The Right Tool for the Job.

An Investigation into Men's Help-Seeking Behaviours and Attitudes in a sample of New Zealand Construction Workers.

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Abstract

There are major difficulties with mental health and suicide within the New Zealand construction industry; a salient feature of this industry is that it is male-dominated, and men face particular challenges when seeking help for mental health issues. Yet little is known about men's help-seeking attitudes and behaviours within the New Zealand construction industry. The present study sought to identify factors which are associated with enhanced or decreased help-seeking behaviour among male construction workers. Male construction workers (N = 578) completed a survey that assessed intentions to seek help from different help-seeking sources, wellbeing, attitudes towards psychological help-seeking, barriers towards treatment and perceived stigma. The Theory of Planned Behaviour (TPB; Ajzen, 1985) was used as a guiding framework to measure and understand individual and social factors which could facilitate or inhibit help-seeking intentions among men. Open-ended questions were used to collect information on perceptions of stress, barriers to accessing mental health support within the workplace, and different ways that men could help other men access support.

Results indicated that masculine gender roles have a negative impact on help-seeking intentions among men within the construction industry. Stoic attitudes towards mental health, perceptions that help-seeking is a sign of weakness or failure, and self-reliance were identified as barriers towards seeking help. Greater adherence to masculine gender roles was also linked to lower levels of wellbeing. The implications of this finding are that men who strongly subscribe to masculine gender roles are more likely to reject talking-based therapies, and shoulder to shoulder interventions, such as workshops and mental health sports-based interventions.

Within the TPB model, attitude towards help-seeking was the strongest predictor of help-seeking intentions. Results indicated that perceived stigma and barriers to treatment were non-significant predictors of help-seeking intentions within the model. In regard to supplementary variables used within the TPB model, prior positive experiences of working with a counsellor and/or psychologist was a significant predictor of help-seeking intentions within the TPB model.

Key barriers identified within the study included time, cost, and having a conversation with a site manager to leave the worksite to access mental health support. The present study identified several areas of opportunity to support men along the help-seeking journey. Areas for intervention included: challenging negative aspects of masculinity within the workplace, including mental health conversations within daily work practices, and creating visible and accessible help-seeking pathways.

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For all the good men we have lost to suicide.

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Chapter One: Construction Industry and Mental Health

The first section of this chapter will provide an overview on the current state of the New Zealand construction industry. The chapter will begin with a definition of construction worker, and the various sub-sectors within the construction industry. Following this, the focus will be on exploring the economic landscape of the industry, the nature of construction work and its relationship to the economy, and the risks and challenges associated with the boom/bust cycle. The second section of this chapter will discuss how legislative changes in health and safety in the workplace have changed how mental health is understood and supported within the work-environment. The third section of the chapter will provide a context for the present research discussing suicide rates within the construction industry, and coronial studies which have explored risk factors among men who have died by suicide whilst being employed within the construction industry.

In the present study, construction industry was defined as the branch of manufacturing and trade based on the building, maintaining, and repairing of structures (Australian and New Zealand Standard Classification of Occupations; ANZSCO). The ANZSCO classification system is used within Australia and New Zealand labour markets and was developed to produce consistency in occupation statistics across the two countries. Using the ANZSCO framework, there are a wide variety of roles which come under the umbrella term construction worker. These include glaziers, plasterer, tiler, plumber, electrician, labourer, and roofer (for a full definition, and overview of job roles used within the study view appendix A). The ANZSCO is a commonly used framework used across Australian and New Zealand government for reporting construction related statistics. It has also been applied within previous New Zealand and Australian research which has explored mental health among construction workers (Bryson et al., 2019; Martin et al., 2016). It is important to

highlight, England and America have different occupational classification systems for defining job roles within the construction industry; therefore, caution needs to be taken when comparing statistics with these countries.

New Zealand Construction Industry

The construction industry is one of the largest sectors within New Zealand, employing approximately 350,000 workers; these workers are predominantly male (PricewaterhouseCoopers, 2019). The construction industry has four sectors: commercial, residential, civil, and construction services. Commercial businesses generally work on projects to be leased or sold within the private sector; projects can include the building of manufacturing plants, offices, shopping malls, and medical centres. Residential construction involves the building of homes. This can include family homes, apartments, and large housing subdivisions. Combined, the commercial and residential sector employ approximately 150,000 workers, with close to half being self-employed (Ministry of Business Innovation and Employment; MBIE, 2018). The civil sector involves the design and building of large industrial projects such as roads, railways, water reservoirs, airports, and tunnels. The civil sector has approximately 35 large firms, which employ approximately 100,000 workers (MBIE, 2017; Worksafe, 2015). The final sector is that of construction services which are comprised of approximately 100,000 workers, with 37% being self-employed (Worksafe, 2015). Included within construction services are a wide range of occupations (e.g., carpet layers, plumbers, and electricians) who sub-contract to medium to large businesses.

The New Zealand construction industry is at capacity with an abundance of work, yet a lack of resources to fill the demand (BRANZ, 2020). There are a number of events which have contributed to the large volumes of work within the construction industry. Following the Christchurch earthquakes in 2011 there was a significant demand for workers from all sub-sectors of the industry to help with demolition, repairs, and the rebuild of the city. Although

construction work has decreased within Christchurch, there is still a large proportion of the industry dedicated to the rebuild (BRANZ, 2020). The housing shortage within New Zealand has placed significant pressure on the commercial and residential sector, with new subdivisions being developed in every city to cope with the housing demand (MBIE, 2018). These events have seen the industry enter a period where there is an abundance of work, yet a shortage of resources (workers and material) to cope with the demand (BRANZ, 2018; PricewaterhouseCoopers, 2019). It is forecasted to manage the large volumes of work in 2019 to 2022, the construction industry will require between 50,000 to 60,000 additional workers (MBIE, 2020).

Boom and Bust Cycle

Construction work is cyclical, with demand determined by the pace of the economy (Peterson & Zwerling, 1998). The construction industry is known for the bust/boom cycle. During bust periods, there is a lack of work, with a high turnover of workers, increased competition, and the need for workers to travel long distances to find work (Peterson & Zwerling, 1998). Boom times present opportunities for construction businesses to grow, however it also brings significant pressure. Small to medium sized companies can grow quickly during a boom phase, and business owners may not be equipped to deal with the responsibilities that came with running a larger organization (BRANZ, 2018). When there is a shortage of skilled workers, companies are unable to deliver projects within a timely manner. To get projects back on track, workers are required to work longer hours, working around the clock to complete the job. When time is stretched thin, safety inevitably suffers, which can result in increased work-place accidents and injury, along with worker health being compromised (both mental and physical; Bryson & Duncan, 2018; Holt-Lunstad et al., 2010). According to the National Pipeline report (2020) the industry is currently within a boom cycle, which is characterised by increased job opportunities, but a lack of resources

(skilled workers and resources) to fill the demand. It is forecasted through 2019 to 2022 the boom period will level out, with gradual growth predicted over the next 5 years (MBIE, 2018).

Health and Safety

Health and Safety is a distinct issue within the construction industry. The construction industry is one of the largest industries within New Zealand and is also one of the most dangerous. Construction workers have had the highest rate of ACC claims by occupation since 2006 (Statistics New Zealand, 2018). According to WorkSafe NZ (2017), annually, over 600 serious harm notifications were reported within the construction industry. More concerning, on average, 10 lives are lost per year within the construction industry due to fatal incidents. Men are overrepresented within these statistics, with 71% of all workplace injury claims generated by men, and 96% of fatal incidents involving male workers (WorkSafe NZ, 2016). These alarming statistics highlight the need for research to be directed towards understanding ways in which workplace injuries, fatalities, and accidents can be reduced and prevented within the construction industry.

The introduction of the Health and Safety at Work Act (HSWA;2015) in New Zealand changed how health and safety was perceived among employers. Previously, much of the focus was on physical safety, with an emphasis on creating safe working environments through the prevention of accidents. However, under the new legislation, workplaces have a legal responsibility to manage risks to mental health, just like they do with any other health and safety risk. There is also a responsibility for employers to adapt the work environment to ensure workers' mental health needs are supported (WorkSafe, 2015). Currently there is a limited amount of research exploring the extent of mental health issues among men within the New Zealand construction industry. There is also a lack of research which has explored men's attitudes towards seeking help for mental health issues. Research within these areas is

important because it can provide employers with information to support the mental health needs of their workers.

Mental Health within Construction

Mental health issues among workers have the potential to compromise health and safety in the workplace. Within the work environment depression can create a number of challenges. For the employer, depression is associated with decreased productivity, lack of communication, lack of cooperation, and is the leading cause of employee absenteeism (Lépine & Briley, 2011). For the worker, depression is associated with hopelessness, decreased job satisfaction, memory difficulties, lack of concentration, fatigue, suicidal ideation, and suicidal behaviour (Isometsä, 2014). In one study, the risk of a workplace injury was increased two-fold in workers with depression (Zheng et al., 2010). The inability to concentrate can impact a worker's ability to follow instructions and make decisions on the worksite, increasing the likelihood of a workplace injury and/or accident (Beseler & Stallones, 2010; Kim et al., 2009).

In 2015 WorkSafe New Zealand commissioned a research project to explore health and safety attitudes and behaviours in the New Zealand work force across four high-risk sectors including agriculture, construction, forestry, and manufacturing. A total of 3751 workers and 1903 employers completed the survey. Within the construction sector, a total of 619 workers and 364 employers completed the survey. The research explored worker and employer perceptions of what they considered to be some of the main causes of long-term (6-months of more) injury and/or health problems on the worksite. Among 15% of construction workers, stress and/or mental health issues was identified as a long-term health problem. This was substantially higher among Māori (28%). Among construction employers, 11% viewed stress and/or mental health issues as a long-term health risk within the industry. These findings indicate there are cultural differences in the perceptions of risk associated with stress

and/or mental illness on the worksite. Furthermore, there were significant differences in perceptions amongst workers and employers on the extent to which stress and/or mental health issues was considered a health and safety risk at work (Worksafe, 2015).

The WorkSafe (2015) study investigated the extent to which serious injuries, health issues, and near misses occurred in the workplace from the perspective of the employers and workers. Workers were asked to identify all the harms they had personally experienced due to their work in the last 12 months. Within the construction sector, 20% of workers indicated they had a serious harm incident/ health issue. Harm associated with stress and/or mental illness was the highest reported stressor (mentioned by 7% of the workers). Interestingly, this was more prominent among managers that supervised three or more workers (mentioned by 11%). The results suggest supervisors could be more prone to stress and/or health issues, which could impact their ability to support other's mental health needs (Worksafe, 2015). These findings highlight the need for further research to explore the actual extent of mental health conditions among construction workers within the New Zealand construction industry. This information will be important in establishing a baseline measure of the prevalence of mental health issues among men within the construction industry, data which could be used to assess the effectiveness of future mental health wellbeing interventions.

Suicide and Construction

Research has indicated that the New Zealand construction industry has the highest proportion of suicides of any industry in New Zealand, with 6.9% of all suicides in New Zealand completed by members of the construction industry (Suicide Mortality Review Committee, 2016). High rates of suicide in the construction industry have also been reported in Australia, United States, Canada, Finland, England, and Korea (Gullestrup et al., 2011; Heller & Hawgood, 2007; McIntosh et al., 2016; Peterson et al., 2018; Turner et al., 2017). Risk factors that have been linked to higher rates of suicide within the construction industry

include long working hours, relationship breakdowns, transient working conditions, substance abuse, low help-seeking behaviour, unhelpful masculine stoic beliefs, social isolation, and mental health problems (Bryson et al., 2019; Heller & Hawgood, 2007; Milner et al., 2017; Player & Proudfoot, 2015).

Research conducted in Australia explored risk factors related to suicide among construction workers using psychological autopsy and focus groups (Heller & Hawgood, 2007). The psychological autopsy involves collecting all available information on the deceased via structured interviews of family members, friends, as well as attending health care personnel (Cavanagh et al., 2003). Patterns identified within the cases included relationship breakdowns, alcohol related problems, long working hours, and increased life stressors. These findings indicate that there are likely multiple factors linked to the high rates of suicide within the construction sector. It is possible there is no single causal mechanism, rather a combination of work and non-work factors, that when combined, increase an individual's vulnerability to mental distress, and suicide (Milner et al., 2017).

In 2018 Building Research Association New Zealand (BRANZ) commissioned a piloting study interviewing people in leadership positions from key stakeholder organisations representing the construction industry, health and safety, and mental health (Bryson & Duncan, 2018). Within the BRANZ study interviewees reported there were signs of a positive cultural shift towards supporting mental health within the industry. One interviewee reported that a work-colleague checked in with him every day after he disclosed that he was going through a challenging time. There were also positive signs that the younger generation were more open to supporting mental health within the industry. One interviewee reported younger workers were more supportive and open towards mental health on the worksite and were more likely to challenge the 'harden up' attitude towards mental health (Bryson & Duncan,

2018). These findings are promising given younger workers will play an integral role influencing help-seeking attitudes and beliefs for future generations.

Coronial Research

In 2019, SiteSafe conducted a study investigating risk factors within coroner reports of 300 individuals who died by suicide whilst employed within the New Zealand construction industry between 2007 and 2017 (Bryson et al., 2019). It is important to highlight that the analysis was based on a description of factors within the coronial reports, therefore no inferences can be made on whether risk factors were causative of suicide. In regard to the level of investigation, only the certificate of the findings from the coroner was examined, the study did not review toxicological reports, medical records, or police reports. Despite these limitations, the study provided valuable insight into some of the risk factors which could be linked to poor mental health and suicide among construction workers within New Zealand.

Findings from the SiteSafe (2019) study indicated that within one third of the coronial cases there was evidence of substance abuse or addiction leading up to the suicide attempt. Substance abuse can be used as a way to cope with stress or as a form of self-medicating for mental health conditions (Bryson et al., 2019; Crum et al., 2013). Research has indicated that construction workers have higher rates of drug and alcohol use compared to the general population (Strickland et al., 2017). However, it is important to highlight that men are more likely than women to abuse alcohol and illicit drugs within the general population of New Zealand (Westermeyer & Boedicker, 2000). Thus, the higher rates of substance abuse within the construction industry could be due to the construction sector being predominantly male, rather than specific work-related factors associated with the construction industry.

Findings from the SiteSafe (2019) study indicated that within over half (54%) of the sample of coronial files there was reported difficulties with social relationships. Relationship

stressors identified included separation from a romantic partner or stressors associated with other family relationships. Social support has shown to be a significant protective factor against depression and suicide (Kanjasty & Norris, 2008; Kleiman et al., 2014; Scourfield, 2010). Family, friends, and work colleagues play an important role in providing a platform for an individual to seek support for mental health issues. Yet, during times of high stress, rather than seek support from family and friends, compared to females, research has indicated some men are more likely to socially isolate themselves (Oliffe et al., 2017; Oliffe et al., 2020). One study interviewed men following an attempted suicide and identified common risk factors leading up to the suicide attempt (Player & Proudfoot, 2015). Findings from the interviews indicated that rather than seeking help, the majority of men in the study isolated themselves when they were feeling depressed, as they did not want to burden family or friends with their problems. Taken together these findings highlight that breakdowns in social relationships could constitute a risk factor for mental distress and suicide among men working within construction. Further research is required to better understand how resources and interventions can be implemented to improve men's ability to utilise social support and mental health services in times of distress.

Findings from the SiteSafe (2019) study indicated that within almost half (48%) of the sample there was evidence of help-seeking behaviour. Results indicated that the majority of men had sought help from a GP. These findings are consistent with prior studies which have shown that GPs are often the last help-seeking service that people visit prior to suicide (Milner et al., 2017). There was also evidence that some of the men had previously sought help from a counsellor and psychologist. Evidence of help-seeking behaviour within the coronial files suggests that some men recognise the importance of accessing support. Furthermore, contact with a health practitioner could present an opportunity for intervention from a GP or mental health provider. However, because the study did not investigate medical

and mental health reports, limited inferences can be made on the causal relationship between help-seeking behaviour and suicidal ideation. Using a qualitative and photo-voice study design, Oliffe et al. (2020) interviewed bereaved partners of 20 men who had died by suicide. Findings indicated that leading up to suicide men isolated themselves from friends and family members. Results also indicated that some men connected with a mental health professional or GP shortly before suicide. Taken together, findings indicate that there are potential opportunities to support men's needs when they are suicidal; however, further research is required to better understand how interventions can be designed and delivered to men more effectively.

In summary, there are major difficulties with mental health and suicide within the New Zealand construction industry; a salient feature of this industry is that it is male-dominated, and some men face particular challenges when seeking help for mental health issues. Among men within the construction industry research has provided valuable insight into risk factors which could influence poor mental health and suicide. However, there is a lack of research providing information on how this issue can be addressed within the New Zealand construction industry. Without a framework for supporting mental health within the construction industry, there is increased risk of injuries, workplace accidents, and mental health issues among workers. Furthermore, without a clear pathway to access support for mental health issues, it is likely the mental health needs of some men within the construction industry are being ignored.

Chapter Two: Men, Masculinity, and Help-Seeking

The chapter explores why some men might have difficulties seeking help for mental health difficulties. One of the central aims of the study was to explore men's attitudes and intentions to seek support from different mental health support services. To understand help-seeking among men one must understand the impact of gender, gender socialisation, and masculinity on the help-seeking process. The first section of this chapter will begin with a definition of gender and gender socialisation. It will be argued differences in the way boys and girls are socialised have a significant influence in shaping men's attitudes towards psychological help-seeking. The second section of this chapter will begin by defining traditional masculine gender roles. Following this the author will explore published work on masculine gender roles and help-seeking. It will be argued that traditional masculine gender roles create challenges among some men to seek help for mental health issues. Specifically, the role of the help-seeker requires one to recognise the need for help, ask for help, and display vulnerability. However, each of these processes are incongruent with masculine gender roles, such as being independent, displaying strength, and not displaying vulnerability.

Gender, Sex, and Gender Roles

Throughout the 18th and early 19th century views of masculinity were developed and understood within a biological framework. Central to this view was an emphasis on sex membership with the presence of male genitalia considered to be a primary factor in determining masculine behaviours, attitudes, and personality traits associated with being male (West & Zimmerman, 1987). From this point of view masculine attributes such as competitiveness, strength, aggression, and assertiveness are considered biological by-products (Kimmel, 1986). One of the limitations of biological explanations of masculinity is the failure to consider the influence of culture and learning experiences on the development

and maintenance of masculinities (Courtenay, 2000; Ehrlich & Levesque, 2011; Levant et al., 1995; Pleck, 1995).

Gender Socialisation

Gender role socialisation paradigms argue men and women learn specific behaviours, attitudes, and cultural norms about what it is considered to be male or female from a young age (West, 1987). Early childhood experiences are fundamental in providing children with a mental framework to understand themselves, others, and the world. Among boys, restricted ways of expressing emotions are reinforced with cultural messages such as 'big boys don't cry', 'stop being a sissy', and 'crying is for girls'. These messages convey to boys that there are certain rules and expectations about how boys and men should manage their emotions (Henslin, 2003). Research has indicated compared to girls, boys are more likely to experience less warmth from parents/caregivers, are left longer when upset (Lytton & Romney, 1991), experience more physical punishment (Golombok & Fivush, 1994) and are played with and handled more roughly by adults (Lytton & Romney, 1991; Maccoby & Jacklin, 1974). On the contrary, girls are encouraged to look inward (Block, 1984), less likely to receive negative reactions when expressing emotion, and provided with more platforms to discuss, learn, and express different types of emotions (Courtenay, 2000). Boys are provided with platforms to express emotion; however, it is often in the form of violence, and aggression. One of the many consequences of early gender socialisation among boys is they are provided with greater restrictions, and fewer opportunities to understand and express different emotions (Courtenay, 2000).

Pleck (1981) argued that although natural difference between males and females exist, differences which are influenced by the pairing of XX and XY chromosomes, differences between masculinity and femininity are also influenced by culture and social processes (Johnson & Repta, 2012; Pleck, 1981). Within the context of seeking help for mental health

issues, gender roles will be defined as the range of behaviours which are considered desirable, appropriate, and acceptable based on the cultural norms of society (Ehrlich & Levesque, 2011; Johnson & Repta, 2012; Pleck, 1981). The present study takes a similar view of masculine gender roles as Pleck (1981), such that processes associated with help-seeking including displaying vulnerability and relying on others to solve problems are incongruent with masculine gender roles that men should display strength and independence. It is also important to note that gender roles are not fixed, rather, masculine gender roles can be dynamic, and created within different social contexts (Seidler, 2018). For example, a construction workers could display vulnerability within the family home, such as crying in front of family members, however, when in the workplace the same individual could conceal signs of distress due to fears of being judged negatively by work colleagues.

Gender Role Conflict

O'Neil argues that people are not born with knowledge of differences in gender, rather they are partially learnt through socialisation and social learning. The socialisation of men into masculine gender roles creates unrealistic expectations, prescribing ways of being a 'man' which are detrimental to the wellbeing of the self and others (O'Neil, 1986). Within the context of help-seeking, masculine gender roles create a conflict for some men. In particular, the role of the help-seeker requires one to recognise the need for help, place oneself within a vulnerable position, and rely on others for recovery. Yet masculine gender roles prescribe and promote ways of being which requires men to display strength, not display weakness, and maintain control (Ducat, 2004; Levant & Pollack; Pleck, 1981). This dilemma men experience when seeking help has been conceptualised as gender role conflict, specifically men's need to seek help for psychological distress, but also the need to maintain one's masculine identity (O'Neil, 1986).

Higher levels of gender role conflict have been linked to a wide range of negative and social outcomes among men. High levels of gender conflict have been linked to hopelessness (Birthistle, 1999; Brewer, 1998), chronic self-destructiveness (Naranjo, 2001), depression, anxiety, substance abuse, and suicidal ideation (Borthwick, 1997; Bothck et al., 1997; Houle, 2004). O'Neil (2000) reviewed 27 studies which explored the relationship between gender role conflict and depression, of these 24 studies reported a significant positive relationship between gender conflict and depression. As well as being vulnerable to experiencing mental health issues, men with high levels of gender role conflict are more likely to hold negative attitudes toward traditional help-seeking sources such as psychiatric, psychological, and counselling services (e.g., Berger et al., 2005; Blazina & Watkins, 1996; Good et al., 1989).

Adherence to masculine gender roles can have a negative influence on men's help-seeking behaviour (Rice et al., 2020). Cleary (2012) identified risk factors which were present following an attempted suicide among young men. Several factors including fear of disclosing personal issues, expectations that men should be able to cope by themselves, and poor understanding of depressive symptoms were identified leading up to the suicide attempt. Similar, Krumm et al. (2017) interviewed men about their understanding of depression, with findings indicating that for some men depression is perceived as a threat to one's masculinity. Men within the study also spoke about ignoring signs of depression and avoidance of help-seeking. These findings indicate that for some men there is likely pressure to suppress symptoms associated with depression and reject help-seeking in order to maintain one's masculinity.

Help-Seeking and Masculine Gender Roles

Processes associated with help-seeking for mental health issues are incongruent with traditional masculine gender roles (Courtenay, 2000; West & Zimmerman, 1987). Courtenay (2000) argues men's reluctance to engage in health services is in response to health practices

being viewed as a feminine activity. Positive beliefs about taking care of one's health, utilising health services, and taking part in the help-seeking process are all actions which are incongruent with traditional masculine gender roles such as remaining strong in the face of adversity, restricting emotional expression, and maintaining independence (Ducat, 2004; Pleck, 1981). Maintaining one's 'manhood', involves displaying limited concerns about one's health, viewing the self as immune to injury or illness, and not participating in health-related practices, which could be perceived as feminine (Addis & Mahalik, 2003; Courtenay, 2000).

Wetherell and Edley (1999) view masculinity as a multidimensional construct which is renegotiated within different environments. For example, within the home environment, a man can display behaviours of a caring sensitive father, showing affection, and emotional vulnerability. However, within the work environment the same individual could restrict emotional expression and display limited affectionate and caring behaviours toward other male colleagues, due to the masculine cultural norms of the work-environment (Wetherell & Edley, 1999). Thus, different types of masculinities are available to men and applied depending on situational demands and the context (Johnston & Morrison, 2007; Salgado et al., 2019; Seidler et al., 2018; West & Zimmerman, 1987). Research exploring help-seeking attitudes among men within the construction industry found seeking help was perceived as a weakness, because it demonstrated one could no longer cope (Cleary, 2012). In contrast, among firemen seeking help was viewed as a priority and strength among men because failing to take-care of one's health placed other men at risk (O'Brien et al., 2005). Both of these studies highlight the fluid nature of masculinities and how people within the environment can support the manifestation of adaptive or maladaptive forms of masculinities.

Skogstad et al. (2005) investigated the impact of masculine gender roles on help-seeking behaviour and attitudes of male inmates at a New Zealand prison. Results indicated men faced a number of barriers in seeking help. Among inmates there was a reluctance to

report feelings of anxiety or sadness because these experiences were viewed as not being ‘staunch’ or ‘manly’ and could result in being scrutinised by inmates and staff. The expression of emotional distress through anger and violence was viewed among inmates as more acceptable, despite the consequences of these actions on the self and others (Skogstad et al., 2005). Inmates held a number of maladaptive beliefs about suicidal ideation, including that having suicidal feelings are a sign or weakness or form of attention seeking. Although these results need to be interpreted within the context of the prison culture, the results highlight some of the challenges men face when talking about mental health issues and seeking help.

Thompson et al. (2012) investigated the relationship between masculine gender roles and attitudes towards undergoing a colonoscopy as a preventive measure for bowel cancer. Results indicated masculine stereotypes such as ‘being staunch’ and ‘macho’ were evident in the discourse of men. Help-seeking and preventative action was viewed as a feminine activity because it challenged masculine identities of control and independence (Thompson et al., 2012). Within rural New Zealand research has found men rationalised their infrequent use of health services by positioning women as over-users of health services (Noone & Stephens, 2008). Whilst men visited health care services less, they viewed their position as honourable and legitimate (Noone & Stephens, 2008; Tyler & Williams, 2014). These studies highlight some of the constraints masculine identities create for men when making decisions to seek help. Furthermore, the challenges in creating services which are sensitive and responsive to men’s needs.

Men Helping other Men

Men are one of the most important resources for other men accessing help on the construction site; they have the potential to facilitate or inhibit a colleague’s decision to seek help (Vogel et al., 2007). Much of the previous research has focused on who refers men to

mental health services, with findings consistently showing that women (partner, sister, and mother) are more likely to take men to GP consults or mental health appointments (Vogel et al., 2014). Vogel et al. (2014) investigated the relationship between gender role conflict and men's willingness to refer other men to counselling services and talk about mental health issues. Participants included 216 male university students aged between 18 and 23 years old. The results indicated that men with higher levels of gender role conflict were less likely to refer other men to counselling services. Findings also indicated men with higher levels of gender role conflict held greater stigmatising views of other individuals with mental health issues and were less likely to talk about mental health issues. Consistent with this finding, avoidance of conversational topics related to mental health and help-seeking have also been found within male dominated industries such as the police and military (Wester et al., 2010; Wester & Lyubelsky, 2005).

Within male dominated industries it is possible fears around expressing one's feelings and seeking help are compounded, due to increased fears of how other men will react (Levant & Pollack, 1995; Wester & Lyubelsky, 2005). In one study, construction workers reported discussing feelings and emotions with other men as a weakness, because it was not the 'manly' thing to do (Milner et al., 2017). Another study explored attitudes and behaviours toward seeking help for depression amongst male construction workers (Cleary, 2012). Workers reported seeking help for depression was viewed as a weakness and a challenge to masculine identities, because it demonstrated they could not cope by themselves. Men were also less likely to confide in co-workers because of the fear of scrutiny and stigma associated with mental illness (Cleary, 2012). Rather than seeking help through mental health services or social support, men endured emotional pain for long periods of time and coped through maladaptive behaviours, such as substance abuse and avoidance (Cleary, 2012; O'Brien et al., 2005).

The macho culture amongst some groups of men within the construction industry could create barriers for seeking help for mental health issues (Milner et al., 2017). The term machoism refers to a strong sense of pride, or an exaggerated masculinity (Levant, 2011). On the construction site, Employment Assistance Programme (EAP) services are one of few help-seeking sources available to men. EAP services provide a platform for men to meet with a counsellor face to face to discuss issues, including work stress, substance abuse, relationship problems, and behavioural issues. However, research has indicated traditional help-seeking contexts and processes, such as the therapist's office and face to face counselling fail to support the needs of some men (Addis et al., 2010; Roberts & Fitzgerald, 1992). Face to face counselling creates a series of paradoxes for some men (Robertson & Fitzgerald, 1992). Part of the counselling process requires men to admit the need for help, rely on others, discuss emotions, and display vulnerability. However, these processes are inconsistent with masculine gender roles such as strength, restricted emotionality, and independence. It is possible mental health services in the construction industry are incongruent with men's masculine gender roles, resulting in a lack of help-seeking pathways for men to seek support for mental health issues.

In summary, the chapter explored the impact of gender, gender socialisation, and masculinity on the help-seeking process among men. It was highlighted to the reader how early childhood experiences are fundamental in shaping men's beliefs, attitudes, and behaviours towards seeking help for mental health issues. It was argued that traditional mental health services, such as face to face counselling, could fail to address the specific needs for some men, due to the incongruence of processes involved in these services and masculine gender roles.

Chapter Three: Towards Understanding Men's Help-Seeking Behaviour

Despite the constraints that masculine gender roles can have on men's decision to access support for mental health issues. Men do seek help for mental health issues and do benefit from talking based therapies (Keers, 2010; Spendelow, 2015). Research has identified conditions where men are more likely to seek help for mental health issues. This chapter explores research which has identified key help-seeking variables which have shown to facilitate help-seeking among men. The chapter will begin by defining help-seeking within a mental health context. The author will put forth a case for the utility of the TPB model to explore and understand social and individual factors which could inhibit or facilitate help-seeking behaviour among men working within the New Zealand construction industry. In putting forth this case, each factor within the TPB will be explored and contextualised within the men's health literature. The final section of this chapter will explore studies which have applied the TPB to explore help-seeking intentions among men for mental health issues.

Help-Seeking Definition

In the present study, help-seeking is contextualised within a mental health context, defined as an adaptive process, in which an individual actively seeks help from another person, to seek advice, information, treatment, or support in response to a problem or distressing experience (Rickwood et al., 2005). Therefore help-seeking is viewed as an intra and interpersonal process, which involves a complex interplay between individual and social factors. At the individual level, help-seeking involves the awareness of a problem and the recognition that one needs to seek help. At the social level, help-seeking involves the ability to articulate one's need to seek help from another, the negotiation of help-seeking pathways, and the utilisation of social relationships to access support (Rickwood et al., 2005).

Theory of Reasoned Action

Several social and cognitive psychology models have been applied to capture and understand factors associated with help-seeking behaviour. Applying models to understand factors which could facilitate or inhibit help-seeking is important because it provides policy makers, researchers, and mental health providers with information that can guide the development of mental health interventions. The Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1969) was the original model developed by Martin Fishbein and Icek Ajzen to explain the relationship between attitudes and behaviour. Ajzen and Fishbein (1974) argued that an individual's behaviour is predicted by intentions to perform a particular behaviour, which is influenced by the subjective norms associated with the behaviour, and the individual's attitudes towards the behaviour. The TRA has been applied to understand and predict behaviour in a number of different settings including consumer behaviour (Ho et al., 2009; Lyong, 1998), high risk and dangerous behaviour (Richardson et al., 2012), and pro-environmental behaviour (Hansla et al., 2008). One of the major criticisms of the TRA was the assumption that people have total control over their behaviour. The model failed to take into account internal and external barriers which could prevent an individual performing a particular behaviour (Ajzen, 1985; Kiriakidis, 2017). For instance, it was recognised that despite having high intentions, if an individual lacked the belief and confidence that they could execute the behaviour, intentions were shown to be a poor predictor of behaviour. Additionally, if intentions were high, yet there were external barriers (e.g., lack of resources), intentions were a poor predictor of behaviour (Ajzen, 1985; Kiriakidis, 2017). To consider these limitations, the TPB was developed, which included a new additional construct called perceived behavioural control. This construct will be defined and discussed within the next section.

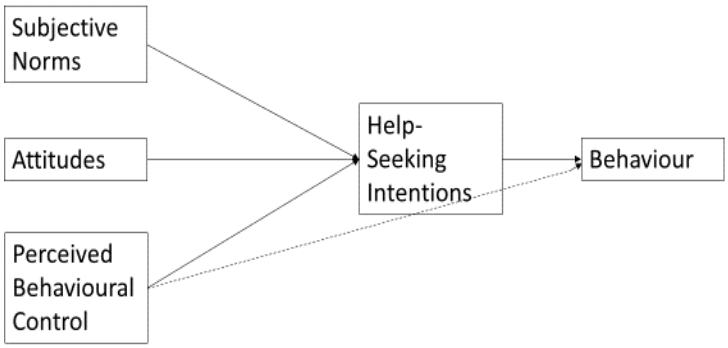
Theory of Planned Behaviour

In the present study the TPB was used as a guiding framework to measure and understand individual and social factors which could facilitate or inhibit help-seeking intentions among men working within the New Zealand construction industry. The TPB has demonstrated utility in predicting a wide range of health related behaviours including physical activity choices (Presseau et al., 2010), condom use (Albarracin, 2001), drinking patterns (Collins & Carey, 2007), diet behaviours (Andrew et al., 2016; Conner et al., 2003), pro-environmental behaviours (Goh et al., 2017; Harland et al., 1999), and weight reduction choices (McConnon et al., 2012). Within the mental health context, the TPB have been applied to predict help-seeking behaviour for depression and anxiety (Damghanian & Alijanzadeh, 2018). The TPB has also been applied to predict help-seeking intentions for dementia (MacFarlane, 2015), depression, anxiety, and suicidal ideation (Carlton & Deane, 2000; Deane & Todd, 1996).

Underpinning the TPB is the assumption that human behaviour is goal-directed and influenced by individual and social cognitive factors (Ajzen, 2011). Within the TPB the act of seeking help for mental health issues is predicted by the strength of an individual's intention to seek help. As can be seen in Figure 1, intentions are influenced by three key factors. First, an individual's attitude towards seeking help via psychological services. Second, the subjective norms associated with help-seeking, specifically perceptions of whether people closest to the individual will approve or disapprove if they seek help for mental health issues. Third, perceived behavioural control, which refers to the perceived ease or difficulty of accessing mental health services. Each of these factors will be explored in the following section and discussed within the context of help-seeking among men.

