi.org/10.1080/10570318209374072

Pals, J. L., & McAdams, D. P. (2004). The transformed self: A narrative understanding of posttraumatic growth. *Psychological Inquiry*, 65-69. http://www.jstor.org/stable/20447204

Panwar, R., Pinkse, J., & De Marchi, V. (2022). The future of global supply chains in a Post-COVID-19 world. *California Management Review*, *64*(2), 5-23. https://doi.org/10.1177/00081256211073355

Park, M. Y., & Kim, E. A. (2018). Perception of importance of patient safety management, patient safety culture and safety performance in hospital managerial performance of hospital nurses. *Journal of Korean Academy of Nursing Administration*, *24*(1), 40-50. https://doi.org/10.11111/jkana.2018.24.1.40

Parker, M. (2000). *Organizational culture and identity: Unity and division at work*. Sage.

Parsons, D. (2010). Organisational resilience. *Australian Journal of Emergency Management, The*, *25*(2), 18-20. https://search.informit.org/doi/10.3316/ielapa.084557405183732

Pasupathi, M. (2001). The social construction of the personal past and its implications for adult development. *Psychological bulletin*, *127*(5), 651–672. https://doi.org/10.1037/0033-2909.127.5.651

Patchen, M. (1970). *Participation, achievement, and involvement on the job*. Prentice Hall.

Păunescu, C., & Argatu, R. (2020). Critical functions in ensuring effective business continuity management. Evidence from Romanian companies. *Journal of Business Economics and Management*, *21*(2), 497-520. https://doi.org/10.3846/jbem.2020.12205

Peacocke, C. (1992). *A study of concepts*. The MIT Press.

Penman, R. (2000). *Reconstructing communicating: Looking to a future*. Routledge.

Pennebaker, J. W., Colder, M., & Sharp, L. K. (1990). Accelerating the coping process. *Journal of Personality and Social Psychology*, *58*(3), 528-537. https://doi.org/10.1037//0022-3514.58.3.528

Peterson, C. (2002). Optimistic explanatory style. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 244-256). Oxford University Press.

Pfefferbaum, R. L., Pfefferbaum, B., Nitiéma, P., Houston, J. B., & Van Horn, R. L. (2014). Assessing community resilience. *American Behavioral Scientist*, *59*(2), 181-199. https://doi.org/10.1177/0002764214550295

Pingree, R. J. (2007). How messages affect their senders: A more general model of message effects and implications for deliberation. *Communication Theory*, *17*(4), 439-461. https://doi.org/10.1111/j.1468-2885.2007.00306.x

Pondy, L. R., & Mitroff, I. I. (1979). Beyond open system models of organization. *Research in organizational behavior*, *1*(1), 3-39.

Potvin, T. C. (1991). *Employee organizational commitment: An examination of its relationship to communication satisfaction and an evaluation of questionnaires designed to measure the construct*. University of Kansas.

Prahalad, C. K., & Hamel, G. (2009). The core competence of the corporation. In *Knowledge and strategy* (pp. 41-59). Routledge.

Priyadarshini, P., & Abhilash, P. C. (2021). Agri-food systems in India: Concerns and policy recommendations for building resilience in post COVID-19 pandemic times. *Global Food Security*, *29*, 100537. https://doi.org/10.1016/j.gfs.2021.100537

Putnam, L. L. (1983). The interpretive perspective: An alternative to functionalism. *Communication and organizations: An interpretive approach*, 31-54.

Putnam, L. L., & Fairhurst, G. T. (2001). Discourse analysis in organizations. Issues and concerns. *The New Handbook of Organizational Communication*, 79-136. https://doi.org/10.4135/9781412986243.n3

Putnam, L. L., & Mumby, D. K. (2013). *Organisational culture. The SAGE handbook of organizational communication: Advances in theory, research, and methods*. Sage Publications.

Rafaeli, A., & Worline, M. (2000). Symbols in organizational culture. *Handbook of organizational culture and climate*, *7*, 1-84.

Rahi, K. (2019). Indicators to assess organizational resilience – a review of empirical literature. *International Journal of Disaster Resilience in the Built Environment*, *10*(2/3), 85-98. https://doi.org/10.1108/ijdrbe-11-2018-0046

Rasmussen, D. (1995). Rethinking subjectivity: Narrative identity and the self. *Philosophy & Social Criticism*, *21*(5-6), 159-172. https://doi.org/10.1177/0191453795021005-612

Razai, M. S., Oakeshott, P., Kankam, H., Galea, S., & Stokes-Lampard, H. (2020). Mitigating the psychological effects of social isolation during the COVID-19 pandemic. *BMJ*, *369*. https://doi.org/10.1136/bmj.m1904

Reger, M. A., Piccirillo, M. L., & Buchman-Schmitt, J. M. (2020). COVID-19, mental health, and suicide risk among health care workers. *The Journal of Clinical Psychiatry*, *81*(5). 3915. https://doi.org/10.4088/jcp.20com13381

Richardson, B. K., & McGlynn, J. (2010). Rabid fans, death threats, and dysfunctional stakeholders: The influence of organizational and industry contexts on whistle-blowing cases. *Management Communication Quarterly*, *25*(1), 121-150. https://doi.org/10.1177/0893318910380344

Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, *58*(3), 307-321. https://doi.org/10.1002/jclp.10020

Ricoeur, P. (1984). Time and Narrative. 1983. *Trans. Kathleen McLaughlin and David Pellauer.* University of Chicago Press.

Riketta, M. (2005). Organizational identity: A meta-analysis. *Journal of Vocational Behavior*, *66*(2), 358-384. https://doi.org/10.1016/j.jvb.2004.05.005

Robertson, H. D., Elliott, A. M., Burton, C., Iversen, L., Murchie, P., Porteous, T., & Matheson, C. (2016). Resilience of primary healthcare professionals: A systematic review. *British Journal of General Practice*, *66*(647), e423-e433. https://doi.org/10.3399/bjgp16x685261

Robinson, D., Perryman, S., & Hayday, S. (2004). The drivers of employee engagement. *Report-Institute for Employment Studies*.

Roche, W. K., Teague, P., & Colvin, A. J. (2014). *The Oxford handbook of conflict management in organizations*. Oxford University Press.

Ronen, S., & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. *The Academy of Management Review*, *10*(3), 435-454.. https://doi.org/10.2307/258126.

Rose, A. (2004). Defining and measuring economic resilience to disasters. *Disaster Prevention and Management: An International Journal*, *13*(4), 307-314. https://doi.org/10.1108/09653560410556528

Rosenfeld, L. B., Richman, J. M., & May, S. K. (2004). Information adequacy, job satisfaction and organizational culture in a dispersed-network organization. *Journal of Applied Communication Research*, *32*(1), 28-54. https://doi.org/10.1080/0090988042000178112

Rotter, J. B. (1954). Development of locus of control. *Pareek Training Instruments in HRD and OD*.

Rousseau, D. M. (1998). Why workers still identify with organizations. *Journal of Organizational Behavior*, *19*(3), 217-233. https://doi.org/10.1002/(sici)1099-1379(199805)19:3<217::aid-job931>3.0.co;2-n

Rubin, R., Palmgreen, P., & Sypher, H. (1994). *Communication research measures: A sourcebook*. Guilford Press.

Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. *Annals of the Academy of Medicine, Singapore*, *8*(3), 324-338. PMID: 547874.

Rutter, M. (1985). Resilience in the face of adversity. *British Journal of Psychiatry*, *147*(6), 598-611. https://doi.org/10.1192/bjp.147.6.598

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, *57*(3), 316-331. https://doi.org/10.1111/j.1939-0025.1987.tb03541.x

Rutter, M. (1999). Resilience concepts and findings: Implications for family therapy. *Journal of Family Therapy*, *21*(2), 119-144. https://doi.org/10.1111/1467-6427.00108

Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Sciences*, *1094*(1), 1-12. https://doi.org/10.1196/annals.1376.002

Sackmann, S. (2006). Success factor: corporate culture: developing a corporate culture for high performance and long term competitiveness. *Six best practices. Gütersloh*.