Figure 1

Theory of Planned Behaviour Model



Behavioural Intentions

The TPB provides a framework to predict behaviour (Ajzen, 2011). Within the context of the present study, this could be defined as an individual accessing support from a mental health provider. However, due to the limited timeframes of the student project, it was not feasible to collect prospective data on men's help-seeking behaviour. Within the present study, the outcome variable assessed was men's intentions to seek help for mental health issues. Intention is defined as an individual's readiness to perform a given behaviour (Ajzen, 2011; Hankins et al., 2000). Research has indicated behavioural intentions are a significant predictor of future behaviour. For example, Armitage and Conner (2001) conducted a meta-analysis of 185 TPB studies from 1970 to 1999. Findings from the meta-analysis indicated intentions explained between 30% to 40% of the variance on behaviour. Although this still leaves a relatively large amount of unexplained variance, it provides a guiding framework for policy makers, researchers, and mental health providers to identify and target factors which could improve help-seeking.

Perceived Behavioural Control

Perceived behavioural control is the most recent addition to the TPB. Perceived behavioural control refers to an individual's perception of the ease or difficulty of performing the behaviour of interest (Ajzen, 2011). Perceived behavioural control consists of two components. First, self-efficacy, which refers to an individual's confidence that they can achieve a particular goal (Bandura, 1999). Within the context of help-seeking, self-efficacy captures the level of difficulty required to seek help and whether an individual will persevere with the behaviour when faced with obstacles (Conner, 2005). Second, external barriers which refers to structural barriers that could prevent an individual accessing support. This can include the cost, availability, and accessibility of mental health services. Among all variables assessed within the TPB model, perceived behavioural control has shown to be the strongest predictor of help-seeking intentions and behaviour (Ajzen, 2011).

Despite the high rates of suicide within the New Zealand construction industry there is a lack of research which has explored worker's perceptions of accessing mental health services, and barriers towards seeking help. Several interviewees from the BRANZ piloting study (Bryson & Duncan, 2018) reported that there was a lack of accessible help-seeking services available for men within the construction industry. Compared to other work environments such as the office, it is possible there are unique factors within the construction work environment that prevent some men from accessing support. For construction workers, the work environment is dynamic, constantly changing, and comprised of a number of different roles such as electricians, plumbers, carpenters, engineers, and roofers. Each of these sub-contractors will enter and leave the construction site at different stages of the project. This is in contrast to the traditional office environment, where employees generally work within the same office environment on fixed schedules. Thus, for some men working within the construction industry there are likely several structural barriers to access support

because the work environment is constantly changing, with help-seeking pathways and information less visible.

Attitudes Towards Help-Seeking

Beyond gender, research has indicated one's attitude toward seeking help for mental health issues is a significant predictor of help-seeking behaviour (Bayer & Peay, 1997; Deane et al., 1999; Yousaf et al., 2015). Attitudes will be defined as a person's belief, whether positive or negative, about seeking help from a mental health professional (Ajzen & Fishbein, 2000). According to Fisher and Turner (1995) beliefs underpin an individual's attitude and behaviour towards seeking help for mental health issues. Within the context of help-seeking, masculine beliefs such as self-reliance and emotional control play a fundamental role in shaping men's attitudes towards seeking psychological help (Good & Wood, 1995; O'Brien et al., 2005). To better understand the impact of masculine beliefs on help-seeking attitudes Good et al. (1989) explored specific components of masculine gender roles which impact attitudes towards psychological help-seeking. Good et al. (1989) found men with higher levels of restricted emotionality were more likely to have negative attitudes towards psychological help-seeking and were less willing to seek help from a counsellor. Restricted emotionality refers to an unwillingness to talk about feelings, disclose sensitive information, and a tendency to inhibit emotions (O'Neil et al., 1986). Researchers have hypothesised the socialisation of boys and young men into restricted and unrealistic masculine gender roles lay down the 'seeds' for the development of negative attitudes towards psychological help-seeking (Cleary, 2012). For one to hold a positive attitude towards seeking help for mental health issues, requires one to act in opposition to masculine implicit cultural messages, such as 'boys don't cry', and 'harden up'. In terms of the maintenance of negative attitudes towards psychological help-seeking, restricted emotionality could not only contribute to the suppression of emotions, but it could function as a form of avoidance which perpetuates

negative beliefs about the utility of seeking help for mental health issues (O'Neil, 2000). Avoidance of talking about sensitive information, discussing feelings with others, and the suppression of emotional feelings, provides men with limited information and opportunities to challenge negative beliefs towards seeking help for mental health issues (e.g., help-seeking is a sign of weakness or failure).

Research consistently reports gender differences in attitudes towards psychological services, with men more likely to hold negative attitudes (Berger et al., 2005; Mackenzie et al., 2006; Masuda et al., 2005; Reimer, 2014; Türküm, 2005). Early intervention and psychoeducation have shown to be effective in creating more adaptive gender roles among men (Barker et al., 2007). However, change within this area is slow. As highlighted, masculine gender roles are developed and maintained by a multitude of variables, including culture, history, and the media (Connell, 1987; Jennings & Murphy, 2000; Levant, 1995). This highlights the need for research to explore individual and social help-seeking variables that are more amenable to change. Research within this area is important because it can provide insight into factors which could impact men's decision to seek help for mental health issues.

Subjective Norms

The final factor within the TPB is subjective norms, which refers to an individual's perception of what other important people (e.g., friends, family, and work colleagues) will think if they perform a particular behaviour (Hankins et al., 2000). Meta-analysis research has indicated within the TPB model subjective norms is one of the weakest predictors of help-seeking intentions and behaviour (Armitage & Conner, 2003). Because of its weak ability to contribute to the variance of intentions and behaviour, some researchers have argued that the construct should be dropped altogether. However, the majority of studies which have assessed the impact subjective norms on behavioural intentions have used a single item

measure and used varying definitions of subjective norms (Armitage & Conner, 2003). Furthermore, the majority of studies included within the meta-analysis were comprised of university students, limiting the generalisability of these findings across different demographics, environments, and health conditions.

In the present study subjective norms was assessed by measuring the perceived stigma associated with seeking help for mental health issues. Perceived stigma refers to an individual's fear that other people within one's social group would view the act of seeking help for mental health issues as a sign of weakness (Vogel et al., 2006). Similar to subjective norms, in perceived stigma, the source of negative evaluation is hypothesised to stem from an individual's perceptions of what other important people (family, friends, and work colleague) might think or say if they seek help for mental health issues (Corrigan, 2004). Within male dominated industries, such as the army, perceived stigma has been linked to a decreased willingness to seek help and avoidance of conversational topics related to mental health (Greene-Shortridge et al., 2007). Men could avoid talking about mental health and seeking help due to fears of how they will be perceived by other men within their environment (O'Neil, 2002; Seidler et al., 2019). It is possible perceived stigma is compounded within the construction industry because the help-seeking process requires men to participate in a process which is incongruent with masculine gender roles, such as independence, stoicisms, and control (Greene-Shortridge et al., 2007).

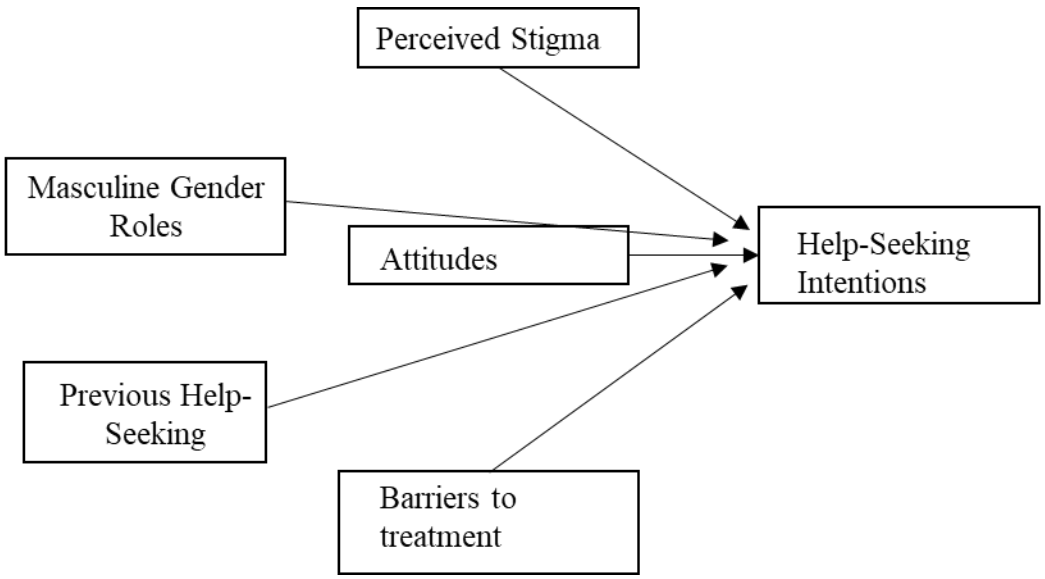
Past Help-Seeking Experiences

The present study explored an extended version of the TPB model by exploring the impact of prior help-seeking experiences on help-seeking intentions. Prior help-seeking experiences of seeking help for mental health issues has been identified as a key facilitator of help-seeking intentions and behaviour (Carlton & Deane, 2000; Deane et al., 1999; Rickwood et al., 2005; Schomerus et al., 2009). Research has indicated that when past experiences are

perceived as positive and beneficial, it has shown to result in greater psychological openness, and positive attitudes towards seeking help for mental health issues within the future (Kelly & Wright, 2007; McKenzie et al., 2008; Rickwood et al., 2005). It is possible for men with prior experiences of seeking help there are fewer barriers to access support within the future due to increased knowledge of how to access services, and if services were perceived positively there is likely less stigma attached to seeking help from a counsellor and/or psychologist.

Figure 2

Adapted Version of the TPB Model including Masculine Gender Roles and Previous Help-Seeking Experiences.



Few studies have explored the influence of prior help-seeking experiences among men, and the impact it has on future help-seeking behaviour. Deane et al. (1999) explored the impact of attitudes, ethnicity, and help-seeking experiences on future help-seeking intentions among 111 New Zealand prison inmates (43% New Zealand European, 44% Māori, and 13% other). Consistent with previous research, attitude towards psychological help-seeking was a significant predictor of help-seeking intentions for personal emotional issues and suicidal

ideation (Deane & Todd, 1999). In regard to ethnicity, Māori men reported significantly more negative past experiences of working with mental health professionals and held more negative attitudes towards seeking psychological help. Furthermore, compared to New Zealand European men, Māori men were less willing to seek help from a counsellor and/or psychologist for suicidal thoughts (Deane et al., 1999). These findings highlight how negative experiences of interacting with mental health services can have long lasting effects for some Māori men, which can create significant barriers for future engagement. These findings are concerning given Māori have the highest rates of suicide compared to any other ethnic group within New Zealand (New Zealand Coronial Services, 2018). It is possible Māori men do not trust or have little faith in working with a counsellor or psychologist within the prison environment (Milne, 2005).

TPB Applied to Explore Help-Seeking for Mental Health Issues

Using the TPB as a guiding framework Damghanian and Alijanzadeh (2018) conducted one of few longitudinal studies exploring help-seeking behaviours among individuals with mild to severe symptoms of depression and anxiety. Data was collected from 1011 Iranian participants (male, 55.2%, average age, 27.59 years). Participants were recruited across eight medical centres. Evidence of mental health issues was assessed by the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983). Data was collected from participants over two time-periods during 2014 and 2016. First, participants completed measures within the TPB model which included: attitudes towards seeking help, subjective norms, self-stigma, barriers to treatment, and help-seeking intentions. Second, following a two-year period, evidence of help-seeking was assessed by accessing participant medical records. Results indicated perceived behavioural control and behavioural intentions explained approximately 60% of the variance in mental health seeking behaviour. Despite the large sample, limited inference could be made on whether gender was a significant factor in

influencing help-seeking intentions and behaviour. However, these findings highlight that key help-seeking variables within the TPB could be influential in shaping an individual's decision to seek help for mental health issues.

MacFarlane (2015) applied the TPB model to investigate factors which predict psychological help-seeking intentions among older adults within New Zealand. Predictor variables assessed within the model included attitudes towards psychological help-seeking, perceived behavioural control, and intentions to seek help. The authors also assessed the impact of previous help-seeking, age, gender, and levels of distress on help-seeking intentions. Participants included 256 New Zealanders aged between 49 to 69 years old. Results indicated attitudes towards psychological help-seeking and perceived behavioural control were significant predictors of seeking help for mental health issues. These findings are consistent with previous research which has explored help-seeking intentions among older adults within New Zealand (James & Buttle, 2008). In terms of help-seeking for different disorders, depression and substance abuse disorders were linked to higher help-seeking intentions compared to anxiety. Findings also indicated that previous positive experiences with mental health services was associated with increased psychological openness and willingness to engage in mental health services in the future. In regard to gender, there were no significant differences in attitudes or help-seeking intentions. These findings are consistent with research that has indicated older men are more likely to hold positive attitudes towards help-seeking compared to younger men (Mackenzie, 2008).

Smith et al. (2008) used the TPB framework to explore help-seeking intentions among 134 American male university students (aged between 18 to 26 years). Participants completed the Male Role Norms Inventory-57 items (MRNI; Levant & Richmond, 2008), Attitudes toward Seeking Professional Psychological Help Scale (ATSPH; Fischer & Farina, 1995), and the General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005). Results indicated

attitudes towards seeking psychological help-seeking was significantly positively related to men's intention to seek help from a counsellor. Results also indicated attitudes towards psychological help-seeking mediated the relationship between masculine gender roles and help-seeking intentions. Men who endorsed traditional masculine gender roles were more likely to hold negative attitudes towards psychological help-seeking and were less willing to seek help from a counsellor. The limitation of Smith et al's (2008) study is the failure to measure subjective norms and perceived behaviour control, which are key predictor variables within the TPB. Providing a measure of perceived behavioural control would provide valuable information on any barrier's men could experience when seeking help for mental health issues. Additionally, measuring subjective norms would provide information on whether normative beliefs associated with mental health would prevent some men from seeking help.

Within New Zealand the TPB has been applied to understand help-seeking intentions among university and high school students. Deane and Todd (1996) investigated the relationship between attitudes toward psychological help-seeking and help-seeking intentions on a sample of university students (aged 19-72 years, mean age 40 years). Results indicated there was a significant positive relationship between attitudes towards seeking help, and help-seeking intentions. In regard to the type of distress, individuals had higher help-seeking intentions for suicidal ideation compared to personal- emotional issues. Using a similar study design Carlton and Deane (2000) investigated the relationship between attitudes towards psychological help-seeking and counselling help-seeking intentions among 221 high school students (aged between 14-18 years, 51% male). Results indicated attitudes towards psychological help-seeking was significantly positively related to help-seeking intentions. However, in contrast to the findings reported in Deane and Todd (1996), there was an inverse relationship between suicidal ideation, and help-seeking intentions. Specifically, individuals

reporting higher levels of suicidal ideation were less willing to seek help from a mental health professional. Carlton and Deane (2000) argued that lower help-seeking intentions among adolescents for suicidal ideation could be due to developmental limitations, such as underdeveloped problem-solving skills. Both of these New Zealand based studies highlight the complex nature of help-seeking, in particular how help-seeking intentions can vary across different types of distress, and age groups.

Using the TPB as a guiding framework Williams et al. (2006) explored help-seeking intentions among a sample of New Zealand male prison inmates (N = 173). The authors explored whether TPB predictor variables (attitudes, subjective norms, and perceived behavioural control) would predict help-seeking intentions for suicidality and personal-emotional problems. The authors also investigated whether levels of emotional distress and previous help-seeking experiences would predict help-seeking intentions. Results indicated predictor variables within the TPB contributed towards the variance of help-seeking intentions (explaining 43% of the variance). Consistent with previous research attitudes towards psychological help-seeking was the strongest predictor of help-seeking intentions (Damghanian & Alijanzadeh, 2018; Smith et al., 2008). Interestingly, prior experiences of working with a mental health provider within the prison was linked with lower help-seeking intentions. However, prior help-seeking experiences of working with a mental health provider outside of the prison was associated with higher help-seeking intentions. It is possible due to the male dominated environment within the prison, unhelpful masculine beliefs about seeking help for mental health issues (e.g., help-seeking is a sign of weakness or failure) could create barriers for some men to seek help (Howerton et al., 2007). However, because the study did not measure masculine gender roles, limited inferences can be made on the impact of masculine gender roles on help-seeking intentions.

In summary, the TPB has been applied to explore help-seeking behaviour among a number of different populations. Among high school and university students research has demonstrated that help-seeking intentions can vary depending on the type of disorder and development level (Carlton & Deane, 2000). Among older adults, psychological help-seeking attitudes have shown to be generally positive for both men and women (James & Buttle, 2008; MacFarlane, 2005). Studies which applied the TPB among men within prison, have highlighted how the impact of culture (ethnicity and gender) can impact attitudes and intentions to seek help from mental health providers (Williams et al., 2006). They have also highlighted how past negative experience can have long lasting effects on future help-seeking behaviour. There is some evidence that the TPB could be used to predict help-seeking intentions among men. However, there is currently no study which has applied the TPB to explore help-seeking intentions among construction workers. This type of research is important because it could help identify key help-seeking variables for intervention and further research.

Chapter Four: Shoulder to Shoulder Interventions

When men do engage in psychological and psychiatric services, the majority of men respond well to medication and psychotherapy (Keers, 2010; Spendelow, 2015). However, the challenge is getting men into some form of mental health support before mental health conditions become chronic. Traditional mental health services, such as talking based therapy might not be effective for all men working within the construction industry. Therefore, it's important to consider alternative help-seeking sources, such as shoulder to shoulder interventions which have shown some potential at improving mental health outcomes among men. The aim of the present chapter is to provide an overview of shoulder to shoulder mental health interventions. The chapter will not provide an exhaustive list of shoulder to shoulder interventions. Rather the focus will be on exploring the underlying mechanisms of shoulder to shoulder interventions which have shown to be effective at engaging men into some form of mental health support and target mental health conditions such as depression and anxiety. The chapter will also explore the Australian based suicide prevention initiative called Mates in Construction (MIC) which is currently being delivered on a number of construction sites within New Zealand.

Shoulder to Shoulder Interventions

In 2014 the Movember Foundation and the Male Mental Health forum (United Kingdom) commissioned a review of the academic literature from 1989 to 2014 relating to male mental health, with a focus on identifying mental health interventions for men. One of the major findings within the report was shoulder to shoulder interventions were effective in providing a service for men to seek support for mental health. Shoulder to shoulder interventions are defined as a 'sideways approach' towards targeting men's mental health needs where aspects of psychoeducation are paired with common masculine activities and

environments (McKelly & Rochlen, 2007). Shoulder to shoulder interventions aim to create a male friendly environment, where men can engage in conversations about mental health based on their own terms (Brook, 2001; Coles et al., 2010; Galdas et al., 2014). Examples of shoulder to shoulder interventions include psychoeducation workshops and outreach programs (Blazina & Marks, 2001; Robertson & Fitzgerald, 1992; Vogel & Wester, 2003), men's sheds (Golding, 2011; Morgan et al., 2007), adventure based therapy (Newes & Bandoroff, 2004), and sports based mental health interventions (Curran et al., 2017; McGale et al., 2011). Especially within male dominated industries where there is stigma attached to talking based therapies; shoulder to shoulder interventions could be used to target some of the 'hard to reach' men who hold negative attitudes towards talking based therapies. Research has linked shoulder to shoulder interventions with a number of positive health and social outcomes. For example, shoulder to shoulder interventions are associated with increased social support (Mckelley & Rochlen, 2007), decreased anxiety and depression (Boone & Leadbeater, 2006; McGale et al., 2011), reductions in stigma associated with mental illness (Misan & Haren, 2008), increased mental health literacy, and positive attitudes towards help-seeking (Wilson & Cordier, 2013).

Robertson and Fitzgerald (1992) investigated men's perceptions of mental health services using different promotional material. Men were asked to rate the acceptability of two different brochures advertising mental health services. Both brochures identified the same set of stressors (social, emotional, medical, somatic, and academic). One brochure described counselling services, advertised as one to one therapy, with an emphasis on discussing personal feelings, sharing intimate concerns, empathy, and identifying emotions. The other brochure promoted alternative therapeutic services including workshops, classes, seminars, and group-based interventions. Results indicated men with positive attitudes towards face to face counselling expressed equal preferences for the two types of counselling brochures. Men

who expressed negative attitudes toward face to face counselling showed a greater interest in seeking help through non-traditional help-seeking platforms, such as workshops and seminars. These findings were influential within the men's mental health literature because it highlighted how the promotion/marketing of mental health services can be influential in shaping men's decision to seek help (Brook, 2001; Robertson & Fitzgerald, 1992; Seidler et al., 2016).

Blazina and Marks (2001) replicated and extended the earlier works of Robertson and Fitzgerald (1992) by exploring the relationship between masculine gender roles and men's willingness to seek help via support groups, counselling, and workshops. Results from the study indicated that greater adherence to masculine gender roles was associated with negative attitudes towards all forms of support. Seeking help from men's support groups were rated the least favourable treatment option. Within the study, men's support groups were described as "a mixture of traditional group processes that had as a focus gender role related issues (i.e., defining what is masculine), affirming social norms regarding emotional sharing among other men in the group, emotional disclosure, vulnerability, and interpersonal skill-building" (Blazina & Marks, 2001, p. 300). It is possible men within the study rejected group-based therapy because of the language used to promote the service. Consistent with this view, research has indicated how therapy is promoted is an influential factor in shaping men's attitudes and willingness to engage in mental health services (Men's Health Forum and Mind, 2011).

The type of language used to promote mental health services can influence men's decision to seek help (Men's Health Forum and Mind, 2018). Wisch and colleagues (1995) investigated the relationship between gender role conflict (adherence to masculine gender roles) and men's attitudes towards psychological help-seeking after they viewed two short counselling videos. Participants were randomly assigned to watch one of two videos, which

showed a client and therapist interacting. In the emotional oriented session, participants watched a 10-minute video of a client and therapist interaction. In this condition, there was an emphasis on emotional expression and discussion of feelings. For example, the therapist asked questions, such as, how do you feel? What type of emotions arise when we talk about this issue? In the cognitive oriented approach, there was an emphasis on problem-solving, being direct, and using cognitive and solution-oriented language. For example, the therapist asked questions such as what challenges have you experienced? What skills do you think you need to solve the issue? Results indicated men held more positive views toward the cognitive oriented therapist interaction, compared to emotional. Furthermore, men with higher levels of gender role conflict reported they would be more willing to seek support from counselling services that used a cognitive oriented approach. The implication of this finding is language is a powerful tool which can either facilitate or inhibit men to seek help from different help-seeking sources (Men's Health Forum and Mind, 2018). Men who endorse traditional masculine gender roles could reject traditional based mental health services (face to face counselling) due to how they are framed. Concepts such as 'emotions' and 'feelings' could trigger avoidance among some groups of men, because they are inconsistent with masculine cultural scripts such as 'men don't cry' and 'harden up' (Brooks, 2001; Men's Health Forum and Mind, 2018).

Sports-Based Mental Health Interventions

Brooks (2010) argued one way to engage men into the help-seeking process is by pairing activities (for example, sport, building, exercise, and cooking classes) with aspects of psychotherapy (Brooks, 2010). Research has indicated men are more likely to engage in the help-seeking process if it involves a familiar activity and takes place outside of the therapist's office (Brooks, 2010; Kiselica et al., 2008). Although there are variations in sports-based mental health interventions, one of the central features of each programme is the pairing of

male familiar topics such as sport with elements of mental health. This includes the delivery of exercise interventions alongside therapy for men experiencing mental illness (Friedrich & Mason, 2017). It also includes the delivery of individual and group counselling services within sports setting, such as local sporting club rooms, or stadiums of well-known sports teams (Pringle et al., 2014). Research indicates sports-based mental health interventions for men are associated with increased help-seeking for both mental and physical health issues (Friedrich & Mason, 2017), decreased stigma (Darongkamas et al., 2011), positive attitudes towards psychological help-seeking (Pringle et al., 2014), increased mental health literacy, and social support (Mason & Holt, 2012; Spandler & McKeown, 2012).

One of the major strengths of sports-based mental health intervention is the holistic approach towards supporting men's health. Friedrich and Mason (2017) conducted a systematic review of 15 football mental health interventions for men within the United Kingdom. Several projects were successful at increasing social support, mental health literacy (Carless & Douglas, 2008; Friedrich & Mason, 2017; Oldknow & Grant, 2008), and increasing men's awareness of suicide (Pringle & Sayers, 2014). Incorporating exercise into mental health initiative was also viewed as a key factor in improving mood and reducing anxiety among men (Mason & Holt, 2012; Spandler & McKeown, 2012). From a help-seeking perspective, sports-based mental health interventions create opportunities for mental health service to target the 'hard to reach' men in society who hold negative attitudes towards counselling and psychological services (Brook, 2010). It also provided a space for men to 'open up' and have conversations about mental health (Pringle & Sayers, 2014). Although sports-based mental health initiatives have shown some potential at targeting men's mental health needs, there is a lack of empirical research which has applied pre and post intervention measures to assess the efficacy of interventions. There is also a lack of research which has

applied randomized controlled study designs comparing sports-based mental health initiatives with talking based therapy.

Football and Mental Health

In order to increase men's engagement in mental health services a community mental health service within the United Kingdom adapted its service to be delivered within the clubrooms of a well-known English football team (Pringle et al., 2014). The programme was a group-based psychoeducation intervention called – "It's a Goal!" Topics covered in the programme included depression, self-esteem, substance abuse, and suicide. Similar to New Zealand, suicide is one of the leading causes of death within the United Kingdom among younger and older men (Manders & Kaur, 2018). Football terminology was used as a framework for men to think and talk about mental health issues within the group. For example, the lead therapist was known as the 'manager', and rather than being known as patients or clients, men within the study were referred to as 'players'. At the beginning of the intervention (known as the season), men were asked to sign player contracts, similar to what you would see when famous football players sign onto major football clubs. Each group session was called 'match day', where men in the group were encouraged to 'tackle' mental health challenges within their life. Player positions on the soccer field were used to highlight some of the challenge's men may experience when addressing mental health issues. For example, the 'midfielder', who was described as able to 'link well with others', 'be hard working' and 'be flexible'. And the goalkeeper, who was described as 'brave', and 'able to see the big picture'. Each of these football metaphors was helpful in stimulating and facilitating conversations about mental health topics within the group (Pringle & Sayers, 2014).

Following completion of the programme men were interviewed from the group and asked to comment on their experiences of participating in the 6-week programme. Findings

indicated as the intervention progressed, men began to feel more comfortable talking about mental health issues and displaying vulnerability among other men (Pringle et al., 2014). This finding contradicts literature which suggests men are less likely to display emotional vulnerability amongst other men (O'Neil, 2008). It is possible, with time and within a familiar environment, men develop greater trust amongst other men to discuss personal issues (Golding, 2011). Results also indicated men from the programme found the service accessible, as can be reflected in one participant's comment – "It's good because it's a 'blokey' thing, and it's a bridge that you can come over" (Pringle et al., 2014, p. 237). It is possible by pairing mental health interventions with familiar topics, men experience less stigma about talking about personal topics (Friedrich & Mason, 2017; O'Brien, 2005). Results also indicated men felt the programme was too short, and that it would have been useful to have more sessions. This finding is positive because it demonstrates men were engaged in the support service and were eager to keep learning. Following the completion of the programme, men within the programme developed the supporters club. On a weekly basis men from the group meet at the stadium to discuss football and challenges they have experienced throughout the week. The supporters club is also used as a platform for nurses and mental health workers to monitor the progress of these men (Pringle et al., 2014). Since the development of 'It's a Goal!' it has been implemented across 16 football clubs within the United Kingdom. The programme has also been adapted for other sports, such as Rugby Union (Witty, 2011).

Men's Sheds

Men's sheds have shown to be effective in targeting men's mental and physical health needs (Golding et al., 2007). Men's sheds are defined as an environment where men come to together in one community, share skills, learn about different health topics, and work on practical tasks individually or as a group (Wilson & Cordier, 2013). Men's sheds first

originated in Australia in 1980 in an effort to create more avenues to target men's mental and physical health needs. Currently it is estimated there are over 2000 sheds operating worldwide throughout Scotland, England, New Zealand, Greece, United States, and Canada (Kelly et al., 2019).

Culph and colleagues (2015) conducted one of few studies exploring how men's sheds helped men deal with depression. Participants included 12 men, with mild to moderate self-reported symptoms of depression. The Becks Depression Inventory -II (BDI-ll; Beck et al., 1988) and semi-structured interviews were used to assess for depression. Data from the BDI-ll indicated men had minor to moderate self-reported symptoms of depression. Results of the interviews indicated men's sheds provided a platform for men to discuss issues related to depression (Culph et al., 2015). As one participant reflected - "you ask how things are going and then it's surprising how they open up" (Culp et al., 2015, p. 311). These findings highlight how men's sheds create an environment where men feel comfortable sharing personal experiences. Although results from the interviews indicate that men's sheds provide a friendly environment where men can have informal conversations about mental health topics and access support. Post intervention measures of depression were not assessed; therefore no inferences can be made on the efficacy of men's sheds to reduce depressive symptoms among men. Further research applying a randomised controlled study design which includes pre and post-test measures would provide greater clarity on the efficacy of men's sheds to reduce and/or treat symptoms of depression.

Mates in Construction

Mates in Construction (MIC) is a suicide prevention initiative currently being implemented within the Australian and New Zealand construction industry. The programme aims to improve help-seeking behaviour among construction workers by providing psychoeducation on depression and anxiety, education on different help-seeking sources

available, raising awareness of suicide, providing platforms for workers to seek help, and training workers to facilitate help-seeking on worksites. The programme is also supported through a crisis helpline, case management, and online counselling services (Gullestrup et al., 2011).

MIC provides workers with the skills and knowledge to deal with mental health issues. Training for MIC falls into four categories. First, general awareness training, which is delivered to workers on medium to large work sites. The training is delivered by two trainers to between 50 and 300 workers using a power-point presentation and takes approximately one-hour for the training to be delivered. This training involves psychoeducation on mental health and practical strategies for dealing with mental distress. Workers are provided with the knowledge and skills to identify and support other workers that are struggling with mental health issues. Second MATES awareness training which has the same content as general awareness training but is delivered informally on smaller worksites with approximately 20 workers, with the content delivered by a trainer during work meetings (takes approximately 20 minutes), not using audio or visual technology. Third, connector training, which involves equipping volunteers on the worksite with the skills and knowledge to identify workers in need of mental health support. This could involve a connector worker making a referral to a MIC case manager, who then provides information to the individual to access services within the industry and/or community. Fourth, assist training involves providing workers with the skills and knowledge to respond to someone who might be experiencing a mental health crisis on the worksite. Assist workers also play a key role in facilitating help-seeking among other men on the worksite (Martin et al., 2016).

Ross et al. (2020) compared the effectiveness of general awareness training (longer duration of workshops with technology) and MATES awareness training (shorter duration of workshop with no technology). Using a before, after, and follow up (between three and six

months) research design, participants completed a six-item suicide awareness measure, with items assessing attitudes towards seeking help, strategies for helping other workers to seek help, and mental health literacy. For the general awareness training group, 2260 workers completed the pre-intervention measure, 2241 completed post-intervention, and 189 workers completed the follow up survey. For the MATES awareness training group, 717 workers completed the pre-intervention measure, 700 completed post-intervention, and 56 completed follow up survey. Findings indicated that there was no significant effect for intervention type. Results indicated that five out of the six items measuring suicide awareness showed significant positive effects post intervention (following the delivery of the workshop). In regard to follow up (three to six months), only one item on the suicide awareness measure was significant, which was an item assessing knowledge and skills to connect a work colleague to mental health support. Although findings from the study indicated that there were improvements post-intervention, the stability of these findings are questionable, given only one item of the measure showed improvement following a three to six-month follow-up. Furthermore, because of the high attrition rates within both groups the reliability of the findings is limited.

Martin et al. (2016) conducted a five-year evaluation of MIC within Queensland, Australia. The authors compared suicide rates of the general male population of Queensland in 2003 to 2007 (before MIC was implemented) to those in 2008 to 2012 (after MIC was implemented). Results indicated there was a reduction in suicide among construction workers; however, the change was not statistically significant (Martin et al., 2016). The authors explain that demonstrating the efficacy of the programme on overall suicide rates for the construction industry is challenging, and ongoing evaluation will be necessary as the programme is more broadly implemented. It is also important to highlight that suicide rates

change over time for a wide variety of reasons (e.g., downturn in economy) and isolating the effects of a single intervention on Queensland suicide rates would be a very difficult task.

One of the limitations of MIC is that it fails to target the mental health needs of the residential sector. MIC is designed for medium to large scale construction companies. However, within the New Zealand construction industry, a large proportion of the sector is comprised of companies that employ between one and nine workers (MBIE, 2018). For these companies, the work environment is constantly changing from contract to contract. This can create challenges for large mental health interventions such as MIC due to the high turnover of workers. Although efforts are currently underway to adapt the MIC programme to be delivered to smaller companies within the residential sector. The implementation of MIC within the New Zealand construction industry will not provide a complete solution for the high suicide rates. Suicide, mental health, and help-seeking are all very complex issues and will require a multidimensional approach (Bryson & Duncan, 2018; Yip, 2011).

In summary, opportunities within the community exist in alternative arenas for targeting men's vulnerability to mental distress and suicide within the New Zealand construction industry. Yet the majority of mental health services available for men within the construction industry are based on the traditional face to face therapeutic model. One of the central themes explored within this chapter was shoulder to shoulder interventions for men. It was highlighted to the reader that language and context are key 'ingredients' when designing and implementing mental health interventions for men (Brook, 2010; Misan & Haren, 2008). In regard to the quality of research, the design and implementation of shoulder to shoulder interventions is still within its infancy, with further research required to better understand the efficacy of shoulder to shoulder interventions to reduce mental health conditions such as depression and anxiety. The chapter explored the feasibility and implications of implementing the MIC suicide prevention initiative within the New Zealand construction

industry. Although MIC has demonstrated some positive results further research is required to assess the efficacy of MIC to target mental health conditions and improve attitudes towards help-seeking.

Chapter Five: The Current Study

Objective One

There are major difficulties with mental health and suicide within the New Zealand construction industry; a salient feature of this industry is that it is male-dominated, and men face particular challenges when seeking help for mental health issues. Yet little is known about men's help-seeking attitudes and behaviours within the New Zealand construction industry. The broad research question the present study sought to answer was: What factors are associated with enhanced or decreased help-seeking behaviour among male construction workers in New Zealand? In the service of answering this broad research question, the study had three objectives and 14 hypotheses, each of which are described below.

The first objective of the study was to provide a snapshot of men's mental health within the New Zealand construction industry. This involved collecting information on masculine gender roles, psychological wellbeing, attitudes towards help-seeking, previous help-seeking experiences, perceived stigma, and barriers towards seeking psychological treatment. Open-ended questions were added to gather information on perceptions of stress, barriers to accessing support within the work environment, and different ways that men could help other men access support.

- Hypothesis one: It is hypothesised, gender role conflict will be significantly negatively related to general help-seeking intentions.
- Hypothesis two: It is hypothesised attitudes towards psychological help-seeking will partially mediate the relationship between gender role conflict (predictor variable) and general help-seeking intentions. Specifically, men with higher levels of gender role conflict, will more likely hold negative attitudes towards psychological help-seeking, and be less willing to seek help.

- Hypothesis three: It is hypothesised there will be a significant negative relationship between perceived stigma and help-seeking intentions.
- Hypothesis four: It is hypothesised there will be a significant negative relationship between barriers to treatment and help-seeking intentions.

Objective Two

The second objective of the study was to better understand some of the conditions when men are more likely to seek help for mental health issues. The TPB was used as a guiding framework to measure and understand individual and social factors associated with help-seeking behaviour.

- Hypothesis five: Perceived stigma, barriers to psychological care, attitudes towards psychological help-seeking and previous positive experiences with mental health services, will each be a significant predictor of general help-seeking intentions within the TPB model.

Objective Three

Consistently research shows adherence to traditional masculine gender roles is associated with negative attitudes, stigma, and decreased willingness to engage in traditional mental services, such as face to face counselling (e.g., Addis et al., 2010; Robertson & Fitzgerald, 1992; Russell et al., 2004). Despite some men's reluctance to engage in these services few studies have explored how service can be adapted to engage men into some form of mental health support. The present study filled this gap within the literature by exploring men's perceptions of seeking help from different types of help-seeking sources.

The present study was also interested in how we can improve men's ability to help other men seek help for mental health issues. Questions within the study were designed to explore men's perceptions of recommending different types of help-seeking services to a

work colleague. Men were also asked about different approaches to encourage a colleague to seek help for mental health issues.

- Hypothesis six: It is hypothesised there will be a significant positive relationship between gender role conflict and preference for alternative help-seeking sources.
- Hypothesis seven: It is hypothesised there will be a significant negative relationship between gender role conflict and men's preference for traditional help-seeking sources.
- Hypothesis eight: It is hypothesised there will be a significant positive relationship between gender role conflict and preference for recommending alternative help-seeking sources to a work-colleague.
- Hypothesis nine: It is hypothesised there will be a significant negative relationship between gender role conflict and preference for recommending traditional help-seeking sources to a work-colleague.
- Hypothesis ten: It is hypothesised there will be a significant positive relationship between attitudes towards seeking psychological help and preference for alternative help-seeking sources.
- Hypothesis eleven: It is hypothesised there will be a significant positive relationship between attitudes towards seeking psychological help and men's preference for traditional help-seeking sources.
- Hypothesis twelve: It is hypothesised there will be a significant positive relationship between attitudes towards seeking psychological help and preference for recommending alternative help-seeking sources to a work-colleague.
- Hypothesis thirteen: It is hypothesised there will be a significant positive relationship between attitudes towards seeking psychological help and preference for recommending traditional help-seeking sources to a work-colleague.

- Hypothesis fourteen: is an overarching model that combines many of the statements made in hypotheses 1-7. Whereas hypotheses 1-7 will be investigated using analyses that treat the variables as observed, this model will be tested using structural equation modelling with latent variables, thereby accounting for the effects of measurement error.

Chapter Six: Method

Design

Within the present study a cross-sectional research design was used to explore individual and social factors associated with help-seeking among men within the New Zealand construction industry. Information was also collected through opened ended questions to elicit perceptions of stress, barriers to accessing help, and ways to encourage other men to seek help. This type of research design was used to contribute to a better understanding of men's help-seeking behaviour within the construction industry.

Participants

Participants were eligible to take part within the study if they were male, aged between 18 and 65 years, and worked within the New Zealand construction industry. These inclusion criteria in turn define the sampling frame. The rationale for setting the inclusion criteria at 18 to 65 years was because the study was interested in making inferences about the core part of the construction workforce. Participants were excluded from the study if they failed to identify their gender or did not identify as male, were below the age of 18 or over the age of 65 years, failed to complete at least 75% of items from the main study measures including the Gender Role Conflict Scale, Short Form (GRCS-SF-18 items; O'Neil et al., 2011), Attitudes Towards Seeking Professional Psychological Help Scale, Short Form (ATSPPHS -SF-10 Items; Fischer & Farina, 1995), General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005), and the Perceived Stigma and Barriers to Care for Psychological Problems scale (PSBCPP; Britt et al., 2000). Participants were removed from the study if they were identified by Qualtrics as either "spam" responses (i.e., duplicate responses from the same person), test responses, or preview responses. Participants were also removed from the study if their identified job role did not come under the definition of construction worker.

Within the present study construction worker is defined according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO). The term construction worker can be used to cover a wide range of roles within the construction industry. It can refer to someone who completes a variety of construction tasks on a construction project. There are also many other roles in construction that do not work directly on the construction site. Under the ANZSCO definition there are a wide range of job roles which come under the umbrella term construction worker, including builder, roofer, engineer, and architect (for a full definition, and overview of job roles used within the study view appendix A).

In total 801 participants attempted the survey. However, using the exclusion criteria described above 16 participants were removed from the main analysis because they identified as female, 9 participants were removed due to their job role not falling under the ANZSCO definition, and 198 were removed due to not completing at least 75% of the main study measures. The final sample size was 578.

Demographic information collected within the study included age, gender, ethnicity, job title, sector of industry, and work-location. Participants were 578 male construction workers aged between 20 and 65 years old. The average age of participants was 42.50 years. This is slightly higher than the 2018 census data, which indicated the average age of construction workers was 38 years (Statista, 2018). Within the present study the range of age within the sample was between 20 and 65 years. As can be seen from Table 1, 30 to 34 years were the most common age group (14.9%), followed closely by 50 to 54 years (14%) and 35 to 39 years (13%).

Table 1

Age of Sample Displayed in Five Year Age Group Bands

Measure	*N*	%
20 – 24 years	24	4.2
25 – 29 years	63	10.9
30 – 34 years	86	14.9
35 – 39 years	75	13
40 – 44 years	67	11.6
45 – 49 years	72	12.4
50 – 54 years	81	14
55 – 59 years	58	10
60 – 65 years	52	9

The majority of the participants identified their ethnicity as New Zealand European/ Pākehā (91.72%), with the others identifying as Māori (4.2%), Asian (1.9%), Pacifica (1.6%) and Middle Eastern (0.62%).

Type of sector

From the sample, 45% worked within the residential sector. The remainder of the sample worked within, commercial (27.3%), civil engineering and roads (9.2%), industrial (8%), and across all sectors (8%). Other (2.5%) included health and safety, transport, and heritage.

Job roles

Some of the most common job descriptions were builders (30.1%), with construction manager (20.10%), and foreman (10.9%) also reported as common roles within the sample. The rest of the job roles can be viewed in Table 2. Results indicated that 5.4 % of the sample were apprentices. Findings indicated that 78.5% of the sample currently supervise or manage workers.

Table 2

Breakdown of Job Roles within Sample

Measure	*N*	%
Architect	25	4.32
Builder	174	30.10
Carpenter	34	5.88
Engineer	35	6.05
Machine Operator/Driver	14	2.42
Electrician	28	4.84
Health and Safety	22	3.80
Labourer	8	1.40
Plumber	9	1.55
Surveyor	31	5.36
Roofer	5	0.86
Construction Manager	116	20.10
Foreman	63	10.90
Other	14	2.42

*Note. "*Other" was comprised of jobs which had less than 5 men. Job roles within other included welder, plasterer, painter, and metal worker.

Work location

The majority of the sample worked within the North Island (64.2%). These men worked in Auckland (27%), Wellington (17%), Waikato (8.3%), Bay of Plenty (3.4%), Taranaki (3.6%), Manawatu and Whanganui (2.4%), Hawkes Bay (1.8%), and Gisborne (0.7%). Just over a third of the sample worked within the South Island (32.3%). These men worked in Canterbury (20%), Otago (7.1%), Nelson-Marlborough (3.4%), Southland (1.6 %), and West Coast (0.2%). Results indicated that 3.5% of the sample worked across New Zealand.

Measures

Psychological Wellbeing

The Patient Health Questionnaire (PHQ-9; Spitzer et al., 1999) was used in the present study to measure psychological wellbeing. The PHQ-9 was selected for the study

because it provides a short and reliable measure of depression. The PHQ-9 consists of 9 items which assess the presence of depressive symptoms within a two-week period. The items on the PHQ-9 coincide with the major depressive disorder criteria based on the Diagnostic and Statistical Manual Fifth Edition (DSM-V; American Psychiatric Association, 2013). Scores on the PHQ-9 range from 0 (absence of depressive symptoms) through to 27 (severe depressive symptoms). The PHQ-9 score was calculated as the sum of responses to all items on the questionnaire (1 through to 9). There are no reverse coded items. Higher total scores on the scale indicate more depressive symptoms. On the questionnaire participants were asked: "over the last 2 weeks, how often have you been bothered by any of the following problems?" Responses are based on a 4- point Likert scale (0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day). Example items include "little interest or pleasure in doing things", "feeling down, depressed, or hopeless", and "trouble falling or staying asleep, or sleeping too much". To review the PHQ-9 please see appendix K.

The reliability and validity of the PHQ-9 has been explored on medical and general populations. Within a primary care setting Kroenke et al. (2001) explored the criterion validity of the PHQ-9 by administering 580 structured interviews and administering the PHQ-9. Results indicated individuals who scored high on the PHQ-9 (> 10) were between 7 to 13 times more likely to be diagnosed with major depressive disorder by the mental health professional using a semi-structured interview. Martin et al. (2006) assessed the validity of the PHQ-9 on a sample representative of the general population (N = 2066, 14-93 years). The authors reported the PHQ-9 demonstrated good construct validity, with the PHQ-9 identifying individuals with clinical depression, as well as individuals with subthreshold depressive symptoms. Results of the study also indicated the PHQ-9 demonstrated good convergent validity, producing similar results to the Beck's Depression Inventory (BDI; Short

version; Beck et al., 1961). In the present study, the Cronbach's alpha for responses on the PHQ was .91.

Masculine Gender Roles

The present study used the Gender Role Conflict Scale, Short Form (GRCS-SF-16 items; O'Neil et al., 2011) to measure masculine gender roles. The original GRCS consists of 37 items. Research has indicated scores from the GRCS-SF correlate highly with the original GRCS-37-item (r =. 90 to .96). Permission was sought to use the GRCS-SF from Dr Jim O'Neil from the University of Connecticut, United States of America. See appendix F to review permission letter.

Four factors are captured within the GRCS-SF which include (1) success, power, and competition, (2) restricted affectionate behaviours between men, (3) restricted emotionality, (4) conflict between work and family life. Factor analysis research has supported the four-factor structure of the GRCS-SF (Hammer et al., 2017). Men report the degree to which they agree or disagree with each statement on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Higher scores on the scale indicate stronger adherence to traditional masculine gender roles. In the present study, the GRCS-SF was calculated as the sum of responses to all items on the questionnaire (1 through to 16). There are no reverse coded items on the GRCS-SF. To review items on the GRCS-SF please review appendix H.

The GRCS-SF has been applied in over 230 different studies which have explored the negative consequences of gender role conflict on men's wellbeing (O'Neil, 2008). The GRCS-SF has shown good internal consistency, with Cronbach alphas of between .77 and .80 (Levant et al., 2015). The GRCS has demonstrated cultural utility, utilised within a number of countries including Sweden, Australia, Japan, Germany, Portugal, and Indonesia (O'Neil, 2008). The GRCS-SF received a Cronbach's alpha coefficient of .88 in the present study.

Measures Applied to Assess the TPB Model

The TPB model was used as a guiding framework to explore individual and social factors which could either facilitate or inhibit men's decision to seek help for mental health issues. Underpinning the TPB is the assumption that human behaviour is goal directed and influenced by individual and social cognitive factors (Ajzen, 2011). Within the TPB the act of seeking help for mental health issues is predicted by the strength of an individual's intention to seek help. Intentions are influenced by three key factors. First, an individual's attitude towards seeking help via psychological services. Second, the subjective norms associated with help-seeking, specifically perceptions of whether people closest to the individual will approve or disapprove if they seek help for mental health issues. Third, perceived behavioural control, which refers to the perceived ease or difficulty of accessing mental health services (Ajzen, 1991). The following section will discuss how each of the TPB constructs was measured within the present study.

Help-Seeking Intentions

In the present study the General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005) was used to measure intentions. Research has indicated the GHSQ has good predictive validity and is associated with retrospective and prospective help-seeking behaviour (Ciarrochi et al., 2002; Deane et al., 2001). Wilson et al. (2001) explored the test retest reliability of the GHSQ for suicidal ideation and emotional problems. For suicidal ideation, the test retest reliability was 0.88, over a 3-week period, with a Cronbach's alpha, 0.83. For emotional problems, the test retest reliability was 0.86 over a 3-week period, with a Cronbach's alpha, 0.86 (Wilson et al., 2001). In the present study the GHSQ received a Cronbach's apla coefficient of .88.

The GHSQ provides a framework which can be altered depending on the purpose of the research (Wilson et al., 2005). In the present study the GHSQ was altered to measure

men's intentions of recommending different types of help-seeking sources to a work colleague. The GHSQ was also used to measure men's intentions of seeking help from different help-seeking sources. On the GHSQ participants were asked two questions:

1. "If you were having mental health issues (for example, feeling depressed, very low, anxious, and/or having suicidal thoughts) how likely is it that you would seek help from the following help-seeking sources?"
2. "What is the likelihood of you encouraging a work-colleague to seek help from the below help-seeking sources?"

Help-seeking sources were divided into alternative, traditional, and other help-seeking sources. Alternative help-seeking sources included sports-based mental health interventions, workshops, and support groups. Sports-based mental health interventions were described as: "while playing sport (e.g., rugby, boxing, tennis etc.) or during physical exercise (e.g., group fitness classes) tips are provided to men on how to cope with mental health issues. Tips could include ways to change negative thinking, relaxation exercises, and tips to make positive changes in life". Mental health workshops were described as: "provide men with the skills and knowledge to cope with some of life's challenges. Workshop topics could include managing financial stress, goal setting, tips for dealing with challenging relationships, and tips to maintain good overall health". Support groups were described as: "provide men with the knowledge and skills to deal with mental health issues, such as depression, anxiety, and alcohol/drug addiction. Support groups also provide an opportunity for men to share their story and help other men having similar challenges with their mental health".

Traditional help-seeking sources included employment assistant counselling, psychological services, and consultation with a general physician. Employment assistant counselling were described as: "provide support for a wide range of issues including

drug/alcohol addiction, career advice, and strategies to deal with work stress. Counsellors provide talking therapies, which can help you work out how to deal with negative thoughts and challenges and make positive changes in your life". Psychological services were described as: "psychologists provide talking therapies, which can help you work out how to deal with negative thoughts and challenges and make positive changes in your life. General Practitioner (GP) was described as: "GPs provide general advice on managing and seeking support for mental health issues. This includes making a referral to mental health services, such as seeing a counsellor or psychologist. GPs can also prescribe medication for mental health issues".

Other help-seeking sources included mental health apps, and seeking help from a church leader, Rabbi, minister, elder, and Kaumātua. Note these help-seeking sources were not included within the main analyses. To review the full definition of alternative, traditional and other help-seeking sources please refer to appendix H.

Using a 0 to 3-point Likert scale participants rated (1) likelihood of seeking help from the 8 help-seeking sources discussed previously (2) likelihood of recommending help from the 8 help-seeking sources. There are no reverse coded items on the GHSQ. Higher scores indicate higher intentions to seek help. The GHSQ is free for public access. Five scores were generated from the GHSQ. For each of the scores generated, higher scores indicated either higher intentions of seeking help or higher intentions to recommend help.

1. General help-seeking intentions score. This score captured participants' intentions to seek help from all 8 help-seeking sources listed in the study. The general help-seeking intentions score was calculated as the sum of responses from items: EAP counselling, psychologist, general physician, mental health apps, general physician, workshops, support groups and sports-based mental health interventions.

2. Self- alternative help-seeking score. This score captured participants' intention to seek help from alternative help-seeking sources. This score was calculated as the sum of responses from items: workshops, sports based mental health interventions, and support groups.

3. Self-traditional help-seeking score. This score captured participants' intentions to seek help from traditional help-seeking sources. This score was calculated as the sum of response from items: EAP counselling, psychology, and general physician.

4. Recommend-alternative help-seeking score. This score captured participants' intentions to recommend alternative help-seeking sources to work-colleague. This score was calculated as the sum of responses from items: workshops, sports based mental health interventions, and support groups

5. Recommend- traditional help-seeking score. This score captured participants' intention to recommend traditional help-seeking sources to a work colleague. This score was calculated as the sum of responses from items: EAP counselling, psychology, and general physician.

Attitudes

In the present study, attitude was defined as a positive or negative belief about seeking help from a mental health professional (counsellor and/or psychological; Fischer & Farina, 1995). The Attitudes Towards Seeking Professional Psychological Help Scale, Short Form (ATSPPH -SF-10 Items; Fischer & Farina, 1995) was used to measure attitudes within the present study. The ATSPPH -SF was adapted from the original Attitudes Towards Seek Professional Psychological Help Scale (ATSPPHS-29 items; Fischer & Farina, 1995). The ATSPPH-SF is comprised of four factors which include stigma tolerance, recognition for the need for help, confidence in mental health professionals, and interpersonal openness. Factor

analysis research has supported the four-factor structure of the ATSPPH-SF (Fischer & Farina, 1995). High scores on the scale have shown to be related to recent use of mental health services, intentions to seek help, and decreased stigma regarding seeking help for mental health issues (Constantine, 2002; Komiya et al., 2000; Vogel et al., 2005). The measure has demonstrated good to excellent psychometric properties, with internal consistencies ranging from .82 to .84, and test retest reliability of between .80 to .87 following a one-month delay (Constantine et al., 2000). The ATSPPH-SF received a Cronbach's alpha coefficient of .83 in the present study. The ATSPPH-SF is free for public access. To review items on the ATSPPH-SF please see appendix I.

Participants rate their responses based on a 0 to 3-point Likert scale (0 = disagree, 1 = partly disagree, 2 = partly agree, 3 = agree). Items 2, 4, 8, 9, and 10 are reversed coded. After recoding the reversed items, responses from the ATSPPH-SF were calculated as the sum of responses to all question on the questionnaire (1 through to 10).

Subjective Norms

Subjective norms refer to an individual's perception of what other people important to them (e.g., friends, family, and work colleagues) will think if they perform a particular behaviour (Hankins et al., 2000). In the present study subjective norms were assessed by measuring the perceived stigma associated with seeking help for mental health issues. Perceived stigma refers to an individual's fear that other people within one's social group would view the act of seeking help for mental health issues as a sign of weakness (Vogel et al., 2006). Similar to subjective norms, in perceived stigma, the source of negative evaluation is hypothesised to stem from an individual's perception of what other important people (family, friends, and co-workers) might think or say if they seek help for mental health issues (Corrigan, 2004). Within male dominated industries, such as the army, perceived stigma has

been linked to a decreased willingness to seek help and avoidance of conversational topics related to mental health (Greene-Shortridge et al., 2007).

The Perceived Stigma and Barriers to Care for Psychological Problems scale (PSBCPP; Britt et al., 2000) was used to measure subjective norms and perceived behavioural control. The PSBCPP is an 11-item measure which assesses perceived stigma and barriers towards seeking mental health support. Before rating responses, participants are asked: "using the scale provided, rate each of the possible concerns that might impact your decision to seek treatment for a psychological problem (e.g., a stress or emotional problem such as depression or anxiety attacks)". Example items measuring perceived stigma include, "it would be too embarrassing", "it would harm my career", and "members on the worksite might have less confidence in me". To review the stigma component on the PSBCPP please see appendix G.

Perceived stigma was calculated by summing questions 1 through to 6 on the PSBCPP. There are no negatively worded items. Participants respond on a 5-Point Likert scale (1 = strongly disagree, 5 = strongly agree), with higher scores on the measure indicating greater perceived stigma and barriers to treatment. Within the present study the perceived stigma (items 1 to 6) component of the PSBCPP received a Cronbach's aphla coefficient of .85.

Perceived Behaviour Control

Perceived behaviour control is the most recent addition to the TPB. Perceived behaviour control refers to an individual's perception of the ease or difficulty of performing the behaviour of interest (Ajzen, 2011). Perceived behavioural control consists of two components. First, self-efficacy, which refers to an individual's confidence that they can achieve a particular goal. Within the context of help-seeking, self-efficacy captures the level

of difficulty required to seek help and whether an individual will persevere with the behaviour when faced with obstacles (Bandura, 1999; Conner, 2005). Within the present study because of constraints with the survey length, self-efficacy was not assessed. Second, external barriers, which refers to structural barriers that could prevent an individual accessing support. This can include the cost, availability, and accessibility of mental health services. Among all variables assessed within the TPB model, perceived behavioural control has shown to be the strongest predictor of help-seeking intentions and behaviour (Ajzen, 2011).

In the present study, perceived behaviour control was assessed using the Perceived Stigma and Barriers to Care for Psychological Problems (PSBCPP; Britt, 2000). Example items measuring barriers to treatment include: "I don't know where to get help", "mental health care costs too much money", and "there would be difficulty getting time off work for treatment". Factor analysis research supports a two-factor structure on the PSBCPP (Britt et al., 2008; Britt, 2000). The PSBCPP has good to excellent internal consistency with Cronbach's alphas, of .91 (stigma) and .74 (barriers to treatment; Britt, 2000; Pietrzak et al., 2009; Hoge et al., 2004; Sharp et al., 2015). Within the present study the structural barriers to treatment (items 7 to 11) component of the PSBCPP received a Cronbach's alpha coefficient of .83. Structural barriers to treatment was calculated as the sum of responses from items 7 to 11 on the PSBCPP. There are no reverse coded items. Higher scores on these items represented increased barriers towards treatment.

Previous Help-Seeking Experiences

Previous help-seeking was assessed by asking participants the following question "have you sought help from a mental health professional in the past?" If participants responded yes to this question, they were asked to the identify the type of service which they sought help from. Options included (psychiatrist, psychologist, counsellor, physician, and other). Participants were then asked to rate the helpfulness of their experience using a 10-

point rating scale (1 = not helpful, 10 = very helpful). Participant's helpfulness score was used as the total score within the present study. Higher scores indicated previous positive experience of working with a mental health professional.

Availability of Mental Health Services

Participants were asked 'do you think there are enough mental health services available within the construction industry? This was a fixed-choice quantitative item, with potential responses including yes, no, and not sure.

Procedure

The questionnaire was designed using Qualtrics survey development software. On the 01/08/2018 the first survey was developed and piloted on 10 construction workers who were acquaintances of the researcher. Workers were male, aged between 25 to 40 years old, and worked in a range of roles within the construction industry, including plumbing, engineering, building, and labouring job roles. The researcher spent time with each participant as they completed the survey. Participants within the piloting study were asked about the readability of the questions, the length of the survey, the content of the survey, and the formatting of the survey. Participant feedback from the piloting session included the observation that questions did not make sense, in particular on the general help-seeking questionnaire; furthermore, some of the participants were uncertain what the term psychological distress meant. Participants reported the survey was too long, and that the word font used within the survey was too small. Participants also reported that the format of the survey was confusing when completing the survey on a mobile phone. Based on the feedback from piloting the final survey was developed on the 01/04/2018. On average the final survey took approximately 13 minutes to complete. On the 01/04/2019 data collection commenced, and the survey was left open for four months. To review the full survey please view appendix B.

Ethics

The study was conducted in accordance with the Massey University Human Ethics Committee guidelines. On the 06/11/2018 the project received full ethical approval from the Massey University ethics committee. Please see appendix C for approval letter.

Participants were recruited from across New Zealand to take part in the study. Information about the study was promoted using construction health and safety organisations including Site-Safe New Zealand, Civil Engineering New Zealand, Building Construction Training Organisation, and Building Research Association New Zealand. Several other small construction companies also promoted the study. Construction companies were sent an email which contained information about participating within the study. This included information on the confidential and voluntary nature of the study, how data would be managed, and that participants could withdrawal from the study at any point. Compensation in the form of the opportunity to win one of $40.00 Mitre-10 (hardware store) vouchers was offered to participants. To review the email cover sheet please see appendix D.

Cultural Consultation

Cultural supervision was sought by Massey University Kaimātai Hinengaro Matua (Māori Clinical Psychologist and Senior Lecturer). Dr Simon Bennett. Within the meeting it was discussed that Māori are over-represented in the construction industry, representing approximately 20% of the construction workforce. The research design was discussed with Dr Simon Bennett, specifically with a focus on including relevant help-seeking sources for Māori men, which included accessing help from a Kaumātua or church leader. To review cultural consultation letter please refer to Appendix G.

Data Analysis

Pre-Registration

Data was analysed using the Statistical Package of Social Sciences (SPSS) for Windows, Version 26.0. (SPSS Inc., 2008). On the 01/03/2019 the researcher and supervisory team pre-registered the study using the Open Science Framework (OSF) online platform. The OSF provides a platform for researchers to collaborate and conduct open research. One of the central goals of the OSF is to work towards the reproducibility of research. This involved pre-registering all hypotheses, identifying which statistical methods would be used to explore hypotheses, stating the level of significance required to confirm the research hypotheses, and outlining how missing data, outliers, and incomplete questionnaires would be managed. To review the OSF documents please review appendix E or visit https://osf.io/7jkrp.

Pearson's correlation was the primary analysis applied for hypothesis 1, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 13. As an alternative, and to check the robustness of findings, Spearman's rho was also used to test the above hypotheses. For each of these hypotheses' correlations were considered significant at $p < 0.05$ (2-tailed). To estimate the power required for a correlation analysis, the researcher conducted a prior power analysis using G* Power (Faul et al., 2014). Pearson's correlation was selected because it was the most used analysis in the study. To detect a correlation of $r = 0.2$ (small to medium), and power level of 0.90, the study required a sample size of $N = 259$. This was achieved with the final sample size $N = 578$.

Simple linear regression was the main analysis for hypothesis 2. Multiple linear regression was used to test hypothesis 5, with intentions towards help-seeking the dependent variable. Hypothesis 14 was an overarching model that combined many of the statements from hypotheses one to seven. Whereas hypotheses one to seven were investigated using analyses that treated the variables as observed, this model was tested using structural equation modelling with latent variables, thereby accounting for measurement error. Structural

equation modelling (SEM) was used to assess an adapted version of the TPB model. SEM has been applied in several other studies which have tested the utility of the TPB to predict help-seeking intentions and behaviour for mental health issues (e.g., Chatzisarantis & Hagger, 2005; Rhodes et al., 2002). SEM was used within the present study to test the direct and indirect effects of variables within the study, whilst simultaneously accounting for measurement error. This addresses a limitation of regression models estimated via ordinary least squares, which assume that predictor variables are measured without error; where this assumption is breached, biased estimates can result (see Westfall & Yarkoni, 2016). One of the strengths of SEM is it allows researchers to explore how factors relate to each other within a model and can also determine the validity of a hypothesised model (Kline, 2005). SEM also provides information on the reliability of the measures, in particular how well each item loaded to each factor within the study.

Within the preregistration document the following fit statistics and criteria were specified for the structural equation model. First, if the *p* value for the chi-square test is less than 0.05, the null hypothesis that the model has perfect fit in the population will be rejected. Second, if the *p* value for the root mean squared test is less than 0.06, this will be taken as evidence of good fit (Hu & Bentler, 1999). Third, if the p value from the standardised root mean residual is less than 0.08, this will be taken as evidence of good fit for the model (Hu & Bentler, 1999).

Data Processing

Single expectation-maximisation imputation was used within SPSS for all missing responses. All items from the main variable within the study (GRCS-SF, ATSPPH-SF, GHSQ, and PSBCPP) were used within the imputation model. Participants who completed at least 75% of the items in the main study scales were included within the imputation model. Using the final sample of participants (*N* =578) frequency tables were used to identify the

number of missing values per measure. There were 7 missing responses on the GHSQ, 4 missing responses on the ATSPPH-SF, 22 missing responses from the PSBCPP, and 2 missing responses from the GRCS-SF.

When completing data screening it became obvious that one of the main variables would create challenges for hypothesis 5 and 14. From 578 participants, 259 participants reported they had previously worked with a mental health professional in the past. Therefore, there were 319 missing responses to this item. Because this variable provides a measure of actual behaviour, it was decided to not apply single expectation-maximisation imputation. Therefore, it was decided to run two multiple regression analyses and structural equation models. This approach was a deviation from the confirmatory plan outlined within the preregistration document. The first analyses were completed without using the previous experiences with mental health services variable (N = 578). The researcher then conducted the same analyses again which included the variable (N = 234).

Data Assumptions

Using SPSS, the assumptions of Pearson's correlation and multiple linear regression were assessed. The assumptions were tested on the main variables within the study which included: gender role conflict, attitudes towards psychological help-seeking, help-seeking intentions, perceived stigma, and barriers to treatment. Testing for skewness was tested on the main variables, scores fell within the recommended range of -1.0 and 1.0 (Kim, 2013). Testing for Kurtosis, scores from each main variable fell within the recommended range ± 1.96 (George & Mallery, 2010). To assesses linearity and additivity scatter plots were developed to visually examine the relationships between independent and dependent variables for each correlation. On visual inspection, scatter plots were roughly rectangular in distribution, and the relationship between variables appeared linear rather than curvilinear (Tabachnick & Fidell, 2007). In regard to predictor variables being measured without error, it

is important to highlight that this was not possible within the study because each variable was measured with some error, as implied by the Cronbach alpha values. However, the SEM analysis for hypothesis 14 accounted for measurement error.

To check the assumption of homoscedasticity, scatter plots were checked to ensure the residuals were distributed at roughly equal widths across the graph (Garson, 2008). Scatterplots of standardised predicted values (X) versus standardised residuals (Y) were developed for each regression model. On inspection, residuals appeared to be randomly scattered around the centre of the plot, rather than skewed to one side. Normal probability plots were developed, with residuals falling on the diagonal line (Pallant, 2007). Scatter plots were also developed, with plots shown to fall roughly within rectangular distribution, and plots appeared linear rather than curvilinear (Tabachnick & Fidell, 2007). To review scatter plots and normal probability plots please see appendix M. In exploring whether the main variables fell within the normal distribution the Shapiro-Wilk test was performed on the unstandardized and standardised residuals. Reliability estimates were calculated for each of the main measures within the study with Cronbach alphas ranging from .72 to .91.

Within the present study Maximum Likelihood (ML) was used within the SEM. One assumption of ML is that observed variables have a multivariate normal distribution within the population (Benson & Fleishman, 1994). However, within the present study this assumption was implausible because items within the study are measured on rating scales, which have a discrete set of response options (Benson & Fleishman, 1994). However, ML has shown to be relatively robust to breaches of this assumption (e.g. they cause little bias to estimate of factor loadings), especially within cases when sample sizes are greater than 400 (Anderson & Gerbing, 1984; Boomsma, 1983). Another assumption of ML is conditional independence of errors. This assumption was implicitly tested via the fit statistics reported above, since the fit statistics test the capacity of the model to explain the observed

relationships between variables. The fit indices will be discussed further within the results section.

Open Ended Questions

Open ended questions were included within the survey. Within the survey there was a free text box which participants could write their response. There was no limit on the amount of text for each response. The following questions were included within the survey:

1. What is your biggest source of stress at work?
2. What do you think are some of the barriers that prevent men from seeking help for mental health issues within the construction industry?
3. What do you think is the best way to encourage a co-worker to seek help for mental health issues?

Content Analysis

Open-ended questions were designed to supplement quantitative findings. Content analysis was used to systematically code and categorise text from the open-ended questions into meaningful smaller units which could be explored quantitatively (Mayring, 2004). Content analysis is a research tool which involves applying different strategies to organise and interpret text (Powers & Knapp, 2006). In general, there are two type of content analyses. First, conceptual analysis, where the focus is on identifying and categorizing concepts within a text, and quantifying the frequency of concepts (Sparkes, 2005). Second, relational analysis, where individual concepts within the text are thought to have no inherent meaning, rather meaning is derived from the exploring the relationships between concepts within the text (Elo & Kyngäs, 2008). The former type of content analysis was used within the present study because the focus was on exploring the existence and frequency of different concepts within the text (Sparkes, 2005).

The present study was guided by the work of Carley (1992) who has provided guidelines for conducting content analysis. Prior to data analysis categories were defined, the level of analysis was identified, and coding rules were developed. An inductive approach was used to develop and define categories within the qualitative dataset. There was a level of flexibility when developing categories, with categories emerging through repeated readings of the dataset. In regard to the level of analysis, sentences were the unit of analysis. Each person's response to an item could be divided into multiple sentences, each of which could be coded into different categories. The definition of each category was used to help distinguish between similar concepts. Definitions of each category also included a range of potential responses for each category. Concepts within each category were coded based on the frequency of times the response occurred within the dataset. If the same concept occurred more than once within a participant's response, the researcher coded this as a single occurrence. To review the definition of each category please review appendix L.

In regard to irrelevant information, if a concept failed to be identified within a category it was deemed irrelevant and not coded. This included response which had little relevance to the research question, or responses which were relevant but did not constitute the development of a category due to the infrequency of the response. Once the categories were defined coding commenced. Coding was done manually. The researcher read though the text multiple times and coded individual concepts using a numerical coding system. Because of time and funding constrains associated with completing a student project, the inter-rater reliability of the results was not assessed.