Saltzman, W. R., Pynoos, R. S., Lester, P., Layne, C. M., & Beardslee, W. R. (2013). Enhancing family resilience through family narrative Co-construction. *Clinical Child and Family Psychology Review*, *16*(3), 294-310. https://doi.org/10.1007/s10567-013-0142-2

Sapeciay, Z., Wilkinson, S., & Costello, S. B. (2017). Building organisational resilience for the construction industry. *International Journal of Disaster Resilience in the Built Environment*, *8*(1), 98-108. https://doi.org/10.1108/ijdrbe-05-2016-0020

Sarfatti Larson, M. (1977). *The rise of professionalism: A sociological analysis*. University of California Press.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson Education.

Sawalha, I. H. (2015). Managing adversity: Understanding some dimensions of organizational resilience. *Management Research Review*, *38*(4), 346-366. https://doi.org/10.1108/mrr-01-2014-0010

Schein, E. H. (1990). Organizational culture. *American Psychologist*, *45*(2), 109-119. https://doi.org/10.1037//0003-066x.45.2.109

Schein, E. H., & Schein, E. (1978). *Career dynamics: Matching individual and organizational needs*. Addison-Wesley Reading.

Schein, H. (2004). *Organizations, culture and leadership* . Jossey-Bass.

Schoenberger, E. J. (1997). *The cultural crisis of the firm*. Blackwell.

Schrimpf, A., Bleckwenn, M., & Braesigk, A. (2023). COVID-19 continues to burden general practitioners: Impact on workload, provision of care, and intention to leave. *Healthcare*, *11*(3), 320. https://doi.org/10.3390/healthcare11030320

Schrodt, P. (2002). The relationship between organizational identity and organizational culture: Employee perceptions of culture and identity in a retail sales organization. *Communication Studies*, *53*(2), 189-202. https://doi.org/10.1080/10510970209388584

Schulman, P., Keith, D., & Seligman, M. E. (1993). Is optimism heritable? A study of twins. *Behaviour Research and Therapy*, *31*(6), 569-574. https://doi.org/10.1016/0005-7967(93)90108-7

Schwartz, S. H.(1994), Cultural dimensions of values-Towards an understanding of national differences. In *International journal of Psychology* (Vol. 27, No. 3-4, 540-540. PSYCHOLOGY PRESS.

Schyns, B., & Schilling, J. (2013). How bad are the effects of bad leaders? A meta-analysis of destructive leadership and its outcomes. *The Leadership Quarterly*, *24*(1), 138-158. https://doi.org/10.1016/j.leaqua.2012.09.001

Scott, C. R. (2007). Communication and social identity theory: Existing and potential connections in organizational identity research. *Communication Studies*, *58*(2), 123-138. https://doi.org/10.1080/10510970701341063

Scott, C. R., Corman, S. R., & Cheney, G. (1998). Development of a Structurational model of identity in the organization. *Communication Theory*, *8*(3), 298-336. https://doi.org/10.1111/j.1468-2885.1998.tb00223.x

Sebastião, S. P., Zulato, G., & Trindade, A. D. (2017). Internal communication and organisational culture: The management interplay in the view of the Portuguese communication consultant. *Public Relations Review*, *43*(4), 863-871. https://doi.org/10.1016/j.pubrev.2017.05.006

Seligman, M. E. (1974). *Depression and learned helplessness*. John Wiley & Sons.

Seligman, M. E. (2006). *Learned optimism: How to change your mind and your life*. Vintage.

Seligman, M. E. (2011). Building resilience. *Harvard Business Review*, *89*(4), 100-106.

Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5-14. https://doi.org/10.1037//0003-066x.55.1.5

Serrano-Ripoll, M. J., Meneses-Echavez, J. F., Ricci-Cabello, I., Fraile-Navarro, D., Fiol-deRoque, M. A., Pastor-Moreno, G., Castro, A., Ruiz-Pérez, I., Zamanillo Campos, R., & Gonçalves-Bradley, D. C. (2020). Impact of viral epidemic outbreaks on mental health of healthcare workers: A rapid systematic review and meta-analysis. *Journal of Affective Disorders*, *277*, 347-357. https://doi.org/10.1016/j.jad.2020.08.034

Seville, E. (2018). Building resilience: How to have a positive impact at the organizational and individual employee level. *Development and Learning in Organizations: An International Journal*, *32*(3), 15-18. https://doi.org/10.1108/dlo-09-2017-0076

Seville, E., Brunsdon, D., Dantas, A., Le Masurier, J., Wilkinson, S., & Vargo, J. (2006). Building organisational resilience: A summary of key research findings. https://ir.canterbury.ac.nz/items/de7bc6e2-2a9f-45fa-9168-aa6f5ed38162

Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., Satele, D., West, C. P., Sloan, J., & Oreskovich, M. R. (2012). Burnout and satisfaction with work-life balance among US doctors relative to the general US population. *Archives of Internal Medicine*, *172*(18), 1377-1385. https://doi.org/10.1001/archinternmed.2012.3199

Shatte, A. J., Reivich, K., Gillham, J., & Seligman, M. E. (1999). Learned optimism in children. *Coping: The psychology of what works*, 165-181. http://doi: 10.1093/med:psych/9780195119343.003.0008

Shechter, A., Diaz, F., Moise, N., Anstey, D. E., Ye, S., Agarwal, S., Birk, J. L., Brodie, D., Cannone, D. E., Chang, B., Claassen, J., Cornelius, T., Derby, L., Dong, M., Givens, R. C., Hochman, B., Homma, S., Kronish, I. M., Lee, S. A., … Abdalla, M. (2020). Psychological distress, coping behaviors, and preferences for support among New York healthcare workers during the COVID-19 pandemic. *General Hospital Psychiatry*, *66*, 1-8. https://doi.org/10.1016/j.genhosppsych.2020.06.007

Shee, P. S., & Abratt, R. (1989). A new approach to the corporate image management process. *Journal of Marketing Management*, *5*(1), 63-76. https://doi.org/10.1080/0267257x.1989.9964088

Shenkar, O. (2001). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, *32*(3), 519-535. https://doi.org/10.1057/palgrave.jibs.8490982

Sherblom, J. C., Umphrey, L. R., & Swiatkowski, P. (2021). Resilience, identity tension, hope, social capital, and psychological stress during a pandemic. *Adversity and Resilience Science*, *3*(1), 37-51. https://doi.org/10.1007/s42844-021-00049-3

Sillars, A., Roberts, L. J., Leonard, K. E., & Dun, T. (2000). Cognition during marital conflict: The relationship of thought and talk. *Journal of Social and Personal relationships*, *17*(4-5), 479-502. https://doi.org/10.1177/0265407500174002

Sillince, J. A., & Brown, A. D. (2009). Multiple organizational identities and legitimacy: The rhetoric of police websites. *Human relations*, *62*(12), 1829-1856. https://doi.org/10.1177/0018726709336626

Sikorska-Simmons, E. (2005). Predictors of organizational commitment among staff in assisted living. *The Gerontologist*, *45*(2), 196-205. https://doi.org/10.1093/geront/45.2.196

Simon, H. A. (1976). *Administrative behavior: A study of decision-making processes in administrative organization*. Free Press.

Simpson, C. L. (2010). Resilience in women sexually abused as children. *Families in Society*, *91*(3), 241-247. https://doi.org/10.1606/1044-3894.4001

Sla, B. (2016). Physician burnout: a global crisis. *Lancet*, *388*(10193), 2272-2281. https://doi.org/10.1016/s0140-6736(19)31573-9

Smircich, L. (1983). Concepts of culture and organizational analysis. *Administrative Science Quarterly*, *28*(3), 339-358. https://doi.org/10.2307/2392246

Smith, F. L., & Keyton, J. (2001). Organizational storytelling: Metaphors for relational power and identity struggles. *Management Communication Quarterly*, *15*(2), 149-182. https://doi.org/10.1177/0893318901152001

Smith, L., & Mounter, P. (2008). *Effective internal communication*. Kogan Page Publishers.

Sohl, S. J., & Moyer, A. (2009). Refining the conceptualization of a future-oriented self-regulatory behavior: Proactive coping. *Personality and Individual Differences*, *47*(2), 139-144. https://doi.org/10.1016/j.paid.2009.02.013

Şomăcescu, S. M., Barbu, C. M., & Nistorescu, T. (2016). Investigating The Relationship Between Organizational Communication And Organizational Culture. *Management & Marketing Journal*, *14*(1).

Somekh, B., & Lewin, C. (2005). *Research methods in the social sciences*. Sage.

Somers, S. (2009). Measuring resilience potential: An adaptive strategy for organizational crisis planning. *Journal of Contingencies and Crisis Management*, *17*(1), 12-23. https://doi.org/10.1111/j.1468-5973.2009.00558.x

Somers, S. C. (2007). *Building organizational resilience potential: an adaptive strategy for operational continuity in crises*. Arizona State University.

Sonnet, M. T. (2016). *Employee behaviors, beliefs, and collective resilience: An exploratory study in organizational resilience capacity* Fielding Graduate University].

Southwick, S. M., Vythilingam, M., & Charney, D. S. (2005). The psychobiology of depression and resilience to stress: Implications for prevention and treatment. *Annual Review of Clinical Psychology*, *1*(1), 255-291. https://doi.org/10.1146/annurev.clinpsy.1.102803.143948

Spee, J. C. (2019). Transformation and resilience at the University of Redlands. *Journal of Management Inquiry*, *29*(2), 139-144. https://doi.org/10.1177/1056492619866262

Sperber, D., & Wilson, D. (1986). IX—Loose talk. *Proceedings of the Aristotelian Society*, *86*(1), 153-172. https://doi.org/10.1093/aristotelian/86.1.153

Stainton, A., Chisholm, K., Kaiser, N., Rosen, M., Upthegrove, R., Ruhrmann, S., & Wood, S. J. (2018). Resilience as a multimodal dynamic process. *Early Intervention in Psychiatry*, *13*(4), 725-732. https://doi.org/10.1111/eip.12726

Steele, C. M., Spencer, S. J., & Lynch, M. (1993). Self-image resilience and dissonance: The role of affirmational resources. *Journal of Personality and Social Psychology*, *64*(6), 885-896. https://doi.org/10.1037//0022-3514.64.6.885

Stephens, K. K., & Dailey, S. L. (2012). Situated organizational identity in newcomers. *Management Communication Quarterly*, *26*(3), 404-422. https://doi.org/10.1177/0893318912440179

Stephenson, A., Vargo, J., & Seville, E. (2010). Measuring and comparing organisational resilience in Auckland. *Australian Journal of Emergency Management, The*, *25*(2), 27-32. https://search.informit.org/doi/10.3316/ielapa.084594671126248

Stephenson, A. V. (2010). Benchmarking the resilience of organisations.

Stohl, C. (1995). *Organizational communication*. Sage.

Stohl, C. (2001). Globalizing organizational communication. In F. M. Jablin & L. L. Putnam (Eds.), *The New Handbook of Organizational Communication*, (pp. 323-376). Sage.

Stoverink, A. C., Kirkman, B. L., Mistry, S., & Rosen, B. (2020). Bouncing back together: Toward a theoretical model of work team resilience. *Academy of Management Review*, *45*(2), 395-422. https://doi.org/10.5465/amr.2017.0005

Stuart, H. (2002). Employee identity with the corporate identity - Issues and implications. . *International Studies of Management & Organization*, *32*(3), 28-44. https://doi.org/10.1080/00208825.2002.11043663

Sutcliffe, K., & Vogus, T. (2003). Organizing for Resilience. Positive Organizational Scholarship: Foundations of a New Discipline. KS Cameron, JE Dutton and RE Quinn. In: San Francisco: Berrett-Koehler. 94-110.

Sutherland, K., Chessman, J., Zhao, J., Sara, G., Went, A., Dyson, S., & Levesque, J. (2020). Impact of COVID-19 on healthcare activity in NSW, Australia. *Public Health Research & Practice*, *30*(4). https://doi.org/10.17061/phrp3042030

Tajfel, H. (1978). Social categorization, social identity and social comparison. *Differentiation between social group*, 61-76.

Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. *Political Psychology*, 276-293. https://doi.org/10.4324/9780203505984-16

Taylor, J. R., & Van Every, E. J. (1999). *The emergent organization: Communication as its site and surface*. Routledge.

Te Hononga, W. (2021). A COVID-19 Situational Report: Beyond Aotearoa New Zealand's Fortress as at 1 September 2021.

Tedeschi, R. G., & Calhoun, L. G. (2004). A clinical approach to posttraumatic growth. *Positive Psychology in Practice*, 405-419. https://doi.org/10.1002/9780470939338.ch25

Theiss, J. A. (2018). Family communication and resilience. *Journal of Applied Communication Research*, *46*(1), 10-13. https://doi.org/10.1080/00909882.2018.1426706

Tompkins, P. K., & Cheney, G. (1983). Account analysis of organizations: Decision making and identity. *Communication and organizations: An interpretive approach*, 123-146.