Chapter Seven: Results

Objective One

The first objective of the study was to provide an overview of men's mental health within the New Zealand construction industry. This involved collecting information on psychological wellbeing, previous help-seeking experiences, men's preferences of seeking help and recommending different help-seeking sources, perceived stigma, and barriers towards seeking psychological care.

Patient Health Questionnaire (PHQ-9; Spitzer et al., 1999)

The PHQ-9 was used to assess psychological wellbeing. Scores on the PHQ-9 range from 0 (absence of depressive symptoms) through to 27 (presence of severe depressive symptoms). Results indicated that 65.23% had scores between 0 and 4 (minimal depression), 30.62% had scores between 5 and 9 (mild depression), and 4.15% of the sample had scores between 15 and 19 (moderately severe depression). Mean and standard deviations on the PHQ-9 can be viewed below in Table 3.

Table 3

PHQ-9 Item Breakdown

PHQ	*M*	*SD*
Little interest of pleasure in doing things	0.61	0.83
Feeling down and hopeless	0.64	0.82
Difficulties with sleep	0.98	1.01
Tired or little energy	1.15	0.90
Poor appetite or overeating	0.73	0.95
Feeling guilty or let people down	0.64	0.87
Trouble concentrating	0.68	0.80
Feeling restless or agitated	0.82	0.86
Suicidal ideation	0.20	0.57
Total PHQ Score	6.54	5.82

Note. N=578. Responses are based on a 4- point Likert scale (0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day).

Previous Help-Seeking Behaviour

In terms of previous help-seeking behavior, results indicated that 42.9% of the sample had sought help from a mental health professional in the past. Of these, 34.7% sought help from a counsellor, 36% from a psychologist, 10.2% from a psychiatrist, 7.1% from a general practitioner, 5.1 % from all of the above, and 6.9% from other. In regard to participants who responded with other, responses included social worker, friend, family member, and church leader.

Enough Mental Health Services

Participants were asked 'do you think there are enough mental health services available within the construction industry?' This was a forced choice question, where participants could respond yes, no, or not sure. Findings indicated that 57.1% reported that there were not enough mental health services, 29.7% were unsure, and 13.2% reported that there were enough mental health services available to men within the construction industry.

Barriers to Treatment and Perceived Stigma

Mean scores were calculated for participant responses on the Perceived Stigma and Barriers to Care for Psychological Problems scale (PSBCPP; Britt et al., 2000). Scores for each item on the measure can range from 1 to 5. As can be seen from Table 3, mean scores for most items fell within the midpoint for both barriers to treatment and perceived stigma. Regarding barriers to treatment, item (11) - "mental health care cost too much money" had the highest mean (M = 3.25). The second highest mean was item (9) - "it is difficult to schedule an appointment" (M = 2.58), and item (10) - "it would be difficult to get time off work"(M = 2.58). In regards to perceived stigma, item (3) -"people would have less confidence in me" had the highest mean (M = 3.02) followed closely by item (6) - "I would

be seen by other men as weak" (*M* = 2.92) and item (4) - "my manager might treat me differently" (*M* = 2.91).

Table 4

Descriptive Statistics for the Perceived Stigma and Barriers to Psychological Care Scale

Item	*M*	*SD*
Perceived Stigma		
1.It would be too embarrassing	2.63	1.10
2.It would harm my career	2.31	1.10
3.People would have less confidence in me	3.02	1.14
4.My manager might treat me differently	2.91	1.20
5.My manager would blame me for the problem	2.31	1.03
6.I would be seen by other men as weak	2.92	1.10
Barriers to treatment		
7.I don't know where to get help	2.40	1.13
8.I don't have adequate transportation	1.48	0.75
9.It is difficult to schedule an appointment	2.58	1.12
10.It would be difficult to get time off work	2.52	1.24
11.Mental health care cost too much money	3.25	1.20

Note. N=578. Participants responded on a 1 to 5-point Likert scale, with higher scores representing increased stigma and barriers towards treatment.

Help-Seeking Source Preference

The present study explored men's intentions of seeking help from alternative, traditional, and other help-seeking sources. Scores on the General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005) can range between 0 and 3, with higher scores representing higher intentions to seek help. As can be seen in Table 4, the highest mean was for men's intentions to seek help from a GP (M = 1.74). Men's intentions to seek help were similar for psychological services (M = 1.58), EAP counselling (M =1.55), workshops (M = 1.55), and sports-based mental health interventions (M = 1.53).

Table 5

Descriptive Statistics of Men's Preference of Seeking Help

Help-Seeking Source	*M*	*SD*
Alternative help-seeking sources		
Sports based mental health intervention	1.53	0.84
Men's support groups	1.33	0.85
Workshop	1.55	0.86
Traditional help-seeking sources		
EAP counselling services	1.55	0.91
Psychological services	1.58	0.94
General Physician (GP)	1.74	0.80
Other		
Mental health apps	1.39	0.89
Minister/Rabbi/ Kaumātua	0.63	0.90

Note. N=578. Participants responded on a 0 to 3-point Likert scale, with higher scores representing higher intentions to seek help from help source.

Recommending Different Types of Support

The present study explored men's preferences for recommending different types of help-seeking sources to a work colleague. Using the GSHQ men rated their intentions of recommending alternative, traditional, and other help-seeking sources. For each help-seeking source, scores can range between 0 and 3, with higher scores representing higher intentions. As can be seen in Table 5, mean scores were similar across both traditional and alternative help-seeking sources. The highest mean was for men's intentions to recommend that a work-colleague seek help from their GP (M = 1.88), closely followed by EAP counselling services (M = 1.86), psychological services (M = 1.83), workshop (M = 1.80), and mental health apps (M = 1.80).

Table 6

Descriptive Statistics for Recommending Different Help-Seeking Sources

Help-Seeking Source	*M*	*SD*
Alternative help-seeking sources		
Sports based mental health intervention	1.78	0.83
Men's support groups	1.68	0.83
Workshop	1.80	0.80
Traditional help-seeking sources		
EAP counselling services	1.86	0.90
Psychological services	1.83	0.87
General Physician (GP)	1.88	0.86
Other		
Mental health apps	1.80	0.89
Minister/Rabbi/ Kaumātua	0.84	0.95

Note. N=578. Participants responded on a 0 to 3-point Likert scale, with higher scores representing higher intentions to recommend the help-source.

Objective Two

The major focus of objective two was to measure and identify individual and social factors which could inhibit or facilitate help-seeking intentions among men within the construction industry.

For hypothesis one, it was predicted there would be a significant negative relationship between gender role conflict (IV) and general help-seeking intentions (DV). Consistent with predictions, there was a significant weak negative relationship between gender role conflict and help-seeking intentions (r = -.117). For hypothesis three, it was predicted that men who reported higher levels of perceived stigma would have lower general help-seeking intentions. There was no support for hypothesis three, with a non-significant relationship between stigma and barriers to treatment. For hypothesis four, it was predicted that men who report higher levels of barriers to psychological care would have lower help-seeking intentions. There was

no support for hypothesis four, with a non-significant relationship between barriers to care and help-seeking intentions.

Table 7

Pearson and Spearman's Correlations among Key Variables

Variable	Correlation Type	Gender Role Conflict	Stigma	Intentions	Barriers
Gender Role Conflict	Pearson's r	1.00			
	Spearman's rho	1.00			
Stigma	Pearson's r	.027	1.00		
	Spearman's rho	.043	1.00		
Intentions	Pearson's r	-.117**	-.01	1.00	
	Spearman's rho	-.124**	-.017	1.00	
Barriers	Pearson's r	.058	.407**	-.036	1.00
	Spearman's rho	.041	.364**	-.025	1.00

Note. *correlation is significant at <0.05 level (2-tailed),**correlation is significant at the 0.001 (2-tailed). *(N=578).*

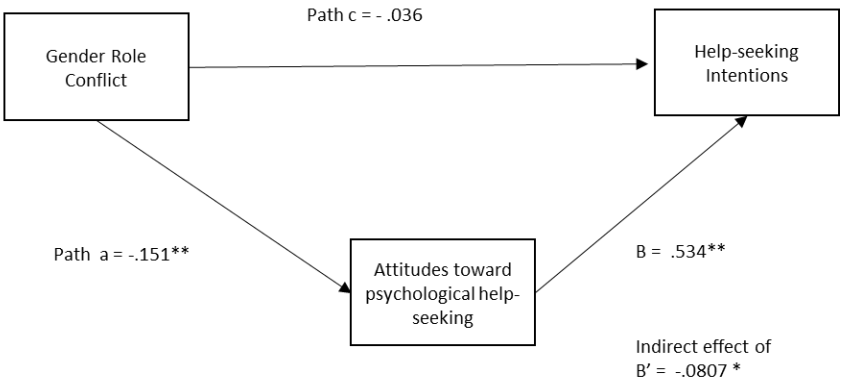
Mediation Model

For hypothesis two, it was predicted that attitudes towards psychological help-seeking (mediator) would partially mediate the relationship between gender role conflict (predictor variable) and general help-seeking intentions (dependent variable). Regression analysis was used to investigate the hypothesis that attitudes towards psychological help-seeking would partially mediate the effect of gender role conflict on help-seeking intentions.

Two models were tested to examine hypothesis two (see Table 7 and Figure 3). Model one explored three pathways (a, b, and c). Simple linear regression was used to explore the direct effect of gender role conflict on help-seeking intentions (path c). Results indicated that gender role conflict was a significant predictor of help-seeking intentions, B = -0.117, SE = 0.013, $p < .05$. Simple linear regression was also used to estimate the direct effect of attitudes towards psychological help-seeking on help-seeking intentions (path b). Results indicated attitudes towards psychological help-seeking was a significant predictor of help-seeking intentions, B = 0.534, SE = 0.027, $p < 0.05$.

Figure 3

Standardized Regression Weights after Exploring Pathway a, b, and c



Note. Standardized Regression Weights after Exploring Pathway a, b, and c. B' shows indirect effect of attitudes towards psychological help-seeking on gender role conflict and help-seeking intentions.

In the second model, multiple linear regression was used to explore whether attitudes towards psychological help-seeking partially mediated the relationship between gender role conflict and help-seeking intentions. Predictor variables, gender role conflict and attitudes towards psychological help-seeking were added to the regression model. As can be seen in Table 7 results indicated that gender role conflict was no longer a significant predictor of help-seeking intentions after controlling for the mediator (attitudes towards psychological help-seeking), B = -0.036, SE =0.011 p = .312. The indirect effect of attitudes towards psychological help-seeking was tested using a percentile bootstrap estimation approach with 5000 samples (Shrout & Bolger, 2002), implemented with the PROCESS macro Version 3.0. These results indicated the indirect standardized coefficient was significant, B = - 0.0807, SE = 0.0250, 95% Ci [-.1298 to - 0.0312].

Table 8

Unstandardized and Standardized Beta Weights following Simple and Multiple Regression

Variable	Unstandardized Beta	Standard Error	Standardized Beta	P Value
Total effect model	13.431	0.782		
Constant				
Gender role conflict	-0.036	0.013	-.117	0.005
Outcome model				
Constant	4.245	0.901		
Gender Role	-0.011	0.011	-0.036	0.312
Conflict				
Attitudes	0.410	0.027	0.534	0.000

Note.** p < .001 (two-tailed). Dependent variable: General Help-Seeking Intentions. N=578

Overall, these results are consistent with the criteria set within the preregistration document, with a negative significant indirect effect of gender role conflict on help-seeking intentions found within the analysis. Results of the study also provided evidence that rather

than partially mediating the relationship between gender role conflict and help-seeking intentions, a full mediation effect was reported, with attitudes towards psychological help-seeking mediating the relationship between gender role conflict and help-seeking intentions.

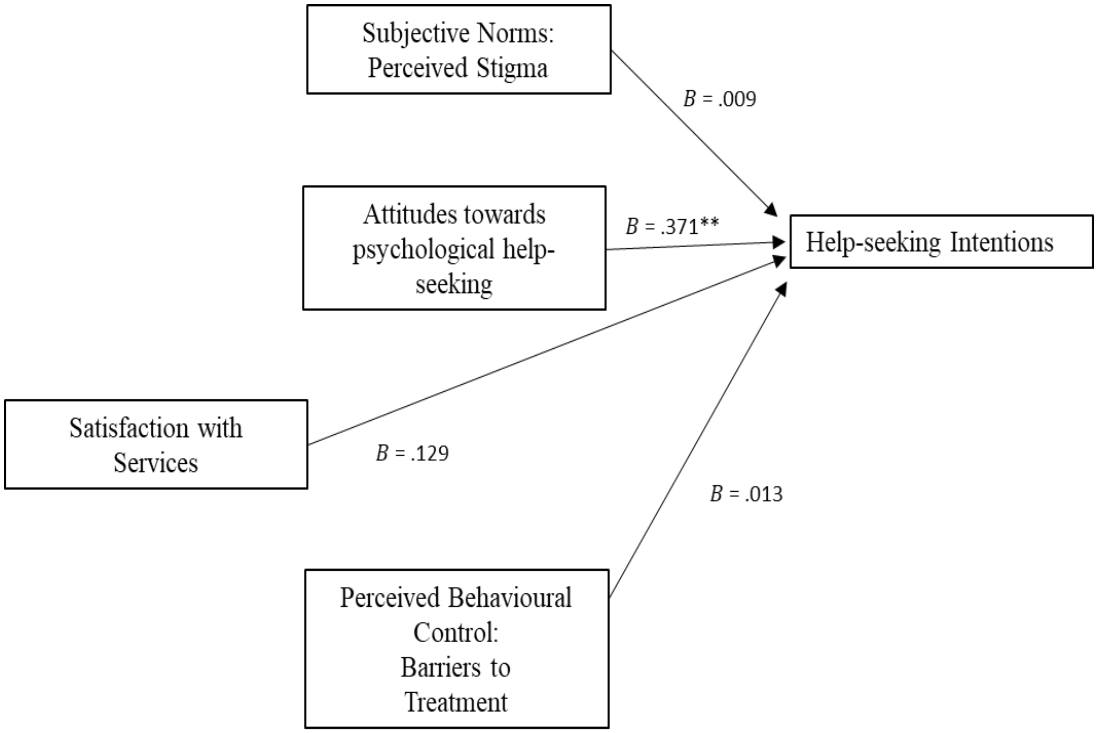
Theory of Planned Behaviour

For hypothesis five, an adapted version of the TPB was tested. The following section will discuss the results from the multiple regression with general help-seeking intentions used as the dependent variable. Predictor variables within the model included attitudes towards seeking psychological help, perceived stigma, and barriers to care. The present study also investigated an extended version of the TPB, by exploring the influence of satisfaction with services (prior engagement with mental health services) within the TPB.

As mentioned within the methodology chapter, the satisfaction with services variable created some challenges for conducting multiple regression and structural equation modeling. Within the study 259 participants completed this measure, with 319 missing responses. Because this variable provides a measure of actual behaviour, it was decided to not apply single expectation-maximisation imputation. Rather the researcher decided to run two separate analyses for hypothesis five. It is important to highlight this decision was made after preregistration and data collection. The first analysis was completed without using the satisfaction with services variable as a predictor (N = 578). The researcher then conducted the same analyses again which included the satisfaction with services variable as a predictor but excluding participants with missing data on this variable (resulting in an N of 259).

Figure 4

Adapted Version of the TPB



Note. Adapted Version of the TPB model with Standardized Beta Weights.

** $p < .001$ (two-tailed), * $p < .05$ (two-tailed). N =259, not including satisfaction with services variable.

As can be seen in Table 8, satisfaction with mental health services (B = .129, p = .064), perceived stigma (B = .009, p = .89) and barriers to treatment (B = .013, p= 0.84) were non-significant predictors within the model. Attitudes towards psychological help-seeking was the only significant predictor of help-seeking within the model (B = .371**,** p <.001). Approximately 29% of the variance in general help-seeking intentions was accounted for by the predictors (R^2 = 29.2, F(4,234) =15.276, $p < 0.001$). These findings are not consistent with criteria set within the pre-registration document.

Table 9

Multiple Linear Regression Conducted with Satisfaction with Services Variable

Variable	Unstandardized Beta	Standard Error	Standardized Beta	*P* value
Constant	4.609	1.138		.001
Stigma	.008	.055	.009	.891
Barriers	.016	.078	.013	.842
Attitudes	.292	.055	.371	.000
Satisfaction with Services	.233	.126	.129	.064

Note. N = 259. Table showing Unstandardized and Standardized Beta Weights. Within analysis ** $p < .01$ (two-tailed) Dependent Variable: General help-seeking intentions.

As can be seen in table 8 and 9, two multiple linear regressions were conducted (with and without satisfaction with services variable). In both analyses, attitudes towards psychological help-seeking was the only significant predictor of help-seeking intentions within the model. Overall, this pattern of finding is not consistent with the predicted model.

Table 10

Multiple Linear Regression Conducted without Satisfaction with Services Variable

Variable	Unstandardized Beta	Standard Error	Standardized BETA	P value
Constant	4.051	.809		.000
Perceived Stigma	-.011	.034	-.012	.750
Barriers	-.030	.047	-.025	.522
Attitudes	.414**	.027	.540	.000**

Note. *N* = 578. Table showing Unstandardized and Standardized Betta Weights. Within analysis ** $p < .001$ (two-tailed) Dependent Variable= General help-seeking intentions.

Structural Equation Modelling

Hypothesis 14 was an overarching model that combined many of the statements from hypotheses one to seven. Whereas hypotheses one to seven were investigated using analyses that treated the variables as observed, this model was tested using structural equation modelling with latent variables, thereby accounting for the aspects of measurement error.

Before discussing the results of the SEM analysis, this section will define some of the terminology used within the SEM. Within Figure 5 is an image of the structural equation model. The large circles are known as latent factors, which refer to variables which are not directly observed, but rather inferred (Hu & Bentler, 1999; Kline, 2005). Latent variables in the present study include gender role conflict, attitudes towards psychological help-seeking, perceived stigma, barriers to treatment, and satisfaction with mental health services.

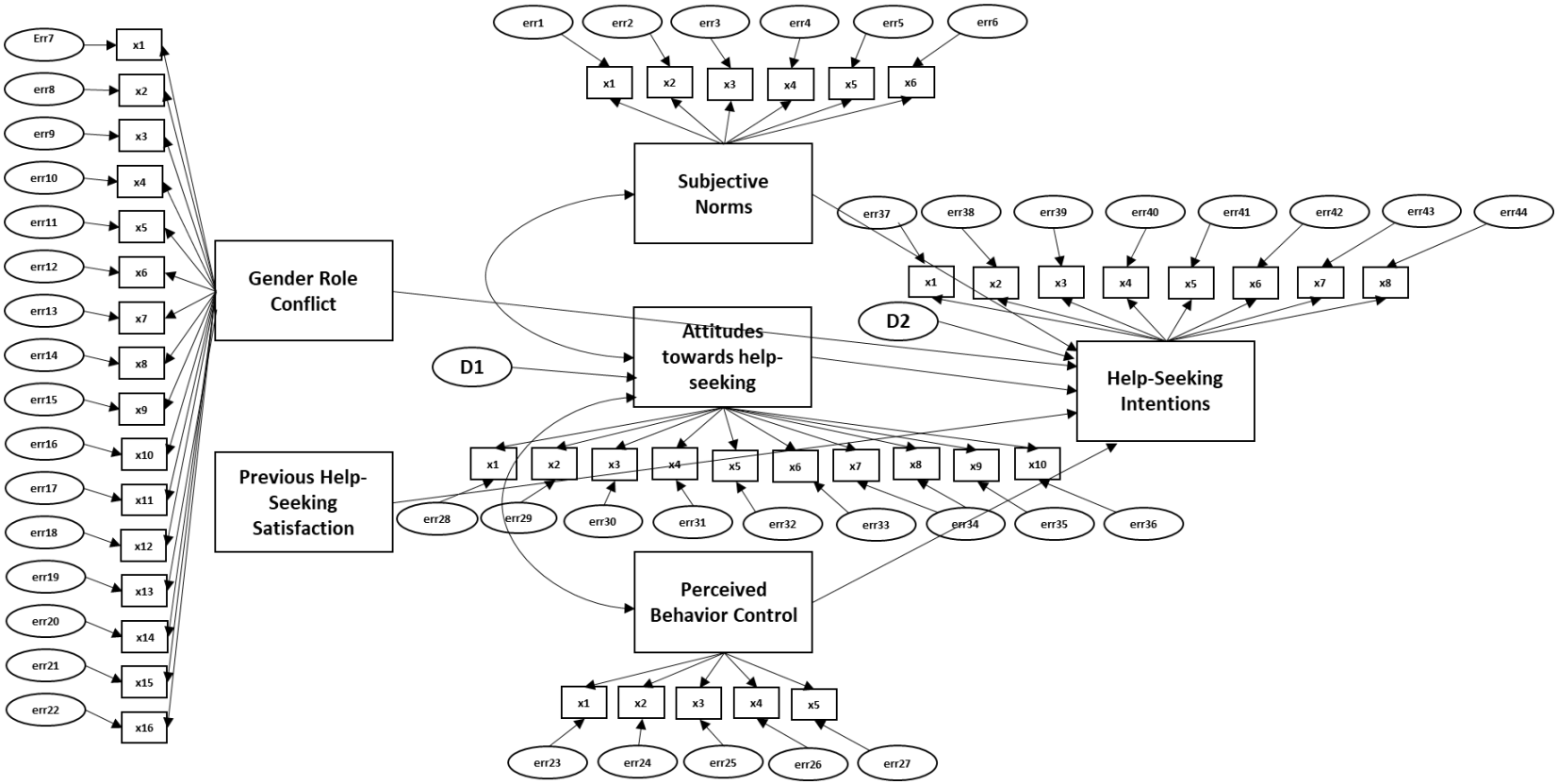
Observed variables (also known as measured variable) can be viewed in the image below as the small rectangles. Each of the rectangles represents a measurement of the latent variable (circle), and each of these measurement items has an error term, which are illustrated as small circles (Hu & Bentler, 1999; Kline, 2005). Lines with an arrow in one direction show a hypothesised relationship between two variables (e.g., attitudes predict help-seeking intentions). The curved arrow represents the covariance between two latent variables (e.g., perceived stigma and help-seeking intentions).

Endogenous variables are variables which are influenced by another variable. As can be seen in Figure 5, there are two endogenous variables within the model, help-seeking intentions, and attitudes. Each of these have a disturbance term, which can be seen as the small circles, with D1 and D2. Exogenous variables are variables which are not influenced by another variable. These variables can also be viewed as predictor variables, and do not have an error term. As can be seen in Figure 5, gender role conflict, perceived stigma, barriers to

treatment, attitudes towards psychological help-seeking, and barriers to treatment are all exogenous variables.

Figure 5

SEM Model Showing Relationships between Variables



Note. SEM path diagram, which includes direct relationships between variables

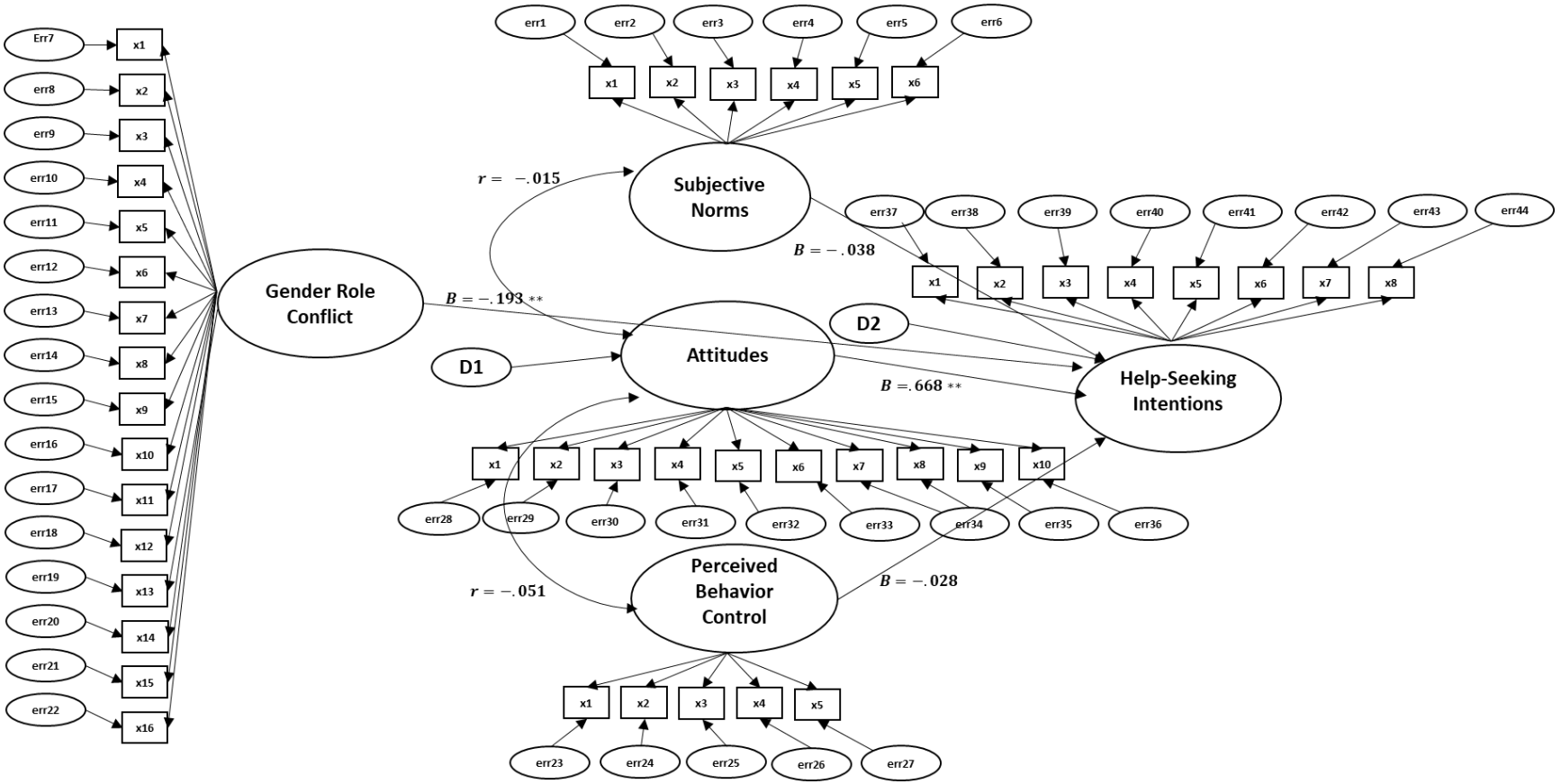
R studio and R were used for the SEM analysis. R studio is an integrated development environment for using R (RStudio Team, 2020). R is a programming tool which was developed in 1995 at the University of Auckland as a platform to conduct complex statistical analyses (RCoreTeam, 2017). The following section will discuss the steps the researcher took to complete the analysis. Two SEM were conducted (with and without satisfaction with services variable).

The following section will discuss the results from the SEM model which did not include the satisfaction with services variable (N = 578). In the first step, the measurement model was developed within R studio using a syntax. Essentially this involved creating code which are represented in Figure 5. This involved labelling the observed, latent variables, errors terms, disturbance terms, and inputting the relationships between latent variables.

In the second step, a specific structural equational model syntax was inputted into R. As can be seen in Table 10 summary statistics were provided. Within the model attitudes towards psychological help-seeking was the strongest predictor of help-seeking intentions B = 0.668, p < 0.001. Gender role conflict was a significant predictor of attitudes towards psychological help-seeking, B = -.193, p < 0.001. Subjective norms (as assessed by perceived stigma) was a non-significant predictor within the model, B = - 0.038, p =0.408. Perceived behavioural control (as assessed by barriers to treatment) was also a non-significant predictor within the model, B = -0.028, p =0.565. Results also indicated gender role conflict was a non-significant predictor of help-seeking intentions, B = -0.051, p < 0.202. In regard to correlations explored within the model, there was a non-significant relationship between attitudes and stigma, B = 0.015, p = 0.565, and attitudes and barriers, B = -0.051, p = 0.202. Overall, this pattern of finding is not consistent with the predicted model.

Figure 6

SEM Model with Direct Relationships between Variables and Covariances



Note. SEM path diagram, which includes direct relationships between variables, as well as covariances. *N* = 578.

**correlation and regression are significant at < 0.001 level (2-tailed).

Table 11

Parameter Estimates from Structural Equational Modelling

Parameter Estimate	Unstandardized regression weight	Standard error	Standardized regression weight	*P* value
Direct Standardized Effects				
Intention ~ Gender Role Conflict	-0.670	0.052	-0.051	0.202
Attitudes ~ Gender Role Conflict	-0.293	0.085	-0.193**	0.001**
Intention ~ attitudes	0.544	0.050	0.668**	0.000**
Intention ~ Stigma	-0.047	0.056	-0.038	0.408
Intention ~ Barrier	-0.033	0.057	-0.028	0.565
Covariances				
Attitude ~ ~ Stigma	0.005	0.016	0.015	0.755
Attitude ~ ~ Barriers	-0.018	0.018	-0.051	0.319

Note. N = 578. SEM excluding Satisfaction with Services Variable. Within analysis ** p <0.001. Data was retrieved from R Studio.

The final step involved exploring fit indices for the predicted model. Fit indices provide information on how well the predicted model fits the observed data. Chi-square ($\chi 2$) provides a measure of the goodness of fit between a set of observed values and those expected theoretically (Hu & Bentler, 1999). Significant chi-square values (p = <0.05) provide evidence that the null hypothesis can be rejected, and that the model is not a perfect fit to the data in the population being tested (Barrett, 2007). Non-significant chi-square values (p = >0.05) provide evidence to suggest the model is a good fit (Kline, 2005). Although the chi-square statistic is commonly reported in SEM, it is important to highlight that there are a number of limitations with this statistic. For example, the chi-square statistic is sensitive to sample size. As the sample size increases (200 or more), chi-square is more likely to become significant, rejecting the proposed model (Bentler,1990; Jöreskog &

Sörbom, 1993). With smaller samples sizes (less than 100) chi-square statistics are more likely to become non-significant (McIntosh, 2007). In the present study, the chi-square statistic was significant ($\chi 2 = 3521.703$, $df = 935$, $p < 0.001$). This finding indicates that the observed and implied variance-covariance matrices differ, providing evidence that there are differences in the hypothesised model (TPB model proposed in Figure 5) and the observed data. The finding does not meet the criterion set and does not indicate a good fit.

The Root Mean Square Error of Approximation (RMSEA) is a useful statistic to set off some of the limitations of chi-square (Baumgartner & Homburg, 1996; Brown, 2015). The RMSEA provides a measure of the difference between the hypothesised model with optimally chosen parameter estimates and the population covariance matrix (Byrne, 1998). As documented within the preregistration document, a RMSEA less than 0.06 was taken as evidence to suggest good fit (Hu & Bentler, 1999). In the present study, the RMSEA was 0.070, {CI; 0.067 – 0.072}, which does not meet the criterion set, providing evidence that the model is a poor fit to the data.

The Root Mean Square (RMR) and the Standardised Root Mean Square Residual (SRMR) provide a measure of the square root of the difference between the residuals of the sample covariance matrix and the hypothesised model (Chen, 2007; Kline, 2010). There can be difficulties when interpreting the RMR when questionnaires within a study have different measurement levels. For example, the measures within the present study included 4-point, 7-point, and 10-point Likert scales. The SRMR resolves this issue, by standardising the data. Scores on the SRMR can range from 0 (excellent fit) to 1 (poor fit). Within the preregistration document a SRMR score of 0.08 was set as a criterion to provide evidence of good fit (Hu & Bentler, 1999; Kline, 2006). In the present study the SRMR was 0.068, providing evidence of good fit.

Overall, results from the SEM indicated that the model did not fit the observed data well. Results from the SRMR providing partial evidence that the predicted model was a good fit to the observed data. However, results from the Chi-square and RMSEA provided limited evidence to suggest a good fit.

The second SEM was assessed including the satisfaction with services variable (N = 259). As can be seen in Table 11 summary statistic were provided. Within the model attitudes towards psychological help-seeking was the strongest predictor of help-seeking intentions B = 0.452, $p < 0.001$. Results indicated satisfaction with services was a significant predictor of help-seeking intentions, B = .150, $p < 0.05$. Subjective norms (as assessed by perceived stigma) was a non-significant predictor within the model, B = -0.030, p = 0.408. Perceived behaviour control (as assessed by barriers to treatment) was also a non-significant predictor within the model, B = -0.006, p =0.565. Results also indicated gender role conflict was a significant predictor of attitudes towards psychological help-seeking, B = -.180, $p < 0.202$. In regard to correlations explored within the model, there was a non-significant relationship between attitudes and stigma, B = .025, p = 0.590, and attitudes and barriers, B = -.123, p = .134. Overall, this pattern of findings is not consistent with the predicted model, and criteria set within the pre-registration document.

Table 12

Parameter Estimates from Structural Equational Model

Parameter Estimate	Unstandardized regression weight	Standard error	Standardized regression weight	P value
Direct Standardized Effects				
Intention ~ Gender Role Conflict	-.215	.120	-.143	.073
Attitudes ~ Gender Role Conflict	-.308	.146	-.180	.035
Intention ~ attitudes	.399	.081	.452	.000**
Intention ~ Stigma	-.032	.093	-.030	.727
Intention ~ Barrier	.008	.119	.006	.947
Intention ~ Satisfaction	.035	.016	.150	.026
Covariances				
Attitude ~ ~ Stigma	.013	.014	.025	.590
Attitude ~ ~ Barriers	-.034	.023	-.123	.134

Note. N = 259. SEM Including Satisfaction with Services Variable. Within the analysis **correlation and regression is significant at p <0.001 level (2-tailed). Data was retrieved from R Studio.

In regard to the fit indices, the chi-square statistic was significant (χ_2 = 2392.616, df = 935, p = 0.000). As specified within the pre-registration document this finding does not indicate good fit (Barrett, 2007). The RMSEA was 0.078, 95% CI [0.074, 0.082], which is higher than the criterion of 0.06 set within the preregistration document (Hu & Bentler, 1999). The SRMR score was 0.093, which is above the specified criterion of 0.08 specified within the registration document (Hu & Bentler, 1999). Overall, findings from the fit indices indicate the predicted model which included the satisfaction with services variable was a poor fit to the observed data.

Objective Three

Objective three explored men's intentions to seek help from alternative and traditional help-seeking sources. Objective three also explored men's intentions of recommending traditional and alternative help-seeking sources to a work-colleague.

In hypotheses six through to thirteen, Pearson's correlation was the main statistic applied to explore the hypotheses. As specified within the preregistration document for a hypothesis to be considered supported correlations needed to be significant (2-tailed, $p<0.05$) and in the specified direction (positive or negative).

Table 13

Pearson and Spearman's Correlations among Key Variables

Variable	Correlation Type	Self Alternative	Self Traditional	Recommend Alternative	Recommend Traditional
Gender Role Conflict	Pearson's r	-.123**	-.071 *	-.132**	-.071
	Spearman's rho	-.122**	-.091*	-.135**	-.087*
Attitudes	Pearson's r	.431**	.596**	.294**	.471**
	Spearman's rho	.392**	.586**	.279**	.450**

Note. N = 578. *correlation is significant at <0.05 level (2-tailed),**correlation is significant at the 0.001 (2-tailed).

As can be seen in Table 12, correlations were computed among all six variables within hypotheses 6 – 13. For hypothesis six, it was predicted that there would be a significant positive relationship between gender role conflict (IV) and preference for alternative help-seeking sources (DV). There was no support for hypothesis six, with a weak

significant negative relationship (r = -.123) between gender role conflict and men's intentions to seek help from alternative help-seeking sources. For hypothesis seven, it was predicted that there would be a significant negative relationship between gender role conflict (IV) and men's preference for traditional help-seeking sources (DV). There was partial support for hypothesis seven with a weak significant negative relationship (r = -0.091) between gender role conflict and men's intentions to seek help from traditional help-seeking sources.

For hypothesis eight it was predicted there would be a significant positive relationship between gender role conflict (IV) and preference for recommending alternative help-seeking sources (DV) to a work-colleague. Contrary to predictions, there was a weak significant negative relationship (r = -.132) between gender role conflict and men's intentions to recommend alternative help-seeking sources. For hypothesis nine, it was predicted there would be a significant negative relationship between gender role conflict (IV) and preference for recommending traditional help-seeking sources to a work colleague (DV). Contrary to predictions there was no significant relationship between gender role conflict and men's intention to recommend traditional help-seeking sources.

For hypothesis ten, it was predicted there would be a significant positive relationship between attitudes towards seeking psychological help (IV) and preference for alternative help-seeking sources (DV). As predicted, there was a moderate significant positive relationship (r = .382) between attitudes towards psychological help-seeking and intentions to seek help from alternative help sources. For hypothesis eleven, it was predicted there would be a significant positive relationship between attitudes towards seeking psychological help (IV) and men's preference for traditional help-seeking sources (DV). Consistent with predictions there was a strong significant positive relationship (r = .596) between attitudes towards seeking psychological help-seeking and intentions to seek help from traditional help-seeking sources.

For hypothesis twelve, it was predicted there would be a significant positive relationship between attitudes towards seeking psychological help (IV) and recommending alternative help-seeking sources (DV). As predicted, there was a weak significant positive relationship (r = .279) between attitudes towards psychological help-seeking and intentions to recommend alternative help-seeking sources. For hypothesis thirteen, it was predicted there would be a significant positive relationship between attitudes towards seeking psychological help (IV) and recommending traditional help-seeking sources (DV). Consistent with predictions, there was a moderate significant positive relationship between attitudes towards psychological help-seeking and intentions to recommend traditional help-seeking sources (r = .471).

Table 14

Summary of Findings

Hypothesis	Description	Supported
H1	It was hypothesised gender role conflict will be significantly negatively related to general help-seeking intentions.	Yes
H2	It was hypothesised attitudes towards psychological help-seeking will partially mediate the relationship between gender role conflict (predictor variable) and general help-seeking intentions.	Yes
H3	It was hypothesised there would be a significant negative relationship between perceived stigma and help-seeking intentions.	No

H4	It was hypothesised there would be a significant negative relationship between barriers to treatment and help-seeking intentions	No
H5	Perceived stigma, barriers to psychological care, attitudes towards psychological help-seeking and previous positive experiences with mental health services, will each be a significant predictor of general help-seeking intentions within the theory of planned behaviour model.	No
H6	It was hypothesised there would be a significant positive relationship between gender role conflict and preference for alternative help-seeking sources.	No
H7	It was hypothesised there would be a significant negative relationship between gender role conflict and men's preference for traditional help-seeking sources.	Yes
H8	It was hypothesised there would be a significant positive relationship between gender role conflict and preference for recommending alternative help-seeking sources to a work-colleague.	No
H9	It was hypothesised there would be a significant negative relationship between gender role conflict and preference for recommending traditional help-seeking sources to a work-colleague.	No
H10	It was hypothesised there would be a significant positive relationship between attitudes towards seeking	Yes

	psychological help and preference for alternative help-seeking sources.	
H11	It was hypothesised there would be a significant positive relationship between attitudes towards seeking psychological help and men's preference for traditional help-seeking sources.	Yes
H12	It was hypothesised there would be a significant positive relationship between attitudes towards seeking psychological help and preference for recommending alternative help-seeking sources to a work-colleague.	Yes
H13	It was hypothesised there would be a significant positive relationship between attitudes towards seeking psychological help and preference for recommending traditional help-seeking sources to a work-colleague.	Yes
H14	Was an overarching model that combined the statements made in hypotheses one to seven using SEM.	No

Chapter Eight: Qualitative Results

Sources of Stress

Participants were asked ‘what is your biggest source of stress at work?’ From participant responses 1152 concepts were coded and organised into 12 categories. The most common type of stress reported was time pressure and workload related (25.7%), followed by management related (24%), financial stress (13.4%), mistakes within the work environment (9.4%), and client related (7.1%) (see Table 17).

Table 15

Categories and Frequencies of response for question: What is your Biggest Source of Stress?

Category	Example response	*N*	%
Time pressure and workloads	*"Contracted to do a 50hr standard working week. I think this is barbaric and should be against the law".* *"Volume of work load and pressure to get it done quickly so you can get more done".* *"Time frames- Constant pressure to meet deadlines. Not enough time in day to keep up".* *“Pressures of time frames for projects. Health and Safety ignored.Men pushed to their limits to preform and work exceptionally long days 18 hrs as not enough resources”.*	296	25.7%
Management related	*"Poor management not addressing work related stress and issues and ignoring them due to financial benefits top the*	276	24%

	company. Being completely arrogant when a worker is asking for change that would safe guard the wren". *"Unsupportive employer, over worked, lack of organization".* *"Overly aggressive, highly critical management that cannot find constructive ways to do things. Lack of rest breaks, even when legislated for. Equipment in poor repair, and dangerous to use".* *"Lack of leadership and feedback from those who should be providing it".* *"Made to feel like a failure Spoken to with no respect Lack of help with tasks undertaken".*		
Financial stress	*"Time and costs of jobs are a continuous pressure".* *"Lack of steady pay".* *"People owing me money or me owing money to sub-contractors Tax GST".*	149	13%
Mistakes within the workplace	*"People making mistakes and me having to fix them".* *"Making mistakes that can cause my employer/client to lose money".*	109	9.4%

	"When work mates make multiple mistakes in a day".		
Client Related	*"The demand and expectations clients have"* *"Clients that are getting more and more demanding and experts at building because they have googled it and know as much as you".* *"Clients you just can't satisfied, always finding fault with the project".* *"Hard to deal with customers, customer complaints generally from unrealistic customers".*	82	7.1%
Physical stress	*"Old injuries coming back to haunt me and knowing they will get worse the older I get".*	50	4.2%
Job uncertainty	*"Keeping everyone in work so I don't have to make redundancies".* *"Constantly having to ensure work is available".* *"In the construction industry, being flat out and not being able to get enough time to complete a deadline, then within a few hours having nothing to do and starting to worry about the security of your job".*	47	4.1%
Legislation and government	*"Dealing with government, councils, and ITo's registration boards, they are staffed*	37	3.2%

	by incompetents who insist on trade practitioners being extremely competent despite their incompetence". *"Complying with revolving rules Confusing information".* *"Staying on top of all the constant changes and laws. E.g. building law changes, hard to deal with councils, employment law".* *"Dealing with the ever changing building rules and regulations".*		
Interpersonal conflict	*"Conflicts in the workplace".* *"Colleague conflict - not just with myself and others but between others also".*	31	2.7%
Lack of job/ career satisfaction	*"Lack of career path, not sure where I want to end up in my career, feeling I'm stuck".* *"The way tradies are viewed and treated, we are a trained qualified profession yet seen as cheap unskilled labour".* *"Feelings of worthlessness from clients and public".*	26	2.3%
Weather and travel	*"Early starts. Weather".* *"Wet Weather Long Days when things are not good at Home/Life".*	26	2.3%

Health and safety related	*"The lack of commitment from construction managers and supervisors to complete tasks that assist in reducing risk of physical and psychological harm if it has an effect on productivity/output".* *"Continuing to have a safe workplace for our employees and contractors. Not having someone injured or sick from the workplace".* *"Lack of follow up with safety concerns at work".*	23	2%

Barriers Towards Seeking Help

Participants were asked ‘what do you think are some of the barriers that prevent men from seeking help for mental health issues within the construction industry?’ From participant responses 955 factors were coded and organised into 8 categories. The perception that seeking help is sign of weakness or that one has failed was the highest reported barrier (27.7%), followed by the perception that men have to be strong and self-reliant (25.9%). Lack of information and accessibility (23%), and cost (7.6%) were also identified as common barriers towards seeking help for mental health issues.

Table 16

Category Examples, and Frequency of Responses for Question: What do you think are some of the Barriers that Prevent Men from Seeking Help for Mental Health Issues within the Construction Industry?

Category	Example participant response	*N*	%
Seeking help is a sign of weakness	*"In our area it is where to turn to for this help. A feeling of failure if you went down this track".*	265	27.7%
	"Fear that it's a sign of weakness amongst their peers".		
	"Stigma of be 'soft' there is rather a lot of bullying happening in the industry and I think that going to get help from a counselor is considered weak. Which I personally don't agree with but very prevalent in the industry".		
	"I feel with an industry that has such a strong push on strength, a lot of men would feel like they're weak if they were to admit they need help".		
	"The hardened up mentality. Sort your own shit out. Looks like you are weak if you have to get help with your problems".		
	"Being the man! That man needs to be man. If the man is feeling down which by the way is not natural because man can't be showing weakness!"		

Men have to be strong and self-reliant.	*"We supposed to be the strongest and toughest in NZ".* *"The man up culture within the building industry. Go hard or go home".* *"Harden up is the first thing that comes to mind. Man up and stop being a pussy. All of the saying like this are the reason that men are the biggest suicide statistic in NZ. The macho manliness mode is ancient and doesn't work. men need real coping mechanisms instead of "manning up" or drinking themselves stupid".* *"Yeah I think it comes down to the old ways like hard up and get a cup of concrete just it's bulshit people need to talk to each other and solve problems help each other".* *"Just generally not taking mental health seriously. A general bullshit macho attitude plagues New Zealand in the trades. Men are too busy keeping a tough guy mask on, when reality shows suffering underneath the pride".*	246	25.9%
Lack of information and accessibility.	*"Easy availability, lack of flexibility during work hours to attend appointments".*	221	23%

	"knowledge of what public services are available to help as most small to medium residential construction companies don't have any formal internal support systems in place". *"Not enough education of different options Availability of people with knowledge Availability of workplace counsellors".* *"Awareness of how/where to get help, and lack of awareness in what benefits might come from counselling/treatment".*		
Cost	*"Probably cost and also asking for time off to go to a counsellor".* *"Such high costs of councilors or mediators. And trying to fit into their schedules while also not losing productivity at work".* *"Wages not being able to be paid whilst attending appointments. Cost of appointments".*	73	7.6%
Mental health literacy	*"Acknowledging that they need help -Being able to see the signs of distress or needing help".* *"I don't think people understand what a common issue this is and that there are many ways and forms of help and support to assist".* *"What constitutes a mental health problem as well, at what point should you seek help? That is the kind of info that would be good. Not "if you feel sad, talk to a professional, or EAP", it*	54	5.7%

	should be if you fell this, for this period of time, you might want to think of talking to someone". *"Knowledge of who to turn to. Understanding potential symptoms of mental health".*		
Service type	*"The counsellors, I have spoken too, Don't listen, or understand men, they talk down to me, and don't speak men language, I don't do art, talk in pictures, or understand, or care about warm fluffy rubbish, And telling me I need drugs gives me no confidence in them at all".* *"I don't feel the right avenues have been created yet. Someone needs to think outside the box to get men to engage because most men do not want to talk to a psychiatrist".* *"Men are not big talkers...more doers. I think we need time to process information so sitting and talking about the same thing for an hour is just not as productive as small touch points interspersed with other things".* *"Been there and done that - psychologists are only 'talk help' we can access that elsewhere. People need access to practical physical activity based support / clubs or Psychiatrists, not Psychologists".*	48	5%
Limited dialogue on mental health with workplace.	*"I don't think it's talked about. Where to talk about it. Think everyone thinks that being a boss in a construction boom*	27	2.8%

	means that you are on a winning thing and earning heaps. Bit doesn't think about the stress. So hard to talk about. And wouldn't talk about it with someone you employ". *"It doesn't exist. Like most of the NZ culture, particularly male, there is little or no dialogue around mental health. In general it is described as a person having a bad day, or that they are a grumpy, or angry person".* *"It's not talked about".*		
Lack of support from management	*"Management not understanding just wanting to pass you onto a support worker".* *"Work doesn't allow us to book appointments during work time".* *"Work is just so busy and bosses never want you to take time off".*	21	2.2%

Men Helping other Men Seek Help

Participants were asked 'what do you think is the best way to encourage a co-worker to seek help for mental health issues?' From participant responses 624 factors were coded and organized into 10 categories. Start a conversation (29.2%) was the most reported way to encourage a co-worker to seek help for mental health issues. Discuss support options

(23.1%), discuss lived experiences of mental health issues (9.62%), normalizing the issue (9.62%), and find a quiet space outside of work to talk to the person (9.13%) were also common responses to the question.

Table 17

Category Examples, and Frequency of Responses to Question: What do you think is the Best Way to Encourage a Co-Worker to seek Help for Mental Health Issues?

Category	Example response	*N*	%
Start the conversation	*"Sit down don't be a dipshit and explain that you dont want them doing something stupid and that you would rather have them around for as long as possible".* *"An honest conversation".* *"Have a conversation, go over a plan of attack".*	182	29.2%
Discuss support options	*"Give them options Listen and communicate non-judgmentally Give support and information Encourage appropriate professional help".* *"Encourage them to talk to their GP as they can arrange appropriate support".* *"Try to forward them to someone for help and ask about have they received the necessary help a few days later".*	144	23.1%

	“Give them numbers to contact, be with them when they call the first time if they need me to”.		
Normalise the issue	*"To let them know that it is normal & they are not letting anyone down".* *"Try and relate to them on a personal level and explain that most people go through rough times and it is nothing to be ashamed of".* *"Let them know they’re not the only ones dealing with issues. Share your weaknesses as well as your strengths".* *"To normalize mental health and offer to assist them in accessing support relevant to their situation".*	60	9.6%
Discuss lived experiences of mental health issues and help-seeking.	*"Explain how it has been helpful to myself and that everyone needs support at times in life and you are not a failure because you choose to get some support".* *“Talk about your own issues to help them feel comfortable talking about theirs. Say things like everyone’s got shit going on, stress is more and more common, you can get through it and you’re a better person for it”.* *"Explain how much it helped me".*	60	9.6%

	"I have had experience with people suffering from depression and had help from professionals and this has helped hugely and I pass this on with the hope it may encourage others to seek professional help".		
Provide a safe space for them to talk outside of work	*"Take them to coffee, beer after work, discuss in private".* *"Discuss it quietly with them outside of the working environment".* *"A quiet word to one side maybe away from the workplace not in front of others".*	57	9.1%
No idea/ don't know	*"Wouldn't have a clue".* *"No idea".*	30	4.9%
Talk to someone they trust	*"Talk to their partner/family".* *"Tell him to talk to friends/family".* *"Talk to partner, a family member or friend. If unable then would recommend talking to a professional or nehtral person".*	20	3.2%
Increase mental health literacy	*"First you would need to know they were having issues, So no idea".* *"First off it requires you to know that they are having some kind of mental health issues and also them willing to trust you enough to ask you for help".*	17	2.7%

	"Being informed first on what to do and where to go Be available to talk to. be a good listener".		
Accessible information	*"Having posters around site and offices, so one doesn't have to make verbal communication with staff members as their first step. Posters should have contact details for 24 helplines and workshops/programs available to them. Monthly Mental 'MOT' 1 2 1 with".* *"Put signs up in the smoko shed".* *"Having the information where they can read it (i.e., posters on the wall are good) creating a relationship that the feel it is possible to take time to seek help confidential".* *"EAP adverts in the toilets/staffrooms where someone can snap a pic of the flyer and look into it later. Essentially this is still considered very private and not considered a health issue like a physical issue. This is what needs to be changed".*	16	2.5%
Create a positive team culture that supports mental health	*"Have the culture that is open and that there is nothing wrong with mental health issues".*	38	6%

	“Have worker meetings to see how things are going and speak more in depth about these things if you need to”.
	"Build an overall team culture enforcing the importance of conversation over these issues. Down play the stigma. Share experiences openly, show that we all have mental health issues irrespective of how severe they may be".

Chapter Nine: Discussion

This study was undertaken to better understand construction workers' help-seeking behaviour within the New Zealand construction industry. This discussion will focus on some of the key findings from the study, with findings contextualised with similar research, and a discussion on the implications of the findings within the New Zealand construction industry. Weaved into the discussion will be the findings from the qualitative data collected within the study. The final section of the discussion will outline the study limitations and provide recommendations for future research and intervention within the New Zealand construction industry.

Masculine Gender Roles and Help-Seeking

Consistent with hypothesis one there was a significant negative relationship between gender role conflict and help-seeking intentions. This finding indicates endorsement of masculine gender roles such as restricted emotionality, stoicism, and self-reliance were linked to decreased help-seeking intentions among construction workers. These findings are consistent with previous research among men, which have found higher levels of gender role conflict to be associated with lower help-seeking intentions (Berger et al., 2005). Some authors have suggested that men who adhere to masculine gender roles are more likely to engage in services which are more congruent with masculine gender roles, such as sports-based mental health interventions or workshops (Ogrodniczuk et al., 2016; Robertson & Fitzgerald, 1992). However, results of the study indicated that adherence to masculine gender roles was linked to lower intentions to seek help from both traditional and alternative help-seeking sources. The implications of this finding are that men who strongly subscribe to masculine gender roles are more likely to reject talking-based therapies, and shoulder to shoulder interventions, such as workshops and sports-based mental health interventions.

More concerning, this same group of men are more vulnerable to substance abuse, depression, and suicide (Houle, 2004; O'Neil, 2008). This was also the case within the present study with greater adherence to masculine gender roles linked to lower levels of wellbeing. Processes associated with help-seeking, such as expressing emotions openly, being vulnerable in front of other men, and asking for help each represent significant barriers for this group of men. They are barriers because they represent threats towards masculinity (Schaub & Williams, 2007). To cope with this threat, it is likely men reject mental health services (Cleary, 2012). Further research on this vulnerable population is required, in particular a better understanding on how mental health services can be designed and delivered to men who adhere to masculine gender roles.

Responses from the open-ended questions suggested that masculine gender roles could have a negative influence on help-seeking behaviour among men within the construction industry. Within the qualitative data stoic attitudes towards mental health, perceptions that help-seeking is a sign of weakness or failure, and self-reliance were identified as barriers towards seeking among men within the study. These findings are consistent with prior research conducted within the New Zealand construction industry, which have shown that stoic attitudes towards mental health create barriers for construction workers to seek help (Bryson & Duncan, 2018). Stoicism refers to the endurance of pain or hardship without the display of feelings or complaint (Gorski, 2010). As can be highlighted by one participant's response stoic attitudes towards mental health can create barriers for men to display vulnerability among other men- "*Just generally not taking mental health seriously. A general bullshit macho attitude plagues New Zealand in the trades. Men are too busy keeping a tough guy mask on, when reality shows suffering underneath the pride"*. Within the context of seeking help for mental health issues, stoic attitudes towards mental health provide limited flexibility for conversations about mental health within the work environment. Not

only do they have a negative impact on help-seeking, but they are linked to workplace bullying and conflict (Waters & Raiden, 2008), lack of compliance with health and safety procedures (Stergiou-Kita et al., 2015), and poor work-life balance (Galea et al., 2015; Lingard et al., 2007).

Perceptions that men should display strength and be self-reliant were identified as barriers towards seeking help. As highlighted by one participant's response - *"The expectation that men in the construction industry are to be resilient and capable of managing stress and stressful situations on their own and in the right way"*. Men who place high value on self-reliance and control are more likely to hide their suffering from other people (Pirkis et al., 2017). Not only does this prevent men from seeking help but could also provide a framework for men to cope with mental distress. Research has indicated that when some men experience distress, they are more likely to 'push harder' towards maintaining the unrealistic expectations associated with 'being a man' (Pirkis et al., 2017). Rather than talk about mental health difficulties with a work colleague or manager, there is likely a need among some construction workers to 'put forth' a perception of coping, to prove to the self and others that everything is 'ok'.

There was a reluctance to seek help among some men due to fears of being perceived as weak by other men within the work environment - *"Just the whole man up attitude, going to get help with these sorts of things shows weakness to other men. In this industry showing 'weakness' will mean sometimes other blokes won't respect you for it*". These findings are consistent with previous research which has indicated that help-seeking is perceived as a sign of weakness among some men within the construction industry (Cleary, 2012; Milner et al., 2017). From a construction manager's perspective, if there are limited signs of distress, how can support and intervention be provided? Rather than searching for signs of distress within individual workers, the focus should be on increasing opportunities for men to have

conversations about mental health within the workplace. If men can observe similar men discussing personal experiences of dealing with mental distress within the work environment, it could provide permission for other men to seek help because the risk of being labelled weak could be reduced.

Because of the physical nature of construction work there is likely a strong emphasis on enduring physical and emotional pain, as can be highlighted by one participant's response - *"A stereotype of the industry is that men are strong, emotionless machines that are tough and get the work done"*. Not seeking help, ignoring mental distress, and 'pushing' through can be viewed as ways of demonstrating and proving one's masculinity to other men within the work environment (Connell, 2005; Kimmel, 1994). Because mental health symptoms are less visible, internal struggles are likely minimised, and levels of distress ignored, resulting in men not addressing mental health issues (Connell, 2005; Kimmel, 1994). As highlighted by one participant's response – *"NZ men inherently try and cope with issues by themselves, sometimes this results in an overwhelming feeling of isolation and depression"*. One of the challenges of trying to support men who strongly subscribe to traditional masculine gender roles, is they are less likely to talk to co-workers about mental health conditions or display any signs of distress (McKenzie et al., 2018). One approach to increase help-seeking among men could be to increase opportunities for men to have conversations about mental health within the workplace. For example, site leaders could include topics related to mental health within health and safety briefings. If men can observe similar men talking about mental health, it is possible other men will feel less judged, and be open to learning more about different aspects of mental health. It would be important leaders are adequately trained to deliver mental health content, and also have work policies in place to support workers to access support following such conversations.

For some men there are likely financial and social consequences for disclosing personal experiences of mental health difficulties within the workplace. Socially, displaying vulnerability could result in an individual being ostracised from a social group or become the 'butt' of jokes on the worksite, subsequently leading to increased bullying, and social isolation. As highlighted by one participant's response - *"Issues are made fun of and joked about rather than taking the stuff seriously"*. From a financial perspective, employers could discriminate against an employee who discloses difficulties with his mental health. Within the present study this fear was evident, with narratives surrounding missing employment opportunities and losing a job – *"If I was to tell someone I was having problems with mental health, I would be treated with caution and most likely not operate machinery"*. Taken together, on some construction sites where mental health is rarely spoken about, among some men not talking about mental health issues could be an adaptive strategy for maintaining employment and relationships within the work environment.

Contrary to predictions of hypothesis three there was no statistically significant relationship between perceived stigma and intentions to seek help. These findings are inconsistent with previous research which have reported a negative association between perceived stigma and help-seeking intentions among men (Hammer et al., 2013). The non-significant relationship was surprising given the large number of men who reported within the qualitative data that being perceived as weak and not coping were major barriers towards seeking help among construction workers. This suggests that the relationship between perceived stigma and help-seeking intentions is complex. It is possible at the individual level perceived stigma has less of an influence on help-seeking intentions, compared to other factors such as one's attitude towards seeking help. This view was supported within the study, with a large proportion of men within the study reporting positive attitudes towards seeking help. However, at the social level, it is likely the perceived perceptions of other men

have an indirect negative effect on help-seeking behaviour. In particular, it is possible men fear that they will be perceived as weak by other men within the work environment if they sought help for mental health issues.

Despite the non-significant relationship between perceived stigma and help-seeking intentions, men's responses to the open-ended questions indicated that the stigma associated with seeking help was perceived as a barrier for workers to access support. For example, the perception that seeking help is a sign of weakness was the most commonly reported barrier within the qualitative data. This finding is consistent with previous research conducted within the Australian construction industry, where discussing 'feelings' and 'emotions' with other men, was viewed as a weakness, and not the 'manly' thing to do (Milner et al., 2017). Unrealistic expectations surrounding what is required to be a 'man' restrict any opportunities for men to talk about mental health issues with colleagues. As highlighted by one participant's response - *"Being the man! That man needs to be man. If the man is feeling down which by the way is not natural because man can't be showing weakness!"* Not only does this suggest men experience fewer opportunities to learn, practice, and experience different types of emotions; but also, that men have likely developed a wide range of strategies to conceal any signs of mental health distress within the workplace.

There was resistance among some men within the study to seek help because help-seeking was associated with failure. As highlighted by one participant's response - *"In our area it is where to turn to for this help. A feeling of failure if you went down this track"*. Seeking help requires men to display vulnerability, relinquish control, and request help from another person; processes that are in stark contrast to prescribed masculine gender roles such as self-reliance, strength, and independence (Connell, 2005; Greene-Shortridge et al., 2007). Education, and exposing men to other men who have lived experiences of mental health conditions, could help normalise help-seeking among men who perceive help-seeking to be a

sign of weakness or failure. This could provide evidence that 'it is ok' for men to seek help, and that men can continue to live productive and fulfilling lives despite experiences of mental distress.

Barriers to Seeking Help

For hypothesis four it was predicted there would be a significant negative relationship between perceived barriers to treatment and help-seeking intentions. Contrary to predictions, there was a non-significant relationship between perceived barriers to treatment and help-seeking intentions. Despite the non-significant relationship between perceived barriers to treatment and help-seeking intentions, several practical barriers to treatment were reported within the open-ended questions, including the time to access mental health services during work hours, costs associated with mental health services, lack of information, and visible help-seeking pathways within the workplace.

Leaving the worksite to access mental health support was identified as a barrier. As highlighted by one participant's response - *"Time. It took me ages be able to get the time off work to go to the dr. Work is just so busy and bosses never want you to take time off"*. Although leaving the worksite during work hours is a barrier, for some men 'having the conversation' with a manager is likely the greater barrier towards accessing support, as highlighted by one participant's response - "*Companies give support, but it's still a big deal to have to go face to face with someone and tell them. Is there any sort if increased privacy or anonymity that can be implemented?"* Without proper access to mental health services or work policies which allow men to leave the worksite for appointments, fewer men will seek help because of the considerable effort to book and travel to an appointment. It is possible on some construction sites supervisors have the potential to facilitate or inhibit help-seeking behaviour. Therefore, it could be important supervisors make themselves approachable, supportive, and non-judgemental when it comes to supporting mental health. Additionally, it

is important anonymous and confidential help-seeking pathways are created for men who do not want to disclose personal information to a work manager. Information on how to access support could be sent to workers through text or email, allowing them to have this information stored and accessible.

The cost of accessing mental health services was identified as a barrier towards accessing support. Several men within the study could not justify the cost of seeking help from a counsellor or psychologist, as highlighted by one participant's response – *"Financial restrictions - counsellors are extremely expensive and a lot of people can't afford it or can't justify that expense"*. For many men, it is likely not just the cost of accessing mental health services, but also the cost associated with being away from the workplace. Counselling and psychology services can be expensive, especially if workers are accessing these services within the private sector. However, for several construction companies there are likely EAP counselling services available, with little or no cost. Yet without awareness of these services it is likely some men suffer in silence because of the perceived financial barriers of accessing counselling. This finding highlights the need for EAP counselling services to be promoted within the work environment, and for employers to create platforms for men to access these services.

There was recognition among some construction businesses that addressing mental health issues can be unproductive within the short-term due to losses in productivity, as highlighted by one participant's response - *"Allowing time to seek help, it becomes unproductive for small businesses to take the time needed to sort problems when they are small and when they become a bigger problem it's even harder to make time to cope properly"*. Providing time off for workers to address mental health issues should be a priority, because poor mental health creates several challenges for the employer and worker. For the employer, poor mental health is associated with decreased productivity, lack of

communication, absenteeism, and lack of cooperation (Rajgopal, 2010). For the worker, poor mental health is associated with hopelessness, decreased job satisfaction, memory difficulties, fatigue, and lack of concentration (Goldberg & Steury, 2001; Siu et al., 2004). The inability to concentrate can also impact a worker's ability to follow instructions and make decisions on the worksite, increasing the likelihood of a workplace injury and/or accident (Beseler & Stallones, 2010; Kim et al., 2009). Taken together, although within the short-term there is an initial cost of supporting workers to access mental health support, if longstanding mental health issues among employees are ignored and not addressed, there is the potential for all areas of functioning within the work environment to be negatively impacted.

For some businesses within the construction industry there was a need for accessible information on how to support mental health within the work environment. As highlighted by one participant's response - *"Knowledge of what public services are available to help as most small to medium residential construction companies don't have any formal internal support systems in place"*. Navigating the public mental health system can be difficult because of the wide range of services available, and the different referral pathways for each service. However, as a business owner, having knowledge of this information is essential for providing support to employees. This might include having knowledge of mental health support phone numbers, community based mental health services, and being familiar with referral pathways. Effective strategies and policies that provide a clear response to mental health within the workplace is a key first step towards increasing help-seeking behaviour among men within the construction industry. By increasing knowledge of the different community mental health services, business owners are equipping themselves with the knowledge and skills to support their employees to access support for mental health issues.

Lack of information within the workplace on how to access support for mental health issues was identified as a barrier. As was highlighted by one participant - *"Know where the*

help is, and how to get help in the construction industry". Having accessible information on where and how to access mental health services can provide a clear direction for someone who is struggling with mental health. If help-seeking pathways are not visible within the work environments not only does this reduce the likelihood of men seeking help, but it also reinforces the view that problems with mental health do not exist, and as a result is rarely spoken about, or taken seriously within the work environment.

Not knowing what mental health conditions 'look like' and how to access support were identified as a barrier towards accessing mental health services. As highlighted by one participant's response - *"Acknowledging that they need help -Being able to see the signs of distress or needing help"*. These findings are consistent with previous research within construction which have reported low rates of mental health literacy among construction workers (King et al., 2019). These findings highlight the need for interventions to improve workers mental health literacy. Education on mental health literacy needs to be delivered in conjunction with information on masculine gender roles, in particular how they create constraints on the identification of mental health symptoms, influence maladaptive forms of coping, and prevent men from seeking help early (Milner et al., 2019).

Sources of Stress Within the Construction Industry

To better understand mental health within the construction industry the study explored men's perceptions of the causes of stress within the work environment. Long working hours and work pressures were identified as core stressors. As can be highlighted by one participant's response, there were calls for work hours to be reduced because of the negative impact it can have on health and safety - *"Pressures of time frames for projects. Health and Safety ignored. Men pushed to their limits to ??perform and work exceptionally long days 18 hrs as not enough resources"*. On some construction sites it is possible productivity is prioritized over health and safety. There were also concerns among some men regarding the

safety of working conditions as can be highlighted by one participant's response – *"Lack of rest breaks, even when legislated for. Equipment in poor repair, and dangerous to use"*. Long working hours within the construction industry have been linked to several negative outcomes including depression, breakdown in family relationships, substance use, and fatigue (Dong, 2015; Lingard et al., 2007; Navarro-Astor, 2011). Under the Health and Safety at Work Act (HSWA, 2015) employers have a legal responsibility to manage risks to mental health, just like they do with any other physical health and safety risk. From a mental health perspective, this requires employers to recognise the negative impact that poor working conditions, high levels of work pressure and long working hours can have on the wellbeing of workers.

Poor communication and conflict with managers were identified as a source of stress among men within the study. As highlighted by one participant's response - "*Overly aggressive, highly critical management that cannot find constructive ways to do things"*. These findings are consistent with previous research which have shown poor communication and conflict are common causes of stress among construction workers and site managers (Fenn et al., 1997; Galea & Loosemore, 2006; Gardiner et al., 1995; Handford, 2015). Among some men within the study they felt there was a lack of respect and recognition from managers, as highlighted by one participant's response - *"Site mangers pushing to get jobs finished. Not being very respectful"*. It is possible construction managers have the most influence on a worker's productivity, work quality, and wellbeing within the workplace. Yet, for many men within the study it seemed as though this relationship was strained. One way to improve this relationship is to provide additional support to site managers. Managers experience stress from all sides of the industry. They bear the stress from having to deal with overly demanding clients or line managers, and they also bear the stress of having to manage large groups of workers on site. Compared to other employment categories within

construction, research has indicated that site mangers are more likely to experience work-overload, role ambiguity, work longer hours, experience higher levels of interpersonal conflict, and spend less time with friends and family (Haynes & Love, 2004; Sommerville & Langford, 1994; Sutherland & Davidson, 1993). Because of the contagious nature of emotions (Cherniss, 2001), when a manager is overstressed, this can set the tone for the rest of the work site. Taken together, these findings highlight the need for specific training and support to be directed towards managers, which could include education on communicating effectively, stress management, and strategies for dealing with difficult personalities.