Tompkins, P. K., & Wanca-Thibault, M. (2001). Organizational communication: Prelude and prospects. In F. M. Jablin & L. L. Putnam (Eds.), *The new handbook of organizational communication: Advances in theory, research, and methods*, (pp. xvii-xxxi). Sage.

Tourish, D., & Hargie, O. (2009). Communication and organizational success. In *Auditing Organizational Communication* (pp. 3-26). Routledge.

Trompenaars, F., & Hampden-Turner, C. (1993). Riding the waves of culture London, Nicholas Brealey. *PART V: Global Corporate Ethics*.

Truss, C., Delbridge, R., Alfes, K., Shantz, A., & Soane, E. (2013). *Employee engagement in theory and practice*. Routledge.

Turnage, A., & Keyton, J. (2013). Ethical contradictions and e-mail communication at Enron Corporation. *Case Studies in Organizational Communication: Ethical Perspectives and Practices*, 87-97.

Ungar, M. (2006). Resilience across cultures. *British Journal of Social Work*, *38*(2), 218-235. https://doi.org/10.1093/bjsw/bcl343

Ungar, M., Ghazinour, M., & Richter, J. (2012). Annual research review: What is resilience within the social ecology of human development? *Journal of Child Psychology and Psychiatry*, *54*(4), 348-366. https://doi.org/10.1111/jcpp.12025

Ungar, M., & Liebenberg, L. (2011). Assessing resilience across cultures using mixed methods: Construction of the child and youth resilience measure. *Journal of Mixed Methods Research*, *5*(2), 126-149. https://doi.org/10.1177/1558689811400607

Vakilzadeh, K., & Haase, A. (2020). The building blocks of organizational resilience: A review of the empirical literature. *Continuity & Resilience Review*, *3*(1), 1-21. https://doi.org/10.1108/crr-04-2020-0002

Van Gennep, A. (1960). *The rites of passage* Routledge and Kegan Paul.

Van Knippenberg, D., & Hogg, M. A. (2001). Editorial: Social identity processes in organizations. *Group Processes & Intergroup Relations*, *4*(3), 185-189. https://doi.org/10.1177/1368430201004003001

Van Riel, C. B., & Balmer, J. M. (1997). Corporate identity: The concept, its measurement and management. *European Journal of Marketing*, *31*(5), 340-355. https://doi.org/10.1108/03090569710167574

Vandenabeele, W. (2009). The mediating effect of job satisfaction and organizational commitment on self-reported performance: More robust evidence of the PSM—performance relationship. *International Review of Administrative Sciences*, *75*(1), 11-34. https://doi.org/10.1177/0020852308099504

Varma, P., Junge, M., Meaklim, H., & Jackson, M. L. (2021). Younger people are more vulnerable to stress, anxiety and depression during COVID-19 pandemic: A global cross-sectional survey. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *109*, 110236. https://doi.org/10.1016/j.pnpbp.2020.110236

Vazirani, N., & Mohapatra, S. (2012). Merging Organisational Culture through Communication-'Post Mergers & Acquisitions'. *SIES Journal of management*, *8*(1).

Vella, S., & Pai, N. (2019). A theoretical review of psychological resilience: Defining resilience and resilience research over the decades. *Archives of Medicine and Health Sciences*, *7*(2), 233. https://doi.org/10.4103/amhs.amhs_119_19

Verhoeven, V., Tsakitzidis, G., Philips, H., & Van Royen, P. (2020). Impact of the COVID-19 pandemic on the core functions of primary care: Will the cure be worse than the disease? A qualitative interview study in Flemish GPs. *BMJ Open*, *10*(6), e039674. https://doi.org/10.1136/bmjopen-2020-039674

Villar, R. C., Nashwan, A. J., Mathew, R. G., Mohamed, A. S., Munirathinam, S., Abujaber, A. A., Al-Jabry, M. M., & Shraim, M. (2021). The lived experiences of frontline nurses during the coronavirus disease 2019 (COVID-19) pandemic in Qatar: A qualitative study. *Nursing Open*, *8*(6), 3516-3526. https://doi.org/10.1002/nop2.901