Stress associated with making mistakes was identified as a source of stress among men within the study. As highlighted by one participant's response - *"Making mistakes that can cause my employer/client to lose money"*. Factors which have been linked to increased mistakes in construction include poor planning, faulty equipment, lack of communication, and fatigue (Chan, 2011; Hallowell, 2010). Fatigue is defined as a state of physical or mental exhaustion which reduces a person's ability to perform work safely and effectively (WorkSafe, 2019). Within construction, long working hours and constant work pressure have been linked to fatigue (Chan, 2011; Hallowell, 2010). Mental fatigue can have a negative impact on cognitive functioning, leading to poor judgement, decreased alertness, careless mistakes, lack of communication, and inability to follow instructions (Marcora et al., 2009; Park et al., 2001). Within the present study, this was a common theme, with managers reporting that workers struggled to follow basic instructions, and reports of workers making multiple mistakes within one day. As highlighted by one participant's response - *"Just work stress basically, too much on, going flat out and your boss is on your case. When work mates make multiple mistakes in a day"*. If companies want to take a proactive approach in reducing mistakes and accidents within the workplace, employers need to recognise the negative impact of work pressures and long working hours on mental health. Proactive steps could

include having realistic schedules for workers, policies to protect workers from overworking, and ensuring managers have the knowledge and skills to support staff that are displaying signs of fatigue (WorkSafe, 2019).

Consistent with previous research job insecurity was identified as a cause of stress among men within the study (Mathebula et al., 2015). As can be highlighted by one participant's response job security is a constant stressor for some workers - *"In the construction industry, being flat out and not being able to get enough time to complete a deadline, then within a few hours having nothing to do and starting to worry about the security of your job"*. Unlike other industries, within construction when projects are near complete, rather than celebrate, there is a 'scramble' for some workers to secure future work. Especially during periods when there is downturn within the economy, construction workers have shown to experience high rates of unemployment (Sobeih et al., 2006). Within the context of seeking help for mental health issues, job insecurity likely creates significant barriers for men to seek help, because there is likely a need among some men to '*prove*' to employers that they are worthy of '*keeping on'*. For some workers there are likely fears that if they disclose mental health issues, they will lose a valued job position on the worksite. Interestingly, within the short-term job insecurity has been linked to higher levels of performance, due to the need for workers to demonstrate their commitment to an organisation and secure future work (D'Souza et al., 2006). However, within the long-term job insecurity has been linked to several negative outcomes including depression, anxiety, low job satisfaction, and family stress (D'Souza et al., 2006; Sverke & Hellgren, 2002).

Help-Seeking Models

Hypothesis two specified a mediation model testing whether attitudes towards psychological help-seeking would mediate the relationship between gender role conflict and help-seeking intentions. Consistent with previous research, full mediation effect was

reported, with attitudes towards psychological help-seeking mediating the relationship between gender role conflict and help-seeking intentions (Smith et al., 2008). Findings from the mediation model suggests that attitudes towards psychological help-seeking could be an important area to target to improve men's help-seeking behaviour. This finding is promising, given that research has identified several areas of potential intervention for changing attitudes towards help-seeking. For example, psychoeducation, previous help-seeking experiences, or knowing someone with mental health issues are all factors which have shown to influence positive attitudes towards seeking help (Dew et al., 2005; Vogel et al., 2007).

The TPB was used as a framework to investigate individual and social factors associated with help-seeking intentions. Structural Equation Modeling (SEM) was used to investigate how well the predicted model fitted the observed data, and examine how attitudes towards help-seeking, gender role conflict, perceived stigma, prior help-seeking experiences, and barriers to treatment influence intentions to seek help among construction workers. Results indicated that the SEM provided a poor fit to the data. Individual pathways were analysed. Within the predicted model, attitude towards help-seeking was the strongest predictor of help-seeking intentions. Inconsistent with predictions, results indicated that perceived stigma and barriers to treatment were non-significant predictors of help-seeking intentions. In regard to supplementary variables used within the TPB model, consistent with predictions gender role conflict was a significant negative predictor of help-seeking intentions (O'Neil, 2000). Results also indicated that prior positive experiences of working with a counsellor and/or psychologist was a significant predictor of help-seeking intentions within the TPB model.

Results of the study indicated that predictor variables assessed within the TPB model explained 29% of the variance in men's help-seeking intentions. The result compared to the body of TPB research indicates a relatively low proportion of explained variance. For

example, meta-analysis research on a variety of health-related behaviours have indicated that predictor variables within the TPB model have an explained mean variance of 39% (Armitage & Conner, 2001). However, it is important to highlight that no two studies are the same within the TPB research, with differences in how predictor variables are measured, population characteristics, and study designs. Therefore, comparison with other studies need to be made with caution. Key differences between the present study and other research is the present study did not measure internal perceptions of behavioural control (self-efficacy) or descriptive norms. Additionally, the present study is the first study to use the TPB among construction workers, therefore comparisons with other studies are limited. Where possible, the discussion will compare findings with other studies which have used the TPB to predict help-seeking intentions among men from different demographics.

The present study replicated and extended the findings of Smith et al. (2008) by exploring the influence of additional variables within the TPB including perceived stigma, barriers to treatment, and previous help-seeking experiences. Similar with the findings of the present study the TPB model accounted for 29.6% of the variance of men's help-seeking intentions, with attitudes towards help-seeking a significant predictor within the TPB model. However, findings from the present study indicated that with the addition of other variables (perceived stigma, barriers to treatment, and previous help-seeking experiences), there was no significant change in variance explained by the predictor variables within the TPB model. Findings are consistent with Britt et al's (2011) study who used the TPB model to explore help-seeking variables among male military veterans. Similar to the present study design, Britt et al. (2011) used the Perceived Stigma and Barriers to Care for Psychological Problems Scale (PSBCPPS; Britt et al., 2008), and open-ended questions to collect data from men. Consistent with findings from the present study attitudes towards help-seeking was the strongest predictor of help-seeking intentions among veterans, with perceived stigma and

barriers to treatment non-significant predictors of help-seeking intentions within the TPB model. Taken together these findings suggest that men's attitude towards working with a counsellor and/or psychologist is an important factor which could influence men's decision to access support for mental health issues.

Results indicated perceived behavioural control was a non-significant predictor of help-seeking intentions within the TPB model. Contextualising this finding is difficult due to the wide range of definitions of perceived behavioural control within the TPB literature (Rhodes & Courneya, 2003). Prior studies have conceptualised perceived behavioural control as a single construct, while more recent research have defined perceived behavioural control as having two distinct constructs, with internal (self-efficacy) and external (perceived environmental barriers) perceptions of behavioural control (Hyland, 2012; Povey et al., 2000). Studies have shown the two different components of perceived behavioural control contribute to different levels of variance within the TPB model, with self-efficacy shown to have greater influence on help-seeking intentions compared to perceived barriers to treatment (Hyland, 2001). The present study did not measure self-efficacy; however, findings of the study support previous research which has shown that perceived barriers to treatment is a non-significant predictor of help-seeking intentions within the TPB model (Britt et al., 2011).

Although perceived barriers to treatment did not directly influence men's intentions to seek help, findings indicated there was a significant negative relationship between perceived barriers to treatment and gender role conflict. Men with higher levels of gender role conflict (greater endorsement of masculine gender roles) reported increased barriers to accessing mental health services. Compared to structural barriers to treatment, it is possible the social environment creates the greatest barriers for some men to access support. On many construction sites, EAP services are likely available; however, processes to access these services could prevent some men from accessing the support (Gammie, 1997). To access

these services, workers need to communicate with site managers to explain work absence and disclose personal information related to mental health. These processes are likely incongruent with masculine gender roles within the work environment, which require men to portray strength, maintain control and not display signs of vulnerability amongst other men (Milner et al., 2017).

The present study explored an extended version of the TPB model by exploring the influence of prior help-seeking experiences on help-seeking intentions. Consistent with previous research findings indicated that previous help-seeking experiences was a significant predictor of help-seeking intentions (Kelly & Wright, 2007; MacKenzie et al., 2008). It is difficult to contextualise this finding within New Zealand, as there is a lack of studies which has explore mental health seeking behaviour rates among men. The majority of men who reported past help-seeking experiences sought help from a counsellor or psychologist and reported positive experiences of the service. This finding is very promising given past literature suggests that some men are reluctant to engage in talking-based therapies (O'Connell & Clare, 2004; Russell et al., 2004). Prior positive experiences of seeking help for mental health issues has been identified as a key facilitator of help-seeking intentions and behaviour (Carlton & Deane, 2000; Deane et al., 1999; Rickwood et al., 2005; Schomerus et al., 2009). Within the present study, prior positive experiences were also linked to positive attitudes and decreased stigma associated with seeking help. The implications of this finding are that men with lived experience of working with a counsellor and/or psychologist find the services helpful and are more likely to seek help from the service within the future.

In the present study, 42.9% of the sample had sought help for a mental health difficulty within the past. It is difficult to contextualise this result due to a lack of research which has explored previous help-seeking behaviour among construction workers. Findings are similar to help-seeking rates reported within the 2016/2017 New Zealand Mental Health

Survey, with results indicating mental health help-seeking rates were 41% among men over a 12-month period (Ministry of Health, 2018). However, caution needs to be taken when comparing help-seeking rates between these two studies, due to the present study not specifying a time period of previous help-seeking behaviour. Deane et al (1999) explored previous help-seeking behaviour among male New Zealand prison inmates (N = 111). Deane et al (1999) found that 68% of the sample had sought help from a counsellor or psychologist in the past. One possible explanation for the higher rates of help-seeking reported within Deane et al's (1999) study could be due to counselling and psychological services routinely used as part of parole and rehabilitation processes within the justice system.

Men's Help-Seeking Choices

Much of the previous research has explored the relationship between gender role conflict and men's intentions to seek help from traditional mental health services, such as counselling and psychology services. Consistently research has found a negative relationship between gender role conflict and men's intentions to seek help from these services (Blazina & Watkins, 1996; Good & Wood, 1995). Despite some men's reluctance to engage in talking based therapies few studies have explored how service can be adapted to engage men into some form of mental health support. The present study filled this gap within the literature by exploring men's perceptions of seeking help from shoulder to shoulder interventions. These services combine activities, such as building or exercise, with elements of psychoeducation. Shoulder to shoulder interventions explored within the present study included workshops, support groups, and sports-based mental health interventions. The present study also explored men's perceptions of seeking help using mental health apps.

Contrary to hypothesis 7, there was a significant negative relationship between gender role conflict and men's intentions to seek help from alternative help-seeking sources. Greater adherence to masculine gender roles was associated with a decreased willingness to seek help

from workshops, support groups, and sports-based mental health intervention. These findings are consistent with Blazina and Mark's (2001) study which found greater adherence to masculine gender roles was associated with a decreased willingness to seek help from workshops, support groups, and talking based therapy. Consistent with hypothesis 8, there was a significant negative relationship between gender role conflict and intentions to seek help from traditional help-seeking sources. This finding is consistent with previous research which have found greater adherence to masculine gender roles to be associated with lower help-seeking intentions, and behaviour among men (Addis & Mahali, 2003; O'Brien et al., 2005).

Within the present study, not only was there a significant negative relationship between gender role conflict and intentions to seek help from traditional and alternative help-seeking sources; higher levels of gender role conflict were linked to increased levels of depression, perceived stigma, and barriers to treatment. Given the number of negative outcomes gender role conflict was linked to within the present study, it raises the question of how can mental health support be delivered to men who strongly subscribe to masculine gender roles? One of the challenges of trying to support men who subscribe to traditional masculine gender roles, is they are less likely to talk to co-workers about mental health conditions or display any signs of distress (McKenzie et al., 2018). One approach is to increase opportunities for men to have conversations about mental health within the workplace. If men can observe similar men displaying vulnerability, it is likely they will feel less judged, and be open to discussing personal experiences of distress. Consistent with this view research has indicated men are more likely to seek help for mental health issues if they have a friend or family member who has sought help in the past (Rickwood et al., 1994). By increasing 'safe' platforms for men to listen and talk about mental health issues, it is possible

that more men will come forward to seek help for their mental health issues which they may have been suppressing for several years.

Consistent with hypothesis ten there was a significant positive relationship between attitudes towards help-seeking and intentions to seek help from alternative help-seeking sources. This finding indicates that positive attitudes are associated with increased intentions to seek help from workshops and sports based mental health interventions. As highlighted by one participant's response, for some men, seeking help is about doing, rather than talking - *Men are not big talkers...more doers. I think we need time to process information so sitting and talking about the same thing for an hour is just not as productive as small touch points interspersed with other things"*. Shoulder to shoulder interventions such as workshops and sports based mental health interventions provide a space for men to learn and talk about mental health issues within a male friendly environment. Furthermore, it is possible, with time and within a familiar environment, men develop greater trust amongst other men to discuss personal issues (Golding, 2011).

Consistent with hypothesis eleven there was a significant positive relationship between attitudes towards psychological help-seeking and men's intentions to seek help from traditional help-seeking sources. This finding indicates positive attitudes towards help seeking are associated with an increased willingness to seek help from traditional based support services, such as counselling, psychology, and GP services. Consistent with previous research seeking help from a GP was the most preferred option among men within the study (Schlichthorst et al., 2016). GP services operate as a gateway for men to access further support. However, there is evidence that GPs are less likely to assess for depression among men compared to women (Dew et al., 2005; Winkler et al., 2006). Short consultations provide limited 'space' for self-disclosure and leave little time for GPs to conduct a thorough assessment of men's mental health needs (Oliffe & Phillips, 2008). Additionally, compared to

women, when men do attend a GP appointment, they ask fewer questions and use less time (Hunt, 2011). Taken together, if GPs are to play an influential role in supporting construction workers to access mental health services, it is important education is provided to GPs on the negative impact of traditional masculine gender roles, in particular how they create constraints for men to ask for help, and display vulnerability (Connell, 2001).

Men Helping Other Men

Improving men's ability to help other men to seek help for mental health issues could be a key step towards improving help-seeking behaviour within the New Zealand construction industry. Much of the research has focused on who refers men to mental health services, with the majority of men being referred to mental health services by a female partner or relative (Cusack et al., 2004; Vogel et al., 2007). The present study was interested in how to improve men's ability to help other men to seek help for mental health issues. Questions within the study were designed to explore men's perceptions of recommending different types of help-seeking services to a work colleague. Men were also asked about different approaches to encourage a co-worker to seek help for mental health issues.

Inconsistent with predictions of hypothesis eight, there was a significant negative relationship between gender role conflict and recommending alternative help-seeking sources. This finding suggests that men who adhere to masculine gender roles are less likely to recommend that a work colleague seek help from workshops, sports-based mental health interventions, and support groups. At closer inspection of men's preferences of recommending different types of help-seeking sources, recommending that a work colleague seek help from support groups was the least preferred option among men. Not only did men have lower preferences of recommending support groups but seeking help from support groups was the least preferred option for men to access support for themselves. These findings are consistent with previous research which shown greater adherence to masculine

gender roles is linked to negative attitudes and decreased willingness to access support from men's support groups (Blazina & Marks, 2001). Support groups involve talking about emotions and being vulnerable, processes which are likely incongruent with the 'harden up' attitude towards mental health held by some men within the construction industry (Bryson & Duncan, 2018).

For hypothesis nine, it was predicted there would be a negative relationship between gender role conflict and recommending traditional mental health services. Contrary to predictions, findings indicated that there was no statistically significant relationship between gender role conflict and men's intentions to recommend traditional help-seeking sources. These findings are consistent with previous studies which have shown non-significant to weak relationships between gender role conflict and men's willingness to refer other men to traditional help-seeking sources, such as counselling and psychology services (Berger et al., 2005). Although there was no relationship between gender role conflict and men's willingness to recommend traditional help seeking sources, qualitative data indicated that some men within the study were open to discussing personal experiences of dealing with mental health issues with a colleague as a way to encourage help-seeking. As highlighted by one participant's response - *"Explain how it has been helpful to myself and that everyone needs support at times in life and you are not a failure because you choose to get some support"*. Talking about personal experiences of mental health helps normalise the issue of mental health among men. Having knowledge that a close workmate has sought help for mental health issues could provide some men with 'permission' to talk about mental health issues, and to seek help from a counsellor or psychologist. As highlighted by one participant's response help-seeking was framed as normal, and not a sign of weakness - "*Try and relate to them on a personal level and explain that most people go through rough times and it is nothing to be ashamed of*". The benefits of normalising mental health issues within

the work environment include increasing empathy towards mental distress, challenging myths surrounding mental health disorders and creating a work environment that supports and promotes mental health within the work environment (Gulliver et al., 2010).

Consistent with hypothesis twelve there was a significant positive relationship between attitudes towards help-seeking and recommending alternative help-seeking sources to a work colleague. This finding indicates that there is a positive link between one's attitude and willingness to recommend that a work colleague access support from alternative help-seeking sources, such as workshops and sports based mental health interventions. Workshops can be used to address myths surrounding mental distress, provide information on the prevalence of mental health conditions, and educate men on the different types of support services available (French & Hernandez, 2013). Compared to psychology and counselling services which take place off-site within the therapist office, workshops can be delivered within the work environment. One of the advantages of having regular workshops within the work environment is they provide an opportunity for large groups of men to learn and talk about mental health; challenging the stereotype that mental health is never talked about amongst men within the work environment (French & Hernandez, 2013).

Consistent with hypothesis thirteen, there was a significant positive relationship between attitudes towards help-seeking and recommending traditional support services. This finding is consistent with previous research which has found positive attitudes towards help-seeking are related to an increased willingness to talk about mental health issues and refer a friend to mental health services (Vogel et al., 2005; Vogel & Wester, 2014). This finding highlights the importance of interventions targeting attitudes towards help-seeking, such as education on the different types of mental health issues, the effectiveness of talking based therapies, and information which challenges the view that help-seeking is a sign of weakness.

Responses from the open-ended questions indicated that men identified several strategies to encourage a work colleague to access support for mental health issues. Starting a conversation with a work colleague was identified as a key strategy to encourage a co-worker to seek help for mental health issues. Starting a conversation can be a powerful way of helping someone struggling with mental health issues. It is also a powerful way of challenging stigma and increasing the norm of talking about mental health issues within the work environment (Gulliver et al., 2010).

Talking to a work colleague outside of the work environment was identified as a strategy to encourage a co-worker to access support for mental health issues. Some suggestions included having a 'chat' over a beer, taking the person out for a coffee, and finding a space away from the work environment to talk. Consistent with previous research, this finding suggests men value confidential pathways to talk about mental health issues with other men (Rochlen et al., 2004). It also suggests that men are aware of the potential consequences of talking about mental health issues within the workplace and recognise the importance of providing a 'safe' space for other men to talk about mental health issues.

Discussing personal experiences of dealing with mental health issues with a colleague was identified as a way to encourage a work colleague to seek help. As one participant noted *"Explain how it has been helpful to myself and that everyone needs support at times in life and you are not a failure because you choose to get some support".* Talking about personal experiences of mental health helps normalise the issue of mental health among men. It also provides evidence to challenge longstanding views of how men should think and act when it comes to addressing mental health issues (e.g. men should not display weakness or talk about mental health issues). Having knowledge that a close workmate has sought help for mental health issues could also give some men 'permission' to talk about mental health issues and seek help from a counsellor or psychologist. Consistent with this view research has indicated

that men are more likely to seek help if they know of a friend or family member who has sought help for mental health issues within the past (Rickwood & Braithwaite, 1994;Vogel et al., 2007). One way to increase men's ability to help other men is to create more platforms for men to have conversations and share personal experiences of dealing with mental health issues.

Findings supported the view that men do have the capacity to help other men within the work environment to seek help for mental health issues. The majority of men within the study were able to identify a wide range of adaptive ways of encouraging workmates to seek help for mental health issues. However, it is likely there is an overarching fear among some men that they would be viewed as weak or not coping by other men on the construction site if they spoke out about mental health issues. As can be highlighted by one participants response there are also likely fears that talking about mental health issues would have negative repercussions on their employment situation - *"Losing a leadership role. Especially for my case, if I was to tell someone I was having problems with mental health, I would be treated with caution and most likely not operate machinery. I feel like there is a stigma around mental health affecting life decisions and holding you back"*. Efforts need to be taken to ensure 'safe' platforms are created for men to discuss mental health issues within the work environment. Having a social network that supports help-seeking and rewards conversations about mental health is a key step towards improving the mental health culture of the construction industry.

Study Limitations and Further Research

The results of the study need to be considered within the context of the research limitations. Results of the study indicated that predictor variables assessed within the TPB model explained 29% of the variance in men's help-seeking intentions. The result compared to the body of TPB research indicates a low amount of variance (Armitage & Conner, 2001).

However, it is important to highlight the study did not measure two aspects of the TPB (descriptive norms and self-efficacy) which could have resulted in the lower overall variance of predictor variables found within the study. Future research including these variables would provide a better understanding as to whether the TPB has utility in predicting help-seeking intentions among construction workers.

Another limitation of the study was the definition of the outcome variable assessed within the TPB model. Ajzen (2011) recommends that outcome variables assessed within the TPB model should specify a context and time period for the behaviour to occur. The outcome variable within the present study was men's intentions to seek help from different help-seeking sources. Men were asked to imagine that they were experiencing mental health difficulties, and how they would respond within the situation. This definition was used because the present study was not interested in assessing help-seeking behaviour over a specific time period. Rather the focus was on identifying individual and social variables which could facilitate or inhibit help-seeking intentions. The potential limitation of the definition of the outcome variable is the lack of specificity related to the time period in which the help-seeking behaviour would occur. Furthermore, because men had to imagine experiences of mental distress, it is unclear as to whether men's intentions would translate into help-seeking behaviour. How men would respond to an imagined situation of experiencing mental health difficulties compared to actual experiences of mental distress are likely significantly different. Further research would benefit from using a longitudinal research design to better understand the influence of help-seeking variables overtime, in particular a better understanding on whether the strength of different help-seeking variables change as the individual gets closer to making a decision to access mental health support. This type of information could inform targets for clinical intervention, which could be used to

support men to overcome barriers to accessing support at different stages of the help-seeking journey.

The study used a cross-sectional research design. It is important to highlight that causality cannot be determined from the results of the study. Rather, the results provide a 'snapshot' of men's mental health within the construction industry. One of the limitations of using a cross-sectional research design is that no inferences can be made on how variables assessed within the study could change over time, and from context to context. For example, levels of gender role conflict are not fixed, rather dynamic, changing depending on the context and the demands of the social situation (Johnston & Morrison, 2007; Wetherell & Edley, 1999). Another limitation of the cross-sectional research design is the potential of additional predictors of help seeking that were not assessed within the present study. For example, further research would benefit from exploring the influence of one's social network, mental health status, levels of mental health literacy, and education level on men's help-seeking intentions.

The use of self-report measure could have limited the validity and reliability of the findings. Self-report data can reduce the reliability of findings due to participants responding in a socially desirable way (Crutzen & Göritz, 2010). For some men within the study, it is possible that adherence to masculine gender roles could have influenced the underreporting of barriers to treatment and depressive symptoms. Within the context of men responding to questions about seeking help for mental health issues, admitting that one is faced with barriers to seeking help and experiencing depressive symptoms could be perceived as a sign of weakness or failure by some men. Admitting that one needs help and disclosing mental health issues are incongruent with masculine gender roles such as independence, not displaying vulnerability, and strength (Cleary, 2012; Courtenay, 2000).

In the present study, 42.9% of the sample had sought help for a mental health issue within the past. It is difficult to contextualise this finding as there is a lack of research which has collected data on prior help-seeking behaviour among men within the New Zealand construction industry. There is also a lack of research which has explored help-seeking rates among men within the New Zealand general population. Further research exploring past help-seeking behaviour will be important, as it will allow researchers to track rates of help-seeking behaviour over time.

Despite the diversity of the sample, the findings are not generalisable to the overall population of male construction workers. Further research is required to understand the mental health needs of different occupations within the construction sector. Prior studies have indicated that labourers and machine operators have higher rates of depression and suicide compared to other job roles within the construction sector (Burki, 2018). Within the SiteSafe (2019) coronial study, the majority of participants who died by suicide were builders (Bryson et al., 2019). This could reflect that builder is a very common job in the construction industry. However, little is known why different subgroups within the construction are more vulnerable to poor mental health outcomes. More research is required to better understand which specific job roles and age groups within construction are more vulnerable to mental health issues, and how resources can be developed and delivered to specific job roles within construction.

The majority of participants identified as New Zealand European, limiting the generalisability of findings to men from different cultures. The construction sector is one of the largest employers of New Zealand men, who come from a wide range of cultures. It is important to take a cross-cultural perspective to understand how to best support men's help-seeking behaviour. The majority of studies on men's help-seeking behaviour within the construction industry have been conducted on western populations, and have used

biopsychosocial conceptualisation of help-seeking, such as receiving support through talking-based therapies or medication. However, help-seeking behaviour is influenced by cultural values and beliefs, which are influential in shaping perceptions of health (McNeil, 2009; Na et al., 2016). For many cultures, such as Asian and Māori, holistic models of health provide a better understanding of help-seeking behaviour (McNeil, 2009; Na et al., 2016). Future research is required to better understand the mental health needs of men from different cultures within construction, and how help-seeking services can be designed and delivered in a culturally responsive and sensitive manner.

There is a lack of research which has explored help-seeking among Māori men within the construction industry. The construction industry is the fourth largest employer for Māori, with approximately 19,000 Māori men working in the sector (MBIE, 2018). Research has indicated, among Māori men contact with mental health services is lower than non-Māori, and when Māori men do seek help, they are more likely to seek help from a GP (Wells et al., 2006). It is possible that opportunities exist within the construction work environment to support the mental health needs of Māori men. However, further research is required to better understand how culturally responsive services can be delivered.

Recommendations

Workers within the study reported that there was a lack of accessible and confidential help-seeking pathways available to construction workers. More mental health services need to be made available to men working within the construction industry. Information to access EAP services could be made available to workers on construction sites, or this information could be sent to workers confidentially before a work project commences. Providing regular mental health workshops and seminars on different topics of mental health would provide a platform for men who would otherwise not go to a counsellor or psychologist. Workshops have been shown to increase mental health literacy, challenge stigma, and increase help-

seeking behaviour among men (Seaton et al., 2017). Workshops also provide opportunities for men to observe other men discuss topics related to mental health, which could challenge the norm that men do not talk about mental health with each other.

Efforts need to be taken by managers and site leaders to ensure workers feel comfortable requesting mental health support. Workers within the study reported concerns of requesting time off to attend mental health appointments due to fears of being treated indifferently by management and other work colleagues. These findings highlight the need for construction companies to have confidential help-seeking pathways available, specifically work policies where workers can access support without a fear of being judged negatively by an employer. Additionally, because the work location is constantly changing for construction workers, workers can often find themselves working within remote locations where access to mental health services can be difficult. Therefore, construction companies need to ensure that contracted EAP services offer appointments which are outside of workhours, or within the weekend.

Mental health literacy is an important tool to empower men to better understand mental health conditions. Within the present study there was a desire among men to learn more about mental health, and the different types of help-seeking options available. To increase the dissemination of knowledge it will be important for managers and site leaders to undergo basic training in a variety of different mental health topics such as: the different types of mental health conditions, signs that a worker is under distress, how to support a worker to access support, the role of different help-seeking services (e.g., secondary vs primary mental health services) and scripts for discussing mental health within health and safety meetings.

There was a desire among some men within the study to utilise mental health apps to increase knowledge associated with mental health. Because the majority of workers own mobile phones, mental health apps can be used to target a wide audience. They can also be a useful tool for men to access distress tolerance skills and upskill knowledge in a wide range of areas related to mental health. Mental health apps do not replace counselling or psychology services; however, they can be used as a 'bridge' for some men to learn more about mental health before accessing mental health services. Currently there are a wide range of mental health apps available; however, few have been designed specifically for men. More research is required to explore apps which would be suitable for men working within construction.

Long working hours and work pressure were the most frequently reported stressors among men within the study. Without addressing or minimising long work hours and work pressure men working within construction will continue to be vulnerable to mental distress. These findings highlight the need for organisations to take a proactive approach towards supporting workers mental health within the workplace. Although increasing help-seeking options, such as making EAP services more readily available for workers is a step within the right direction. These efforts could be considered tokenistic if efforts are not made to create healthier working conditions for workers, such as reducing work pressure, and the requirement for long working hours. Proactive steps could include having realistic schedules for workers, policies to protect workers from overworking, and ensuring managers have the knowledge and skills to support staff that are displaying signs of fatigue.

Findings from the study indicated that masculine gender roles could create barriers for men to seek help and for men to help other men access support. Rather than challenge masculine gender roles among workers, managers could role model and promote positive aspects of masculinity within the workplace. This could include having a conversation with

workers about the courage to seek help, the importance of 'reaching out' to a work colleague who is stressed, and the promotion of wellbeing tools within daily work practices. Education could also be delivered to men on the different aspects of masculine gender roles, and how sometimes they can have a negative impact on men's willingness to talk about mental health issues.

Conclusion

The present study is the first of its kind to explore men's perceptions of seeking help for mental health issues within the New Zealand construction industry. In general findings from the study supported the view that men held positive attitudes towards seeking help from a counsellor or psychologist. Men also held positive attitudes towards seeking help from workshops, sports based mental health interventions, and using mental health apps to access information and support. Despite men's openness to utilising support services results indicated that masculine gender roles could create significant barriers for some men to access support within the construction industry. Reports from the study indicated that there was an awareness of masculine stereotypes, and how they *play out* within the workplace, such that men are supposed to display strength and *push* through mental health difficulties. There was also an awareness of the restricted and unrealistic nature of masculine gender roles and how they prevent men from seeking help and talking with other men about mental health issues within the work environment.

For many men within construction it is likely less about the type of help offered that prevents them from seeking help, it is the journey towards accessing mental health services that is the most difficult. To begin the help-seeking process men need to identify mental health symptoms; a task which men are less proficient in compared to women due to differences in gender socialisation (Cotton et al., 2006). Once a problem is recognised men have to overcome the greatest obstacle of them all; ingrained cultural messages which

prescribe ways of thinking and behaving for men, such as men must be strong and self-reliant, and that help-seeking is associated with failure. Once men have made it this far on the help-seeking journey, there are still several obstacles which they must overcome to access mental health support. Key barriers identified within the study included time, cost, and having a conversation with a site manager to leave the worksite to access mental health support. The present study identified several areas of opportunity to support men along the help-seeking journey. Areas for intervention included: challenging negative aspects of masculinity within the workplace, including mental health conversations within daily work practices, and creating visible and accessible help-seeking pathways.

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Appendix A: Australian and New Zealand Standard Classification of Occupations (ANZSCO)

ANZSCO Group Code	ANZSCO Occupation Code	Occupation
1331		*Construction Managers*
	133111	Construction Project Manager
	133112	Project Builder
312		*Building and Engineering Technicians*
	3121	Architectural, Building and Surveying Technicians
	3122	Civil Engineering Draftspersons and Technicians
	3123	Electrical Engineering Draftspersons and Technicians
	3124	Electronic Engineering Draftspersons and Technicians
	3125	Mechanical Engineering Draftspersons and Technicians
	3126	Safety Inspectors
	3129	Other Building and Engineering Technicians
33		*Construction Trade Workers*
	312	Building Associate, Building Construction Supervisor
	3311	Bricklayers and Stonemasons
	3312	Carpenters and Joiners
	332	Floor Finishers and Painting Trades Workers
	3321	Floor Finishers
	3322	Painting Trades Workers
	3223	Structural Steel and Welding Trades Workers
	333	Glaziers, Plasterers and Tilers
	3331	Glaziers
	3332	Plasterers
	3333	Roof Tilers
	3334	Wall and Floor Tilers
	334	Plumbers
34		*Electrotechnology and Telecommunications Trades Workers*
	341	Electricians
342		*Electronics and Telecommunications Trades Workers*
	3423	Electronics Trades Workers
	3424	Telecommunications Trades Workers
71		*Machine and Stationary Plant Operators*
	711	Machine Operators
	712	Stationary Plant Operators
82		*Construction and Mining Labourers*
	821	Construction and Mining Labourers

8211	Building and Plumbing Labourers
8212	Concreters
8213	Fencers
8214	Insulation and Home Improvement Installers
8215	Paving and Surfacing Labourers
8216	Railway Track Workers
8217	Structural Steel Construction Workers
8219	Other Construction and Mining Labourers

Note. Construction industry job categories defined according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO). Retrieved from Full Text Search | ANZSCO INFORMATION (ozhome.info)

Appendix B: Online Survey

Information Sheet

My name is Andrew Walmsley and I am conducting this research as part of my Clinical Psychology Doctorate training with the School of Psychology at the Massey University, Wellington, New Zealand. I am seeking assistance for a study which looks at men's help-seeking behaviours for mental health issues within the construction industry.

Background
Men currently seek psychological help at far lower rates than women. By determining what factors might facilitate help-seeking in men, it is hoped that we can improve rates of men's help-seeking within the construction industry.

Who can participate?
You need to be male, between 18-65 years old, and currently working within the New Zealand construction industry. You need to be able to read and understand English.

Aim
The project aims to find out what factors influence men to seek help for psychological distress. In particular, the study is interested in understanding any barriers which could be preventing men from seeking psychological support within the construction industry.

What will participation involve?
You will fill out an anonymous online survey. The survey will take approximately 10-15 minutes to complete. Before you decide if you would like to take part, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully. If there is anything that is not clear or you would like more information, please do not hesitate to contact us using the details below/

Participation in this study is entirely voluntary and you can cease involvement at any time. You may choose to skip any questions or withdraw from the study at any stage.

How will data be managed?
You will not be asked to provide your name in this survey. You will be asked to provide your email address if you wish to receive a summary of findings or if you would like to go into the draw to win a prize, but this information will be collected in a separate questionnaire at the end of the survey so that your email address will not be stored in the same database as your responses.

The data we collect will initially will only be accessible by the project team. Once the data has been analyzed, we will ensure that any information in the dataset that might indicate who you are has been removed, and then post the data in an online database. Other researchers and members of the public will be able to obtain the online database.

Any identifiable data you provide (e.g., email address) will be deleted as soon as the project

is complete, estimated January 2021. The de-identified data will be stored indefinitely.

If you would like a summary of the results of the study upon completion there will be an option to leave an email or physical address in which the lead researcher can send through the results. Please also leave your email if you would like to go in the draw to win one of fifty $50.00 hardware store vouchers.