Wadi, M. M., Nordin, N. I., Roslan, N. S., Tan, C., & Yusoff, M. S. (2020). Reframing resilience concept: Insights from a meta-synthesis of 21 resilience scales. *Education in Medicine Journal*, *12*(2), 3-22. https://doi.org/10.21315/eimj2020.12.2.2

Waldron, V. R., & Farnworth, M. J. (2020). Steeling against midlife adversity: Resilience-promoting practices of long-term romantic pairs. *Journal of Family Communication*, *20*(2), 129-145. https://doi.org/10.1080/15267431.2020.1729158

Walker, B., Moss, C., Gibson, J., Sutton, M., Spooner, S., & Checkland, K. (2019). Tenth national GP worklife survey. *Manchester: policy research unit in commissioning and the healthcare system manchester centre for health economics*.

Waller, M. A. (2001). Resilience in ecosystemic context: Evolution of the concept. *American Journal of Orthopsychiatry*, *71*(3), 290-297. https://doi.org/10.1037//0002-9432.71.3.290

Walsh, G. S., & Cunningham, J. A. (2017). Regenerative failure and attribution. *International Journal of Entrepreneurial Behavior & Research*, *23*(4), 688-707. https://doi.org/10.1108/ijebr-03-2015-0072

Walton, M., Murray, E., & Christian, M. D. (2020). Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic. *European Heart Journal: Acute Cardiovascular Care*, *9*(3), 241-247. https://doi.org/10.1177/2048872620922795

Walumbwa, F. O., Avolio, B. J., & Zhu, W. (2008). How transformational leadership weaves its influence on individual job performance: The role of identity and efficacy beliefs. *Personnel Psychology*, *61*(4), 793-825. https://doi.org/10.1111/j.1744-6570.2008.00131.x

Wanat, M., Hoste, M., Gobat, N., Anastasaki, M., Böhmer, F., Chlabicz, S., Colliers, A., Farrell, K., Karkana, M., Kinsman, J., Lionis, C., Marcinowicz, L., Reinhardt, K., Skoglund, I., Sundvall, P., Vellinga, A., Verheij, T. J., Goossens, H., Butler, C. C., … Tonkin-Crine, S. (2021). Transformation of primary care during the COVID-19 pandemic: Experiences of healthcare professionals in eight European countries. *British Journal of General Practice*, *71*(709), e634-e642. https://doi.org/10.3399/bjgp.2020.1112

Waterman, R. H., & Peters, T. J. (1982). *In search of excellence: Lessons from America's best-run companies*. Harper & Row.

Watson, T. J., & Watson, D. H. (2012). Narratives in society, organizations and individual identities: An ethnographic study of pubs, identity work and the pursuit of 'the real'. *Human Relations*, *65*(6), 683-704. https://doi.org/10.1177/0018726712440586

Weick, K. (1979). *The social psychology of organising*. Random House.

Weick, K. E. (1987). Organizational culture as a source of high reliability. *California management review*, *29*(2), 112-127. https://doi.org/10.2307/41165243

Weick, K. E., & Sutcliffe, K. M. (2001). *Managing the unexpected* (Vol. 9). Jossey-Bass.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, *16*(4), 409-421. https://doi.org/10.1287/orsc.1050.0133

Wentland, D. M. (2009). *Organizational performance in a nutshell*. IAP.

Werner, E. E. (1987). Vulnerability and Resiliency: A Longitudinal Study of Asian Americans from Birth to Age 30.

Werner, E. E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai longitudinal study. *Development and Psychopathology*, *5*(4), 503-515. https://doi.org/10.1017/s095457940000612x

Werner, E. E. (2014). High-risk children in young adulthood: A longitudinal study from birth to 32 years. In *Risks and problem behaviors in adolescence* (pp. 76-85). Routledge.

Werner, E. E., Bierman, J. M., & French, F. E. (1971). *The children of Kauai: A longitudinal study from the prenatal period to age ten*. University of Hawaii Press.

Werner, E. E., & Smith, R. S. (2001). *Journeys from childhood to midlife: Risk, resilience, and recovery*. Cornell University Press.