PLEASE NOTE: If any parts of the survey cause distress, you are encouraged to seek psychological support. The first option would be to talk to your local GP. Alternatively, you could contact other psychological support organizations, such as Lifeline 0800 543 354 or Mental Health Helpline 0800 111757 or free text 1737. If you would like to book an appointment with a counsellor please visit www.talkingworks.co.nz.

Who may I contact if I have questions about the research project?

If you would like more information about the **research** before you decide take part, or after completing the research please contact:

Researcher
Andrew Walmsley
School of Psychology
Massey University
Wellington
New Zealand
Email: Andy.Walmsley.1@massey.ac.nz

Primary project supervisor
Dr John Fitzgerald
School of Psychology
Massey University
Wellington
New Zealand
Phone: +64 4 801-5799 ext 63620
Email: J.M.Fitzgerald1@massey.ac.nz

Secondary project supervisor
Dr Matt Williams
School of Psychology
Auckland Campus,
Massey University.

Phone: +64 9 414-0800 ext 43117
Email: M.N.Williams@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application SOB 18/59. If you have any concerns about the conduct of this research, please contact Dr Gerald Harrison, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 356 9099 x 83657, email humanethicsouthb@massey.ac.nz .

Demographics and General Information

Consent

I have read and understood the information sheet for this study and consent to collection of my responses.
(Please click on the 'Yes' choice if you wish to proceed.)

- ○ Yes
- ○ No

Descriptive and general information

How old are you?

- ○ Age in years

What is your gender?

- ○ Male
- ○ Female
- ○ Non-binary
- ○ Transgender
- ○ Other _____

Which ethnic group do you belong to? *(If your answer includes more than one ethnic group, please indicate which one you consider to be your primary ethnicity).*

- ○ New Zealand European
- ○ New Zealander
- ○ Māori
- ○ Samoan
- ○ Cook Island Māori
- ○ Tongan
- ○ Asian
- ○ Indian
- ○ British
- ○ Middle Eastern
- ○ Australian
- ○ American
- ○ African
- ○ Other _____

What is your job description?

- ○ laborer
- ○ carpenter
- ○ electrician
- ○ heavy equipment operator
- ○ welder
- ○ Builder
- ○ mason plasterer
- ○ plumber
- ○ roofer
- ○ pipefitter
- ○ sheet metal worker
- ○ steel worker
- ○ engineer
- ○ architect
- ○ other _____

Where do you work?

- ○ North Island
- ○ South Island
- ○ Other _____

Where in the North Island?

- ○ Auckland
- ○ Dannevirke
- ○ Dargaville
- ○ Gisborne
- ○ Hamilton
- ○ Hastings
- ○ Kaitaia
- ○ Kerikeri
- ○ Levin
- ○ Masterton
- ○ Napier
- ○ New Plymouth
- ○ Paihia
- ○ Palmerston North
- ○ Paraparaumu
- ○ Rotorua
- ○ Taumarunui
- ○ Taupo
- ○ Tauranga
- ○ Te Kuiti

- ○ Thames
- ○ Tokoroa
- ○ Wellington
- ○ Whakatane
- ○ Whanganui
- ○ Whangarei
- ○ Whitianga
- ○ Other _____

Where in the South Island?

- ○ Alexandra
- ○ Ashburton
- ○ Blenheim
- ○ Christchurch
- ○ Dunedin
- ○ Gore
- ○ Greymouth
- ○ Milford Sound
- ○ Motueka
- ○ Mount Cook
- ○ Nelson

- ○ Oamaru
- ○ Queenstown
- ○ Reefton
- ○ Other _____

Do you manage or supervise people?

- ○ Yes
- ○ No

How long have you been working in the construction industry?
Please include: Number of years and months working within the construction industry.

- ○ Years _____
- ○ Months _____

Men's preferences for seeking help from different help seeking sources & men's preference to recommend different help-seeking sources to a work-colleague.

If you were having issues with your mental health (for example, feeling depressed, very low, anxious, and/or having suicidal thoughts).

How likely is it that **YOU** would seek help from the below support service?
AND
What is the likelihood of you encouraging a **WORK-COLLEAGUE** to seek help

from the below support service?

Please indicate your response by selecting the option that best describes your intention to seek help from the listed help source.

PLEASE NOTE: The support service may/or may not be available at your work-site. Please rate your response based on your preference, rather than the availability of the support service.

Mental Health Apps

Provide practical strategies on how to cope with mental distress, such as when feeling low and unmotivated, anxious, and/or difficulties with sleeping. Strategies could include ways to change negative thinking, relaxation exercises, and tips to make positive changes in life.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Mental Health Support in Sport and Exercise

While playing a sport (e.g. rugby, boxing, tennis etc.) or during physical exercise (e.g. group fitness classes) tips are provided to men on how to cope with mental health issues. Tips could

include ways to change negative thinking, relaxation exercises, and tips to make positive changes in life.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Mental Health Workshop

Provide men with the skills and knowledge to cope with some of life's challenges. Workshop topics could include managing financial stress, goal setting, tips for dealing with challenging relationships, and tips to maintain good overall health.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Men's Support Groups

Provide men with the knowledge and skills to deal with mental health issues, such as depression, anxiety, and alcohol/drug addiction. Support groups also provide an opportunity

for men to share their story and help other men having similar challenges with their mental health.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Psychologist
Psychologists provide talking therapies, which can help you work out how to deal with negative thoughts and challenges, and make positive changes in your life.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Work-Place Counselling (EAP counselling)
Provide support for a wide range of issues including: drug/alcohol addiction, career advice, and strategies to deal with work stress. Counsellors provide talking therapies, which can help you work out how to deal with negative thoughts and challenges and make positive changes in your life.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Medical Doctor- General Practitioner (GP)
GP's provide general advice on managing and seeking support for mental health issues. This includes making a referral to mental health services, such as seeing a counsellor or psychologist. GPs can also prescribe medication for mental health issues.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this service	○	○	○	○
Likelihood of recommending this type of service to a **WORK-COLLEAGUE**	○	○	○	○

Church leader/ Rabbi/ Kaumatua/ Elder
Guidance, advice, and support provided from a church leader or elder from within the community.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from a church leader/Rabbi/Kaumatua/Elder.	○	○	○	○
Likelihood of recommending this type of help to a **WORK-COLLEAGUE**	○	○	○	○

Over the last 2 weeks, how often have you been bothered by any of the following:

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things?	○	○	○	○
Feeling down, depressed, or hopeless?	○	○	○	○
Trouble falling or staying asleep, or sleeping too much?	○	○	○	○
Feeling tired or having little energy?	○	○	○	○
Poor appetite or over eating?	○	○	○	○
Feeling bad about yourself – or that you are a failure or have let yourself or you family down?	○	○	○	○
Trouble concentrating on things, such as following instructions or focusing on a work task?	○	○	○	○
Feeling restless and/or agitated?	○	○	○	○
Thoughts that you would be better off dead or of hurting yourself in some way?	○	○	○	○

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- ○ Not difficult at all
- ○ Somewhat difficult
- ○ Very difficult
- ○ Extremely difficult

Open ended question:

Tell me about some of the things that stress you within your job.

_____

_____

_____

Read each statement carefully and indicate your degree of agreement using the scale below.

	Disagree	Partly disagree	Partly agree	Agree
I would consider working with a psychologist or counsellor in the future.	○	○	○	○
A person with mental health problems is not likely to solve it alone; he is likely to solve it with professional help from a psychologist or counsellor.	○	○	○	○
Considering the time and expense involved in working with a psychologist or counsellor, it would have limited value for a person like me.	○	○	○	○
A person should work out his own problems; working with psychologist or counselor should be a last resort.	○	○	○	○
Mental health issues, like many things, tend to work out by themselves.	○	○	○	○

Read each statement carefully and indicate your degree of agreement using the scale below.

	Disagree	Partly disagree	Partly agree	Agree
If I was having issues with my mental health (e.g. feeling very low, anxious, and/or having suicidal thoughts) my first thought would be to get help from a psychologist or counsellor.	○	○	○	○
The idea of talking about my mental health problems with a psychologist or counselor strikes me as a poor way to get rid of mental health issues.	○	○	○	○
If I were experiencing issues with my mental health I would be confident that I could find help from working with a psychologist or counselor.	○	○	○	○
I respect a person who is willing to cope with his mental health issues without resorting to help from a psychologist or counsellor.	○	○	○	○
If I was worrying about my mental health over a long-period of time, I would access help from a counsellor or psychologist.	○	○	○	○

Do you think there are enough mental health services available for men within the construction industry?

_____

_____

What do you think is the best way to encourage a co-work to access mental health support if he/she is experiencing mental health issues in the workplace?

_____

_____

Using the scale provided, rate each of the possible concerns that might impact your decision to seek help for mental health issues from a mental health professional (e.g., a psychologist or counsellor).

	Strongly Disagree	Disagree	Agree and Disagree Equally	Agree	Strongly Agree
It would be too embarrassing	○	○	○	○	○
It would harm my career	○	○	○	○	○
People on the work-site might have less confidence in me	○	○	○	○	○
My manager/supervisor might treat me differently	○	○	○	○	○
My manager/supervisor would blame me for the problem	○	○	○	○	○
I would be seen as weak by other men	○	○	○	○	○
I don’t know where to get help	○	○	○	○	○
I don’t have adequate transportation	○	○	○	○	○
It is difficult to schedule an appointment	○	○	○	○	○
It would be difficult to get time off work.	○	○	○	○	○
Mental health care costs too much money.	○	○	○	○	○

Have you ever sought help from a mental health professional in the past?

- ○ Yes
- ○ No

If so, who from?

- ○ Counsellor
- ○ Psychologist
- ○ Medical doctor – (GP)
- ○ Psychiatrist
- ○ Other – please name _____

How helpful was your experience of working with a mental health professional?

Not helpful Very helpful

1 2 3 4 5 6 6 7 8 9 10

You have reached the end of the survey. Thank you for taking the time to complete the questionnaire.

PLEASE NOTE: If any parts of the survey cause distress, you are encouraged to seek support. The first option would be to talk to your local GP. Alternatively, you could contact other support organizations, such as Lifeline 0800 543 354 or Mental Health Help-Line 0800 111757 or free text 1737. If you would like to book an appointment with a counsellor please visit www.talkingworks.co.nz

Appendix C: Ethics Approval Letter

Date: 06 November 2018

Dear Andy Walmsley

Re: Ethics Notification - **SOB 18/59 - The Right Tool for the Job: An Investigation into Help-Seeking Behaviour Among Men within the Construction Industry.**

Thank you for the above application that was considered by the Massey University Human Ethics Committee: **Human Ethics Southern B Committee** at their meeting held on **Tuesday, 6 November,**

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Professor Craig Johnson
Chair, Human Ethics Chairs' Committee and Director (Research Ethics

Appendix D: Information Letter to Promote Survey

Hi there,

My name is Andrew Walmsley and I am conducting this research as part of my Clinical Psychology Doctorate training with the School of Psychology at the Massey University, Wellington, New Zealand. I am seeking assistance for a study which looks at men's help-seeking behaviours for mental health issues within the construction industry.

Aim

The project aims to find out what factors influence men to seek help for psychological distress. In particular, the study is interested in understanding any barriers which could be preventing men from seeking help for mental health issues within the construction industry.

Background

Men currently seek psychological help at far lower rates than women. By determining what factors might facilitate help-seeking in men, it is hoped that we can improve rates of men's help-seeking within the construction industry.

Who can participate?

You need to be male, between 18-65 years old, and currently working within the New Zealand construction industry. You need to be able to read and understand English.

What will participation involve?

You will fill out an anonymous online survey. The survey will take approximately 10-15 minutes to complete. Participation in this study is entirely voluntary and you can cease involvement at any time. You may choose to skip any questions or withdraw from the study at any stage. There is also an opportunity for participants to go into the draw to win one of 50 construction store vouchers.

If you are interested in taking part within the study and would like more information, please feel free to contact me.

Kind regards,

Andy Walmsley

School of Psychology
Massey University
Wellington

Email: Andy.Walmsley.1@massey.ac.nz

Appendix E: Pre-registration: Confirmatory Analysis Plan and Variables

Hypothesis 1

It is hypothesized, gender role conflict will be significantly negatively related to general help-seeking intentions. Specifically, men with higher levels of gender role conflict will have lower general help-seeking intentions.

Variables:

Gender role conflict (IV)

General help-seeking intentions (DV)

Statistical approach

Hypothesis 1 would be tested using a Pearson's correlation between gender role conflict and general help-seeking intentions.

How will statistic be supported?

Hypothesis 1 would be supported if the correlation between these two variables is negative and statistically significant (2-tailed, $p < 0.05$).

Hypothesis 2

It is hypothesised attitudes towards psychological help-seeking will **partially** mediate the relationship between gender role conflict (predictor variable) and general help-seeking intentions (DV). Specifically, men with higher levels of gender role conflict, will more likely hold negative attitudes towards psychological help-seeking, and be less willing to seek help.

Variables:

Gender role conflict (IV)

Attitudes towards psychological help-seeking (Mediating variable)

General help-seeking intentions (DV)

Statistical approach

Mediation analyses will be applied to test hypothesis 2. In particular, multiple linear regression will be applied to estimate the direct effect of gender role conflict on general help-seeking intentions. Multiple regression will also be used to estimate the indirect effect of gender role conflict on help-seeking intentions that occurs via an effect on attitudes towards seeking help.

How will hypothesis be supported?

Hypothesis 2 will be considered to be supported if there is: A negative and significant ($p < 0.05$) indirect effect of gender role conflict on psychological help-seeking.

Hypothesis 3 & 4

Hypothesis 3: Men who report higher levels of perceived stigma (IV) will have lower general help-seeking intentions (DV)

Hypothesis 4: Men who report high levels of barriers to psychological care (IV) will have lower general help-seeking intentions (DV).

Variables:

Perceived stigma (IV)

Barriers to psychological care (IV)

General help-seeking intentions (DV)

Statistical approach

Hypothesis 3: Pearson's correlation will be used to test the relationship between perceived stigma and general help-seeking intentions. The hypothesis would be supported if there is a significant negative relationship (2-tailed, $p < 0.05$) between perceived stigma and general help-seeking intentions.

Hypothesis 4: Pearson's correlation will be used to test the relationship between barriers to psychological care and general help-seeking intentions. The hypothesis would be supported if there is a significant negative relationship (2-tailed, $p < 0.05$) between barriers to psychological care and general help-seeking intentions at $p<0.05$.

Hypothesis 5

Hypothesis 5*:* Perceived stigma, barriers to psychological care, attitudes towards psychological help-seeking and previous positive experiences with mental health services, will each be a significant predictor of general help-seeking intentions within the theory of planned behaviour model.

Variables:

Perceived stigma (IV)

Attitudes towards psychological help-seeking (IV)

Previous positive experiences with mental health services (IV)

Barriers to psychological care (IV)

General help-seeking intentions (DV)

Statistical approach

Multiple regression will be used to test the hypotheses 5 with general help-seeking intentions used as the dependent variable. Predictor variables within the model include attitudes towards seeking psychological help, prior help-seeking behaviour, perceived stigma, and barriers to mental health treatment.

How will hypothesis be supported?

Hypothesis 5 will be considered to be supported if the regression coefficient for perceived stigma is significantly negative, with $p < 0.05$, barriers to psychological care is significantly negative, with $p < 0.05$, attitudes towards psychological help-seeking is significantly positive, with p less than 0.05, and previous positive experiences with mental health services is significantly positive, with $p < 0.05$. It is also hypothesised that the standardised regression coefficient for attitudes towards seeking psychological help will be larger than those for the other coefficients.

Hypothesis 6 – 9

Hypothesis 6: It is hypothesized there will be a significant positive relationship between gender-role conflict (IV) and preference for alternative help-seeking sources (DV).

Hypothesis 7: It is hypothesized there will be a significant negative relationship between gender-role conflict (IV) and men's preference for traditional help-seeking sources (DV).

Hypothesis 8: It is hypothesised there will be a significant positive relationship between gender-role conflict (IV) and preference for recommending alternative help-seeking sources (DV) to a work-colleague.

Hypothesis 9: It is hypothesised there will be a significant negative relationship between gender-role conflict (IV) and preference for recommending traditional help-seeking sources to a work-colleague (DV).

Variables:

1. Gender Role Conflict (IV)
2. Self: alternative help-seeking score (DV)
3. Self: traditional help-seeking score (DV)
4. Recommended: alternative help-seeking score (DV)
5. Recommended: traditional help-seeking score (DV)

Statistical approach

Variables assessed: Gender role conflict and men's preference for seeking help from alternative help-seeking sources.

Hypothesis 6: Pearson's correlation will be used to test the relationship between gender role conflict (IV) and men's preference for alternative help-seeking sources (DV). It is hypothesized there will be a significant (2-tailed, $p<0.05$) positive relationship between gender-role conflict and preference for alternative help-seeking sources.

Variables assessed: Gender role conflict and men's preference for seeking help from traditional help-seeking sources.

Hypothesis 7: Pearson's correlation will be used to test the relationship between gender role conflict (IV) and men's preference for traditional help-seeking sources (DV). It is hypothesized there will be a significant (2-tailed, $p<0.05$) negative relationship between gender-role conflict and men's preference for traditional help-seeking sources.

Variables assessed: Gender role conflict and men's preference for recommending alternative help-seeking sources to a work-colleague.

Hypothesis 8: Pearson's correlation will be used to test the relationship between gender role conflict (IV) and preference for recommending alternative help-seeking sources to a work-colleague
(DV). It is hypothesised there will be a significant (2-tailed, $p<0.05$) positive relationship between gender-role conflict and preference for recommending alternative help-seeking sources to a work-colleague.

Variables assessed: Gender role conflict and men's preference for recommending traditional help-seeking sources to a work-colleague.

Hypothesis 9: Pearson's correlation will be used to test the relationship between gender role conflict (IV) and preference for recommending traditional help-seeking sources to a work-colleague (DV). It is hypothesised there will be a significant (2-tailed, $p<0.05$) negative relationship between gender-role conflict and preference for recommending traditional help-seeking sources to a work-colleague.

Hypothesis 10 – 13

Hypothesis 10: It is hypothesized there will be a significant positive relationship between attitudes towards seeking psychological help (IV) and preference for alternative help-seeking sources (DV).

Hypothesis 11: It is hypothesized there will be a significant positive relationship between attitudes towards seeking psychological help (IV) and men's preference for traditional help-seeking sources (DV).

Hypothesis 12: It is hypothesised there will be a significant positive relationship between attitudes towards seeking psychological help (IV) and preference for recommending alternative help-seeking sources (DV) to a work-colleague.

Hypothesis 13: It is hypothesised there will be a significant positive relationship between attitudes towards seeking psychological help (IV) and preference for recommending traditional help-seeking sources to a work-colleague (DV).

Variables:

6. Attitudes toward seeking psychological help (IV)
7. Self: alternative help-seeking score (DV)
8. Self: traditional help-seeking score (DV)
9. Recommended: alternative help-seeking score (DV)
10. Recommended: traditional help-seeking score (DV)

Statistical approach

Variables assessed: attitudes towards seeking psychological help and men's preference for seeking help from alternative help-seeking sources.

Hypothesis 10: Pearson's correlation will be used to test the relationship between attitudes towards psychological help (IV) and men's preference for alternative help-seeking sources (DV). It is hypothesized there will be a significant (2-tailed, $p<0.05$) positive relationship

between attitudes towards seeking psychological help and preference for alternative help-seeking sources.

Variables assessed: attitudes towards seeking psychological help and men's preference for seeking help from traditional help-seeking sources.

Hypothesis 11: Pearson's correlation will be used to test the relationship between gender role conflict (IV) and men's preference for traditional help-seeking sources (DV). It is hypothesized there will be a significant (2-tailed, $p<0.05$) negative relationship between attitudes towards seeking psychological help and men's preference for traditional help-seeking sources.

Variables assessed: attitudes towards seeking psychological help and men's preference for recommending alternative help-seeking sources to a work-colleague.

Hypothesis 12: Pearson's correlation will be used to test the relationship between attitudes towards seeking psychological help (IV) and preference for recommending alternative help-seeking sources to a work-colleague
(DV). It is hypothesised there will be a significant (2-tailed, $p<0.05$) positive relationship between gender-role conflict and preference for recommending alternative help-seeking sources to a work-colleague.

Variables assessed: attitudes towards seeking psychological help and men's preference for recommending traditional help-seeking sources to a work-colleague.

Hypothesis 13: Pearson's correlation will be used to test the relationship between attitudes towards seeking psychological help (IV) and preference for recommending traditional help-seeking sources to a work-colleague (DV). It is hypothesised there will be a significant (2-tailed, $p<0.05$) negative relationship between gender-role conflict and preference for recommending traditional help-seeking sources to a work-colleague.

Assumptions for analyses, and plans for alternative/corrected analyses if each assumption is violated.

Multiple regression and Pearson's correlation will be used to test the hypotheses in the present study.

Assumptions applied in the present study

(1) Zero conditional mean of errors – errors are assumed to have a mean of zero for any given value, or combination of values on the predictor variables
(2) Independence of errors – errors are assumed to be independent

(3) Homogeneity of variance assumption - model errors are assumed to have an unknown but finite variance that is constant across all levels of predictor variables
(4) Predictor variables are assumed to be measured without error.
(5) No multicollinearity - Independent variables will not highly correlate with each other.

Pearson's correlation is the primary analysis used in hypotheses 1, 3, 4, 6 – 9, and 10 – 13. As an alternative, and to check the robustness of findings, the present study will also use Spearman's rho correlation for the above hypotheses.

Multiple linear regression will be the primary analysis used in hypothesis 2. I will run the primary analysis, and report the findings, and how the assumptions held up. Following the primary analysis, I will run and report a post-hoc exploratory analysis, and report these findings

Measures used within main analysis

***Predictor**: Gender Role conflict*

***Used within hypothesis**: 1, 2, 6, 7, 8, 9, 13, and 14.*

***Measure:** Gender Role Conflict Scale – Short Form (GRCS-SF-16Items; O'Neil, 1986)*

***Scoring**:* The gender role conflict score will be calculated as the sum of responses to all items on the questionnaire (1 through to 16) There are no reverse coded items. Participants report the degree to which they agree or disagree with each statement on a 6-point scale ranging from 1 (strongly agree) to 6 (strongly disagree). Higher total scores on the scale indicate stronger adherence to traditional masculine gender-roles.

***Predictor:** Attitudes towards psychological help-seeking*

***Used within hypothesis:** 2, 5, 10, 11, 12, 13, and 14.*

***Measure**: Attitudes Towards Seeking Professional Psychological Help Scale, Short Form (ATSPPHS -SF-10 Items; Bacon, Fischer, & Farina, 1995).*

Attitudes towards seeking professional psychological help score will be calculated as the sum of responses to question 1 through to 10 after reverse coding items 2, 4, 8, 9, and 10. Participants respond using a 4-point Likert scale ranging from 1 (Disagree) to 4 (Agree). Higher scores are linked with increased positive attitudes toward seeking psychological help.

***Outcome variable:** General Help-Seeking*

***Used within hypothesis:** 1 – 14.*

Measure: General Help-Seeking Questionnaire (GHSQ; Wilson, Deane, Ciarrochi, & Rickwood, 2005).

The general help-seeking scale consists of 16 items, which assesses an individual's preference to seek help from different help-seeking sources (alternative vs traditional). The scale also assesses an individual's preference for recommending different help-seeking sources to a work-colleague (alternative vs traditional). There are no reverse coded items. Participants are asked to comment on their preference for seeking help from 8 different help-seeking sources. Participants are also asked to rate their preference for recommending different help-seeking sources to a work-colleague. Participants rate their response on a 4-

point Likert scale ranging from 1 (Very Unlikely) to 4(Extremely Likely) for each help-seeking option.

Five scores will be calculated for the general help-seeking scale.

1. **General help-seeking score:** General help-seeking score will be calculated as the sum of responses to questions 1, 3, 5, 7, 9, 11, 13, and 15. Scores from each of these questions will be summed to create a total general help-seeking intention score. There are no reverse coded items. Participants are asked to comment on 8 different help-seeking sources by rating their help-seeking intentions on a 4- point Likert scale ranging from 1 (Very Unlikely) to 4(Extremely Likely) for each help-source option. Higher scores indicate higher intentions to seek help.
2. **Self: alternative help-seeking score** - Preference for seeking help for the self from alternative help-seeking sources will be calculated as the sum of response from items 1, 3, 5, and 7 from the general help-seeking scale. Participants are asked to comment on their preference for seeking help from 4 different alternative help-seeking sources by rating their preference on a 4- point Likert scale ranging from 1 (Very Unlikely) to 4(Extremely Likely Unlikely) for each help-source option. Higher scores indicate higher preference for alternative help-seeking sources.
3. **Recommended: alternative help-seeking score -** Preference for recommending alternative help-seeking sources to a work-colleague will be calculated as the sum of responses from items 2, 4, 6, and 8 from the general help-seeking scale. Participants are asked to comment on their preference for recommending alternative help-seeking sources to a work colleague by rating their preference on a 4- point Likert scale ranging from 1 (Very Unlikely) to 4(Extremely Likely Unlikely) for each help-source option. Higher scores indicate higher preference to recommend alternative help-seeking sources to a work-colleague.
4. **Self: traditional help-seeking score** - Preference for seeking help for the self from traditional help-seeking sources will be calculated as the sum of response from items 10, 12, and 14 from the general help-seeking scale. Participants are asked to comment on their preference for seeking help from 3 different traditional help-seeking sources by rating their preference on a 4- point Likert scale ranging from 1 (Very Unlikely) to 4(Extremely Likely Unlikely) for each help-source option. Higher scores indicate higher preference for traditional help-seeking sources.
5. **Recommended: traditional help-seeking score -** Preference for recommending traditional help-seeking sources to a work-colleague will be calculated as the sum of responses from items 9, 11, and 13 from the general help-seeking scale. Participants are asked to comment on their preference for recommending traditional help-seeking sources to a work colleague by rating their preference on a 4- point Likert scale ranging from 1 (Very Unlikely) to 4(Extremely Likely Unlikely) for each help-source option. Higher scores indicate higher intentions to recommend traditional help-seeking sources to a work-colleague.

Predictor: *Perceived stigma and Barriers to treatment*

Used within hypothesis: *3, 4, 5 ,13, and 14.*

Measure: *Perceived Stigma and Barriers to Care for Psychological Problems (PSBCPP- 11 items)*

Perceived stigma will be calculated by summing questions 1 through to 6, and barriers to care for psychological problems will be calculated from questions 7 through to 11 on the perceived stigma and barriers to care for psychological problems scale (PSBCPPS). There are no negatively worded items. Participants respond on a 5-Point Likert scale (1= strongly disagree, 5 = strongly agree), with higher scores on the measure indicating greater perceived stigma and barriers to treatment.

Predictor variable: *Previous positive help-seeking experiences*

Used within hypothesis: *5, 13, and 14.*

In this analysis, previous positive experiences with mental health services will be calculated by summing questions 1 and 3.

Q.1 Have you sought help from a mental health professional in the past?

2= yes

1 = no

Q.3 How helpful was your experience of working with a mental health professional?

Participant rate the helpfulness of the mental health service using a 10-point Likert scale (1 = not helpful, 10 =very helpful).

Participants will receive a total score, based on the sum of responses from questions 1 and three. Higher scores indicate more positive experiences of working with mental health professionals.

Appendix F: Permission Letter from Dr Jim O'Neil

From: jimoneil1@aol.com <jimoneil1@aol.com>
Sent: Friday, 20 July 2018 7:19 AM
To: walmsley_a@hotmail.com
Subject: GRCS

Dear Andy:

Thanks for your email about using the GRCS with your research with New Zealand men in the construction industry. This study has not been completed before, so it could be unique and timely. I have attached the GRCS to this email. If you use it, please send back the release form. You may also want to go to the GRC Research web page where the previous 330 GRC studies are summarized in 24 informational file. The address is: http://jimoneil.uconn.edu.

My recently published book described below may be useful to you in your research. Also, the journal article listed at the end of this email may also be helpful.

The best to you with your research!

Jim O'Neil, Ph.D.

Professor of Educational Psychology & Family Studies

University of Connecticut

Appendix G: Cultural Supervision

MASSEY UNIVERSITY

SCHOOL OF PSYCHOLOGY

10th August 2018

Human Ethics Committee

Massey University

Tēnā koutou,

The Right Tool for The Job: An Investigation into Help-Seeking Behaviours Among Men within the New Zealand Construction Industry

I am writing to confirm that Andy has sought my cultural advice in preparing his ethics application and developing his research project. He has also met with me in person seeking cultural advice regarding his project.

Despite the fact that Andy's project does not specifically focus on Māori he has given an impressive depth of consideration to the implications that his study could have for hauora Māori. In my meeting with Andy he demonstrated an acute awareness of the fact that Māori are over-represented in the construction industry, representing over 20% of the workforce. Furthermore he expressed a strong interest in ensuring that his research was conducted in a manner that firstly facilitated Māori participation and secondly ensured that the cultural nuances of participant responses were not lost or misinterpreted in the data analysis.

In light of that we had a discussion about the psychometric protocol that Andy has developed and explored the strengths and weaknesses of certain measures. On this basis I have every confidence that Andy is well prepared to ably and sensitively facilitate positive Māori participation in his study.

I have a close working relationship with Andy's first supervisor Dr John Fitzgerald and have indicated my availability to have an ongoing consultative role in this project should significant issues arise pertaining to Māori. I have encouraged Andy to contact me should cultural/bicultural issues arise during the course of his fieldwork and also if he needs assistance in engaging with Māori stakeholders I would be happy to help facilitate this.

If you have any questions please do not hesistate to contact me.

Noho ora mai rā,

Simon Bennett, PhD

Ngāti Whakaue, Patu Harakeke, Kati Waewae

Director of Clinical Psychology Training – Wellington Campus

Kaimatai Hinengaro Matua: Māori Clinical Psychologist, Senior Lecturer

School of Psychology, Massey University Wellington

DDI: +64 4 979 3609

Appendix H: General Help-Seeking Questionnaire

If you were having issues with your mental health (for example, feeling depressed, very low, anxious, and/or having suicidal thoughts).

How likely is it that **YOU** would seek help from the below support service?
AND
What is the likelihood of you encouraging a **WORK-COLLEAUGE** to seek help from the below support service?

Please indicate your response by selecting the option that best describes your intention to seek help from the listed help source.

PLEASE NOTE: The support service may/or may not be available at your work-site. Please rate your response based on your preference, rather than the availability of the support service.

Mental Health Apps
Provide practical strategies on how to cope with mental distress, such as when feeling low and unmotivated, anxious, and/or difficulties with sleeping. Strategies could include ways to change negative thinking, relaxation exercises, and tips to make positive changes in life.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Mental Health Support in Sport and Exercise
While playing a sport (e.g. rugby, boxing, tennis etc.) or during physical exercise (e.g. group fitness classes) tips

are provided to men on how to cope with mental health issues. Tips could include ways to change negative thinking, relaxation exercises, and tips to make positive changes in life.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Mental Health Workshop

Provide men with the skills and knowledge to cope with some of life's challenges. Workshop topics could include managing financial stress, goal setting, tips for dealing with challenging relationships, and tips to maintain good overall health.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Men's Support Groups

Provide men with the knowledge and skills to deal with mental health issues, such as depression, anxiety, and alcohol/drug addiction. Support groups also provide an opportunity for men to share their story and help other men having similar challenges with their mental health.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Psychologist
Psychologists provide talking therapies, which can help you work out how to deal with negative thoughts and challenges, and make positive changes in your life.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Work-Place Counselling (EAP counselling)
Provide support for a wide range of issues including: drug/alcohol addiction, career advice, and strategies to deal with work stress. Counsellors provide talking therapies, which can help you work out how to deal with negative thoughts and challenges and make positive changes in your life.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this support service	○	○	○	○
Likelihood of recommending this service to a **WORK-COLLEAGUE**	○	○	○	○

Medical Doctor- General Practitioner (GP)
GP's provide general advice on managing and seeking support for mental health issues. This includes making a referral to mental health services, such as seeing a counsellor or psychologist. GPs can also prescribe medication for mental health issues.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from this service	○	○	○	○
Likelihood of recommending this type of service to a **WORK-COLLEAGUE**	○	○	○	○

Church leader/ Rabbi/ Kaumatua/ Elder
Guidance, advice, and support provided from a church leader or elder from within the community.

	Very Unlikely	Unlikely	Likely	Very Likely
Likelihood **YOU** would seek help from a church leader/Rabbi/Kaumatua/Elder.	○	○	○	○
Likelihood of recommending this type of help to a **WORK-COLLEAGUE**	○	○	○	○

Appendix I: The Attitudes Towards Seeking Professional Psychological Help Scale, Short Form

Read each statement carefully and indicate your degree of agreement using the scale below.

	Disagree	Partly disagree	Partly agree	Agree
I would consider working with a psychologist or counsellor in the future.	○	○	○	○
A person with mental health problems is not likely to solve it alone; he is likely to solve it with professional help from a psychologist or counsellor.	○	○	○	○
Considering the time and expense involved in working with a psychologist or counsellor, it would have limited value for a person like me.	○	○	○	○
A person should work out his own problems; working with psychologist or counselor should be a last resort.	○	○	○	○
Mental health issues, like many things, tend to work out by themselves.	○	○	○	○

	Disagree	Partly disagree	Partly agree	Agree
If I was having issues with my mental health (e.g. feeling very low, anxious, and/or having suicidal thoughts) my first thought would be to get help from a psychologist or counsellor.	○	○	○	○
The idea of talking about my mental health problems with a psychologist or counselor strikes me as a poor way to get rid of mental health issues.	○	○	○	○
If I were experiencing issues with my mental health I would be confident that I could find help from working with a psychologist or counselor.	○	○	○	○
I respect a person who is willing to cope with his mental health issues without resorting to help from a psychologist or counsellor.	○	○	○	○
If I was worrying about my mental health over a long-period of time, I would access help from a counsellor or psychologist.	○	○	○	○

Appendix J: The Perceived Stigma and Barriers to Care for Psychological Problems Scale

Using the scale provided, rate each of the possible concerns that might impact your decision to seek help for mental health issues from a mental health professional (e.g., a psychologist or counsellor).