West, C. P. (2009). Association of resident fatigue and distress with perceived medical errors. *JAMA*, *302*(12), 1294-1300. https://doi.org/10.1001/jama.2009.1389

Weston, K. (2020). Nurses' voices essential in COVID-19 reviews. *Kai Tiaki: Nursing New Zealand*, *26*(6), 34-34.

Whetten, D. A., & Foreman, P. (2014). An Organizational Identity Lens for Organizational Climate Scholarship. *The Oxford handbook of organizational climate and culture*, 443.

WHO. (2020). *COVID-19 and violence against women: what the health sector/system can do, 7 April 2020*.

Whyte, A. (2023). Cyclone Gabrielle: PM warns tough calls to come as resilience 'tested like never before'. *stuff.co.nz*

Wiersma, W. (2009). Research methods in education: An introduction. Routledge

Wildavsky, A. B. (1988). *Searching for safety* (Vol. 10). Transaction publishers.

Williams, S., & Tsiligianni, I. (2020). COVID-19 poses novel challenges for global primary care. *npj Primary Care Respiratory Medicine*, *30*(1). https://doi.org/10.1038/s41533-020-0187-x

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, *11*(2), 733-769. https://doi.org/10.5465/annals.2015.0134

Willmott, H. (2003). Critical Science? *The Oxford Handbook of Organization Theory*, 88.

Wilson, D. (2002). Truthfulness and relevance. *Mind*, *111*(443), 583-632. https://doi.org/10.1093/mind/111.443.583

Wilson, S. R., Kuang, K., Hintz, E. A., & Buzzanell, P. M. (2021). Developing and validating the communication resilience processes scale. *Journal of Communication*, *71*(3), 478-513. https://doi.org/10.1093/joc/jqab013

Wood, J. T. (2015). *Interpersonal communication: Everyday encounters*. Cengage Learning.

Woolley, L., Caza, A., & Levy, L. (2010). Authentic leadership and follower development. *Journal of Leadership & Organizational Studies*, *18*(4), 438-448. https://doi.org/10.1177/1548051810382013

Wright, M. O., Masten, A. S., & Narayan, A. J. (2012). Resilience processes in development: Four waves of research on positive adaptation in the context of adversity. *Handbook of Resilience in Children*, 15-37. https://doi.org/10.1007/978-1-4614-3661-4_2

Wyman, P. A., Sandler, I., Wolchik, S., & Nelson, K. (2000). Resilience as cumulative competence promotion and stress protection: Theory and intervention. *The promotion of wellness in children and adolescents*, 133–184. Child Welfare League of America.

Yu, J., Park, J., & Hyun, S. S. (2021). Impacts of the COVID-19 pandemic on employees' work stress, well-being, mental health, organizational citizenship behavior, and employee-customer identity. *Journal of Hospitality Marketing & Management*, *30*(5), 529-548. https://doi.org/10.1080/19368623.2021.1867283

Zamanzadeh, N. N., & Afifi, T. D. (2019). Prosocial relationship maintenance and resilience/thriving. In *The Routledge handbook of positive communication*, 60-69. Routledge.

Zautra, A. J., Hall, J. S., & Murray, K. E. (2010). A new definition of health for people and communities. *Handbook of adult resilience*, *1*(1).

Zautra, A., Hall, J., Murray, K., & The Resilience Solutions Group. (2008). Resilience: A new integrative approach to health and mental health research. *Health Psychology Review*, *2*(1), 41-64. https://doi.org/10.1080/17437190802298568

Zellars, K. L., Justice, L., & Beck, T. E. (2011). Resilience: New paths for building and sustaining individual and organizational capacity. *Research in Occupational Stress and Well-being*, 1-37. https://doi.org/10.1108/s1479-3555(2011)0000009005

Zimrin, H. (1986). A profile of survival. *Child Abuse & Neglect*, *10*(3), 339-349. https://doi.org/10.1016/0145-2134(86)90009-8

Zoller, H. M. (2003). Health on the line: Identity and disciplinary control in employee occupational health and safety discourse. *Journal of Applied Communication Research*, *31*(2), 118-139. https://doi.org/10.1080/0090988032000064588

Žukauskas, P., Vveinhardt, J., & Andriukaitienė, R. (2018). Philosophy and paradigm of scientific research. *Management Culture and Corporate Social Responsibility*. *121*(13), 506-518. https://doi.org/10.5772/intechopen.70628