	Strongly Disagree	Disagree	Agree and Disagree Equally	Agree	Strongly Agree
It would be too embarrassing	○	○	○	○	○
It would harm my career	○	○	○	○	○
People on the work-site might have less confidence in me	○	○	○	○	○
My manager/supervisor might treat me differently	○	○	○	○	○
My manager/supervisor would blame me for the problem	○	○	○	○	○
I would be seen as weak by other men	○	○	○	○	○
I don’t know where to get help	○	○	○	○	○
I don’t have adequate transportation	○	○	○	○	○
It is difficult to schedule an appointment	○	○	○	○	○
It would be difficult to get time off work.	○	○	○	○	○
Mental health care costs too much money.	○	○	○	○	○

Using the scale provided, rate each of the possible concerns that might impact your decision to seek help for mental health issues from a mental health professional (e.g., a psychologist or counsellor).

	Strongly Disagree	Disagree	Agree and Disagree Equally	Agree	Strongly Agree
It would be too embarrassing	○	○	○	○	○
It would harm my career	○	○	○	○	○
People on the work-site might have less confidence in me	○	○	○	○	○
My manager/supervisor might treat me differently	○	○	○	○	○
My manager/supervisor would blame me for the problem	○	○	○	○	○
I would be seen as weak by other men	○	○	○	○	○
I don’t know where to get help	○	○	○	○	○
I don’t have adequate transportation	○	○	○	○	○
It is difficult to schedule an appointment	○	○	○	○	○
It would be difficult to get time off work.	○	○	○	○	○
Mental health care costs too much money.	○	○	○	○	○

Appendix K: The Patient Health Questionnaire

Over the last 2 weeks, how often have you been bothered by any of the following:

	Not at all	Several days	More than half the days	Nearly every day
Little interest or pleasure in doing things?	○	○	○	○
Feeling down, depressed, or hopeless?	○	○	○	○
Trouble falling or staying asleep, or sleeping too much?	○	○	○	○
Feeling tired or having little energy?	○	○	○	○
Poor appetite or over eating?	○	○	○	○
Feeling bad about yourself – or that you are a failure or have let yourself or you family down?	○	○	○	○
Trouble concentrating on things, such as following instructions or focusing on a work task?	○	○	○	○
Feeling restless and/or agitated?	○	○	○	○
Thoughts that you would be better off dead or of hurting yourself in some way?	○	○	○	○

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- ○ Not difficult at all
- ○ Somewhat difficult
- ○ Very difficult
- ○ Extremely difficult

Appendix L: Category Definitions for Open Ended Questions

Category Definition and Description for Question: What is your Biggest Source of Stress?

Category label	Description
Client related	Responses ranged from dealing with the demands and expectations of clients, delayed payments from clients, dealing with angry clients, and communicating with clients.
Physical injuries	Physical difficulties impacting ability to work. Physical difficulties included longstanding injuries, energy levels, and concerns surrounding age and ability to 'keep up' with the rest of the team.
Health and safety concerns	Stress of keeping the work environment safe from physical and psychological harm. Stressors included lack of commitment from construction managers and supervisors to complete tasks that assist in the reduction of physical and psychological harm, outdated and faulty machinery, and working with staff who fail follow through on health and safety procedures.
Job uncertainty	Stress associated with securing future work for self and work team.
Financial stress	Stressors included pricing jobs, relying on others for payment, paying staff on time, having enough money for tax, low income, and lack of steady income.
Time pressure and workload	Stress due to working long hour, having to meet unrealistic deadlines, heavy workloads with no time off, managing multiple high-pressure tasks at once, and feeling overwhelmed due to large quantities of work.
Mistakes within the workplace	Responses ranged from time spent fixing other people's mistakes, working with incompetent staff, feeling responsible for other people's mistakes, the cost associated with fixing mistakes, and the fear of making a mistake.
Legislation and government	Dealings with council and other government organisations. Stressors included challenges of staying current and complying with current council building law changes, dealing with government health and safety inspectors, and organisations such as the IRD and ACC.

Management related	Stressors included management not addressing work related stress, such as high workloads. Stressors also included having to deal with multiple managers, having aggressive and highly critical managers who 'push' to get the job done, micromanagement, and lack of respect from managers.
Lack of job/ career satisfaction	Responses ranged from boredom, career stagnation, and lack of career path.
Interpersonal conflict	Interpersonal conflict within the workplace. Responses ranged from working with overly aggressive personalities and dealing with conflict within the workplace.
Weather and travel	Responses ranged from long commute times to work, working away from home for extended periods of time, wet weather, and the lack of consideration for season and climate changes and how they can impact work progress.

Category Definition and Description for Question: What do you think are some of the Barriers that Prevent Men from Seeking help for Mental Health Issues within the Construction Industry?

Category Label	Description
Lack of information and Accessibility	Responses ranged from lack of information on the types of mental health services available, and how workers can access support services.
Service type	Lack of satisfaction with current mental health services available to men within the construction industry. Responses ranged from dislike of talking based therapies, perceptions that mental health provides do no understand the stress construction workers experience, and lack of trust in counsellors/ psychologists.
Lack of support from management	Responses ranged from old school managers who don't take mental health seriously, lack of understanding and encouragement from management, managers providing little flexibility for employees to access mental health services during work hours, lack of trust and

	empathy from managers, and employers not recognising that mental health issues should be included as sick leave.
Limited dialogue on mental health within the workplace	Responses ranged from mental health never spoken about on worksites or rarely mentioned during health and safety meetings. Not common to talk about thoughts and feelings at work, and mental health only spoken about in a bad way.
Cost	Cost of accessing mental health services and the cost of taking time off work to attend appointment.
Seeking help is a sign of weakness	Responses ranged from seeking help a sign of weakness among work colleagues, construction workers supposed to display strength not weakness, and feeling ashamed or a failure if sought help for mental health issues.
Men have to be strong and self-reliant.	Responses ranged from the perception that men working within the construction industry have to be strong, self-reliant, display no emotions.
Mental health literacy	Responses ranged from difficulties identifying mental health issue within the self and others and lack of understanding on how mental health services work.

Category Definition and Description for Question: What do you think is the Best way to Encourage a Co-Worker to Seek Help for Mental Health Issues?

Category	Description
No idea/ don't know	Responses ranged from don't know, no idea, and wouldn't have a clue.
Start the conversation	Responses ranged from having a friendly interaction, be open and honest with them, ask if they are ok, gain their trust and talk to them about getting help, and use discretion.
Discuss support options	Responses ranged from discuss the different type of help-seeking options available. Help-seeking options included peer support network, GP, EAP services, health and safety representative, and mental health support phone numbers.

Discuss lived experiences of mental health issues and help-seeking	Responses ranged from disclosing personal experiences of mental illness and the benefits of accessing support.
Talk to someone they trust	Responses ranged from talking with friends, family, or a trusted work-colleague.
Provide a safe space for them to talk outside of work	Responses included talk to the person off-site in a casual way, give them a safe space to talk, send them a text or email, or discuss the issue over a coffee or beer.
Increase mental health literacy	Responses ranged from talking to someone who can provide advice, identify whether the individual is having mental health issues, and researching information online before talking to the individual.
Normalise the issue	Responses ranged from letting the individual know that mental health issues are common, men are not failures if they seek help, and that help-seeking is not a sign of weakness.
Accessible information	Responses ranged from having information readily available for men to access mental health services. Information included signage at worksites, and pamphlets within the ‘smoko’ room.
Create a positive team culture that supports mental health	Responses ranged from develop a work culture that priorities conversations of mental health, include mental health topics within team building exercises, normalising help-seeking, and have team meetings which are open and supportive of mental health.

Appendix M: Residual and Scatter Plots

Figure 7

Scatterplot Depicting the Relationship Between Gender Role Conflict and Help-Seeking Intentions

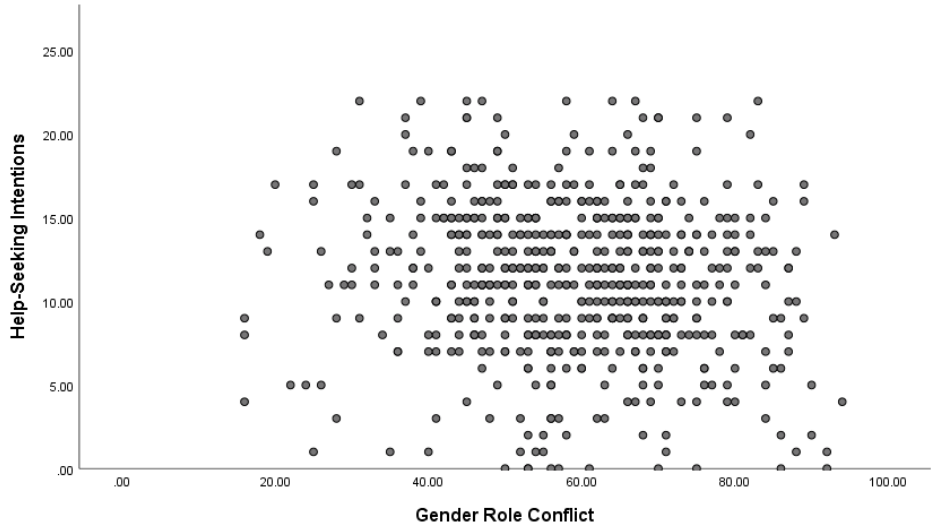


Figure 8

Scatterplot Depicting the Relationship Between Perceived Stigma and Help-Seeking Intentions

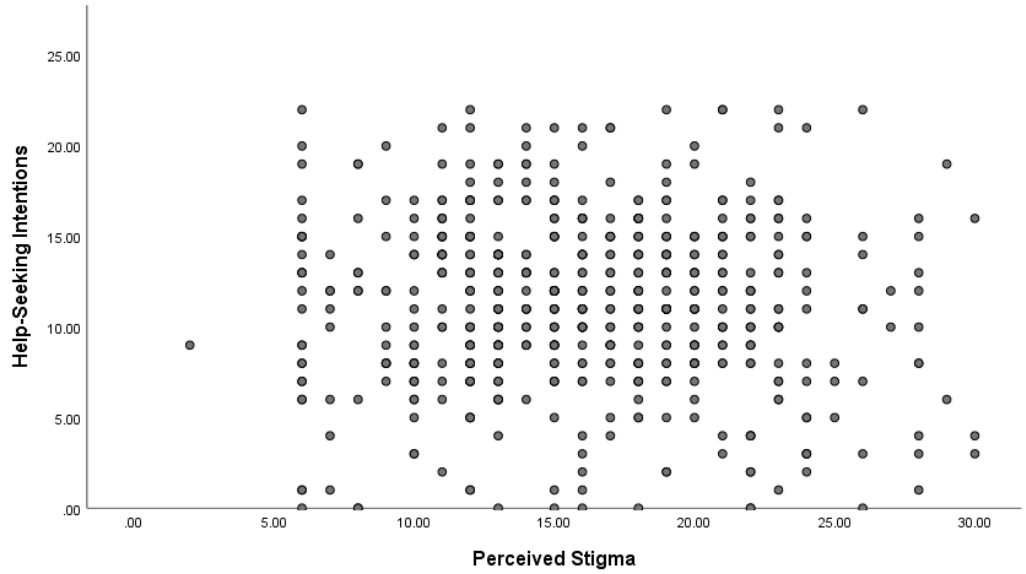


Figure 9

Scatterplot Depicting the Relationship Between Barriers to Treatment and Help-Seeking Intentions

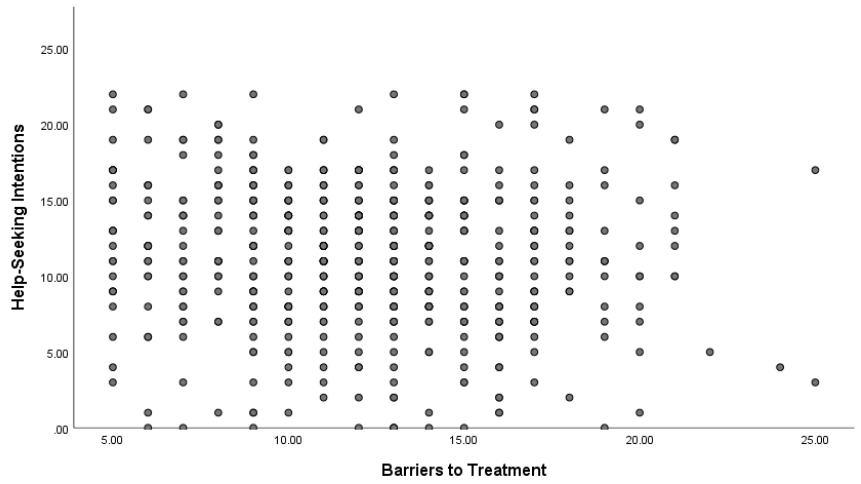


Figure 10

Scatterplot Depicting the Relationship Between Gender Role Conflict and Preference for Alternative Help- Seeking Sources

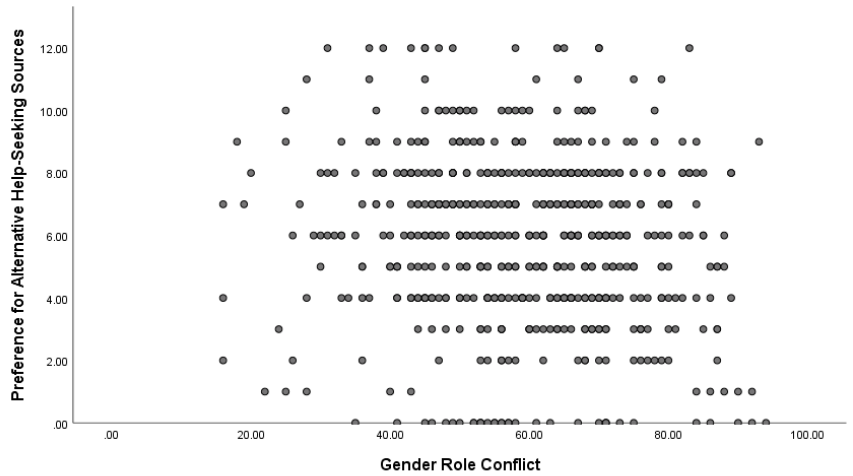


Figure 11

Scatterplot Depicting the Relationship Between Gender Role Conflict and Preference for Traditional Help- Seeking Sources

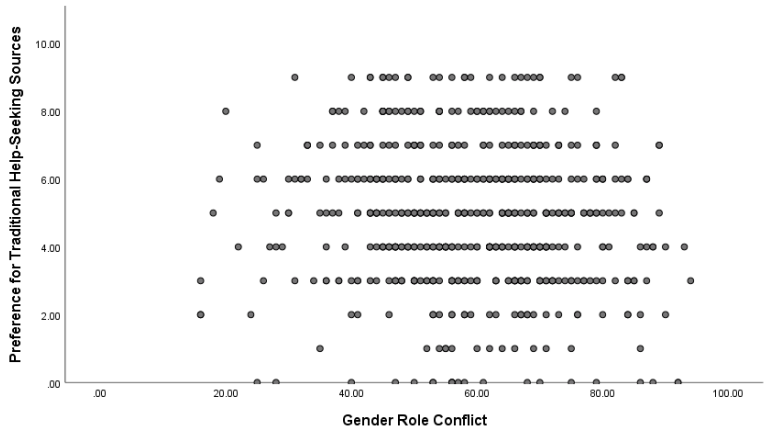


Figure 12

Scatterplot Depicting the Relationship Between Gender Role Conflict and Recommending Alternative Help-Seeking Sources

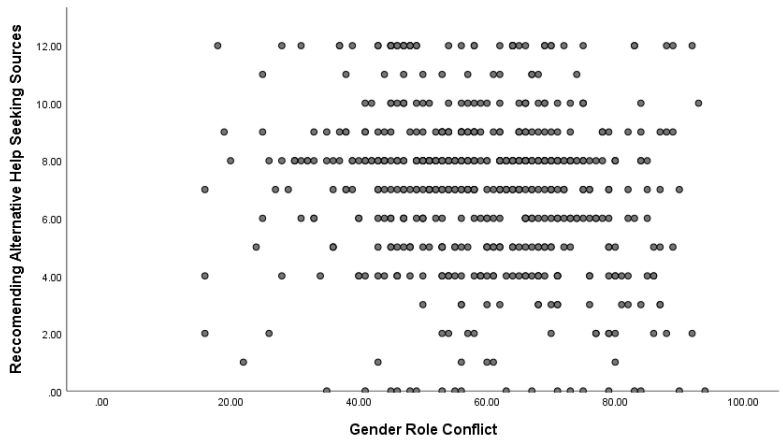


Figure 13

Scatterplot Depicting the Relationship Between Gender Role Conflict and Recommending Traditional Help-Seeking Sources

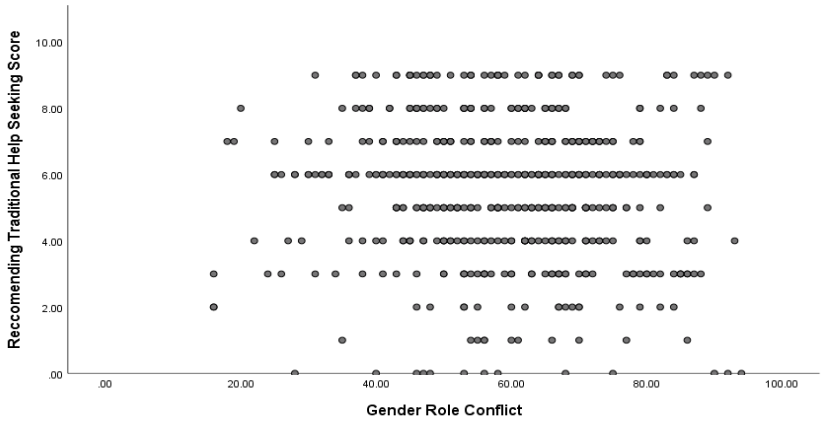


Figure 14

Scatterplot Depicting the Relationship Between Attitudes towards Help-Seeking and Preference for Alternative Help-Seeking Sources

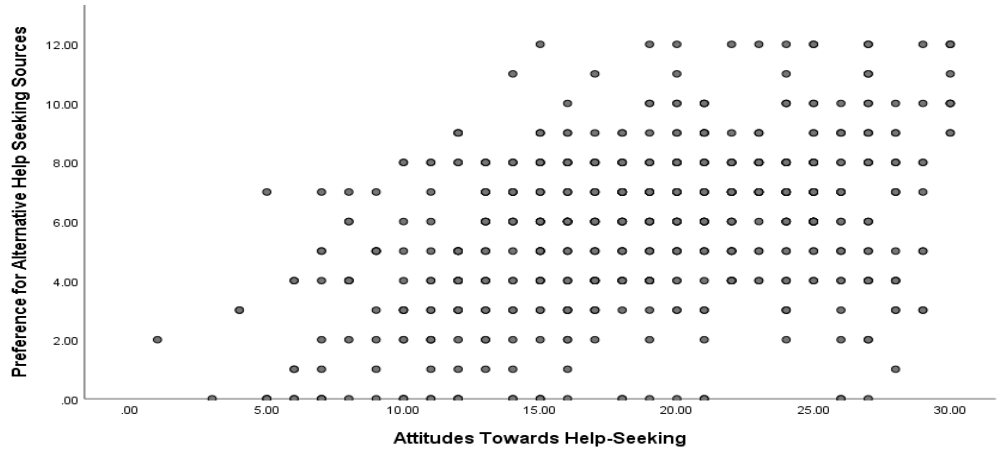


Figure 15

Scatterplot Depicting the Relationship Between Attitudes towards Help-Seeking and Preference for Traditional Help-Seeking Sources

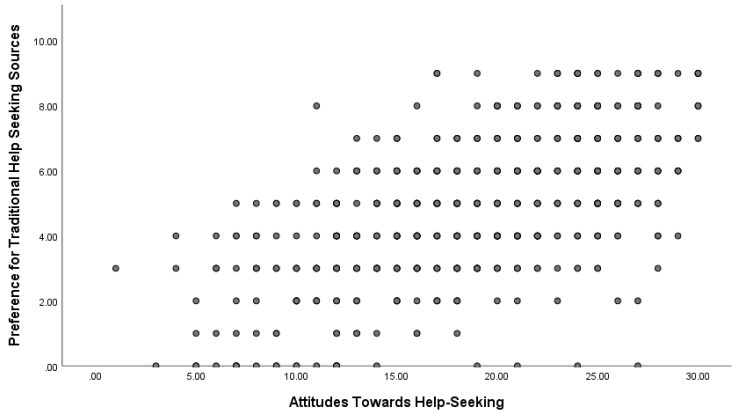


Figure 16

Scatterplot Depicting the Relationship Between Attitudes towards Help-Seeking and Recommending Alternative Help-Seeking Sources

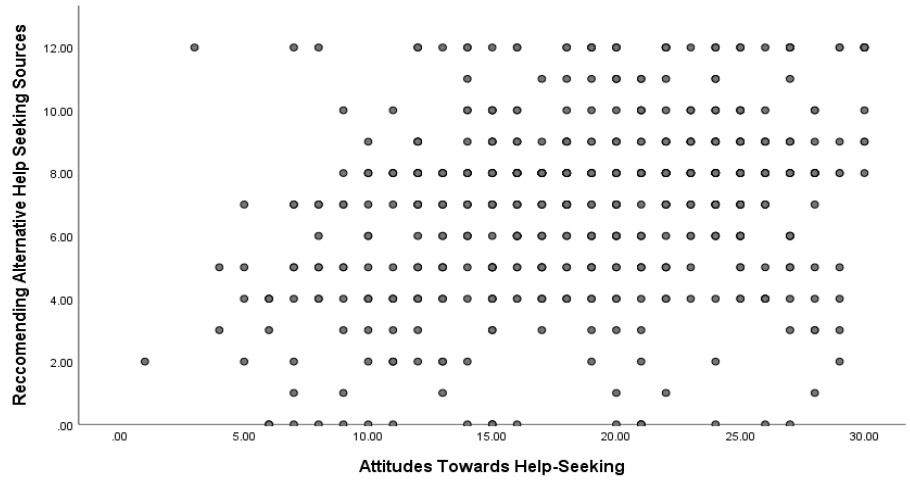


Figure 17

Scatterplot Depicting the Relationship Between Attitudes towards Help-Seeking and Recommending Traditional Help-Seeking Sources

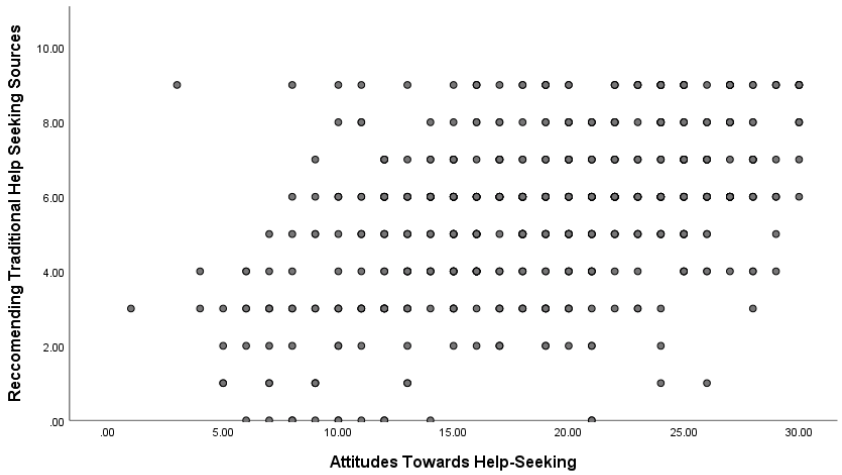
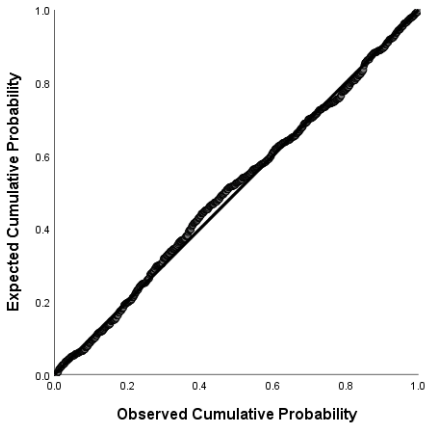


Figure 18

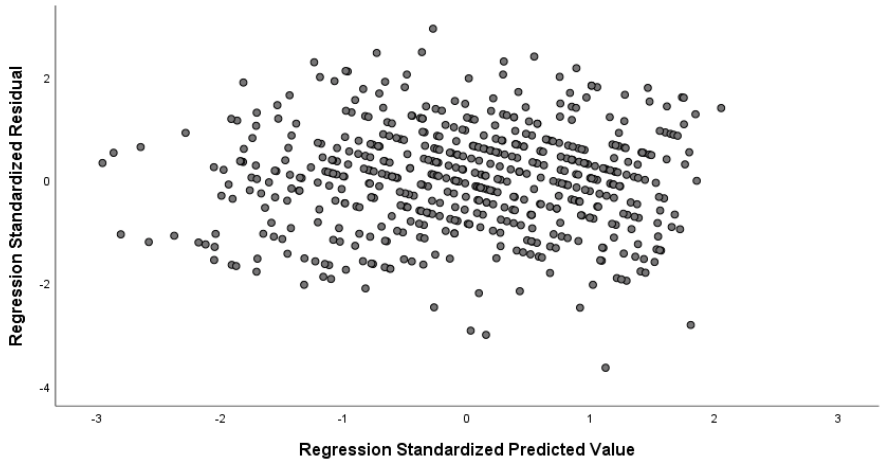
Normal P-P Plot of Regression Standardized Residual. Dependent Variable: Help-Seeking Intentions



Note. P-P Plot of Regression Standardized Residuals for hypothesis five. Predictor Variables: Attitudes towards help-seeking, stigma, barriers to treatment, and gender role conflict. Dependent variable: Help-seeking intentions.

Figure 19

Scatterplot Depicting Regression Standardized Residual and Predicted Values. Dependent Variable Help-Seeking Intentions



Note. The analysis depicted in this figure involved regression analysis for hypothesis five with predictors variables: attitudes towards psychological help-seeking, gender role conflict, barriers to treatment, and perceived stigma. Help-seeking intentions was the dependent variable.

Appendix N: Case Study

Research Case Study

Understanding Men's Mental Health

Research case study presented in partial fulfilment of the degree of Doctor of Clinical Psychology

Andrew Walmsley (2020).

This case study represents the work of Andrew Walmsley during his internship at New Plymouth Hospital, Taranaki, in 2020. Some information within the case study has been changed to protect the anonymity of the clients.

Abstract

This case study outlines the lessons from my doctoral research as applied to my work as an intern psychologist at New Plymouth hospital. The case study opens with a brief overview of my personal reasons for conducting research on men's mental health, gaps within the literature, my engagement with the construction industry and the research aims and methodology. Reflections then follow on how my research experience contributed to my development as a practitioner. They include reflections on gender socialisation, understanding the male expression of anger, the consequences of delayed help-seeking and mental health literacy among men.

Study Beginnings

My lived experience of working within the construction industry motivated me to explore help-seeking behaviour and attitudes among men within the construction industry. I grew up in a small New Zealand community, leaving school at an early age and eventually taking a job as a labourer at a roofing company. While working for this company I learnt what it meant to work hard. The men whom I worked with were gladiators, men of steel, who worked through all weather conditions, putting their bodies on the line each day to get the job done. However, over time it became obvious to me that there were cracks within the armour of some of these men. Despite being excellent workers on the worksite, when it came to addressing mental health issues, these men lacked the knowledge, skills, and courage to speak up and ask for help.

Sadly, I have attended a number of funerals of good men, who have died by suicide, and witnessed the rippling impact this has on a community. I took this project on out of frustration, and also hope, that one day in New Zealand, we can reduce the number of men dying by suicide each year.

Background Literature

Construction workers are six times more likely to die from suicide than an accident at work (Gullestrup et al., 2011). On the construction site, Employment Assistance Programme (EAP) services are the primary mode of help offered to workers experiencing mental distress. EAP services provide a platform for men to meet with a counsellor face to face to discuss issues, including work stress, substance abuse, relationship problems, and behavioral issues. However, a number of studies have indicated some men have little faith in the efficacy of face to face therapies (O'Connell & Clare, 2004; Russell et al., 2004). Reasons include, not seeing the point in talking about their personal problems to a stranger, difficulties expressing

emotions, fear of exposure, lack of familiarity with psychological discourse, and lack of faith in talking based therapies.

Traditional mental health services, such as face to face counselling create a series of paradoxes for men (Robertson & Fitzgerald, 1992). For some men, asking for help, and seeking support through counselling services could be viewed as an adaptive process, experienced with minimal resistance. Yet for other men, the counselling process could be perceived as a personal failure, due to entering a process which is incongruent with the implicit messages they have been taught from a young age such as 'no pain, no gain', 'boys don't cry' and 'harden up' (Addis et al., 2010). Failing to conform to these implicit masculine messages, could have been resulted in shame, ridicule, and exclusion from peers.

Increasing pathways for men to access psychological support is important. However, more importantly, is creating services which foster change, engagement and are congruent with men's specific needs. Traditional therapeutic contexts, such as the therapist's office, fail to support the needs of some men (O'Connell & Clare, 2004). Research has found some men prefer to access help within a safe space, in particular, contexts which are considered familiar to men, and 'male' friendly (Ogrodniczuk et al., 2016). Shoulder to shoulder interventions have shown to be effective in engaging men in mental health services. Shoulder-to-shoulder interventions provide a platform for men to discuss sensitive information whilst engaging in a shared activity within a 'male friendly' environment (Ogrodniczuk et al., 2016). Shoulder to shoulder interventions such as exercise and sporting activities have shown to be effective in breaking down stigma attached to mental health among men (Carless & Douglas, 2008; Carless & Sparkes, 2008). Another example of a shoulder-to-shoulder intervention is Men's Sheds. Men's Sheds have been described in the literature as a male friendly service, providing a 'health by stealth' approach for men in need of psychological support (Morgan et al., 2007). Several studies have supported the effectiveness of Men's Shed's, with increases

in social connectiveness, social support, and self-esteem reported (Morgan et al., 2007). The implications of this, is that opportunities within the community exist in alternative arenas for targeting men's vulnerability to mental distress and suicide. Yet the majority of mental health services available for men within the New Zealand construction industry are based on the traditional face to face therapeutic model.

Study rationale and aims.

The first objective of the study was to provide a 'snapshot' of men's mental health needs within the NZ construction industry. This included gathering data on sources of stress, barriers towards help-seeking, and factors which could facilitate or inhibit help-seeking behaviour among men within the construction industry. The second objective of the study was to explore the relationships between key help-seeking variables, including attitudes towards help-seeking, barriers towards seeking help, perceived stigma, masculine gender roles, and help-seeking intentions.

Engagement with the industry

At the time of my research there was no data on men's mental health within the New Zealand construction industry. I spent the first 12-months of my thesis developing relationships within the industry. This was done by sending introduction emails to health and safety organisations across New Zealand and visiting construction company managers to discuss the purpose of my research. I eventually connected with a health and safety organisation called Site Safe who were also conducting research within the construction industry. They had just received funding to investigate risk factors among 300 coronial files of men who had died by suicide whilst employed within construction between 2008 to 2018. Over the summer of 2018 to 2019 I joined the Site Safe research team and developed some key relationships with researchers and other health and safety organisations within the

industry. My role within the project was to code and identify common risk factors within the coronial data. Breakdown in relationships, substance abuse, and financial stress were common risk factors within the coronial dataset. Upon completing this project, the results were presented at one of the largest health and safety conferences within New Zealand. This gave me an opportunity to further develop my network within the construction industry.

During my time at Site Safe I worked with psychologist Dr Kate Bryson who is now one of the lead researchers within the construction industry. Over the summer of 2019 to 2020 we collaborated on another research project exploring the builder-client relationship, exploring the challenges on the relationship, and how this has an impact on builder and client mental health. The final report will be complete early 2021.

During 2019 to 2020 the Australian based MATES in construction programme was launched within New Zealand. I was fortunate enough to attend the launch party in Auckland and met the CEO of the New Zealand and Australian based program. They were both very interested in my study, and how we could use the results to support further research and interventions within the construction industry. Following the completion of my thesis, I will be teaming up with the MATES research team to conduct further research, and possibly a project which will explore the impact of bullying within the construction industry, which has shown to be a significant contributor to poor mental health within the industry.

In summary, since starting my doctorate journey I have worked on multiple research projects. I have been fortunate enough to be part of the conversations which have led to the development of further research and interventions to support mental health among construction workers within New Zealand. Although this time could have been better spent working on my thesis, working on these projects was part of my engagement process with the industry, and allowed me to reach such a wide audience when collecting data for my study.

Through this process, I have also developed a career path within research, which I will follow upon the completion of my thesis and clinical psychology training.

Methodology

The following section will provide an overview of my study including the research design, demographics of participants, and data analysis approach.

The study was conducted in accordance with the Massey University Human ethics committee guidelines. The study collected quantitative data using an online survey from men aged between 18 to 65 years old who were working within the construction industry. Variables explored within the survey included: masculine gender roles, help-seeking attitudes, help-seeking behaviours, psychological wellbeing, and perceptions of seeking help via alternative platforms. Parametric analyses, including multiple linear regression were applied to explore the relationship between men's adherence to masculine gender roles, attitude towards seeking help, and men's preferences for seeking help from different help-sources. The study also collected qualitative data using open-ended questions which included (1) What is your greatest source of stress? (2) What do you think are some of the barriers towards accessing mental health services? (3) Do you think there are enough mental health services available within the construction industry? (4) What do you think is the best way to encourage a work colleague to access help who is struggling with mental health issues? Thematic analysis was used to explore the patterns within the qualitative dataset.

Participants were recruited from across New Zealand to take part in the study. Information about the study was promoted using construction health and safety organisations including Site-Safe New Zealand, Civil Engineering New Zealand, Building Construction Training Organisation, and Building Research Association New Zealand. 112 small construction companies also promoted the study.

Reflections

My internship began January 2020 New Plymouth Hospital. The internship consisted of one 12-month placement where my working weeks were split across Child and Adolescent Mental Health Service (CAMHS) and Community Adult Mental Health. The following reflections were made during my time at New Plymouth hospital when engaging with males across the two services. They include reflections on my own gender socialisation, understanding the male expression of anger, the consequences of delayed help-seeking, the benefits of using alternative approaches towards engaging males into help-seeking, and mental health literacy.

Whilst working within the community adult mental health team I worked with a client named Dylan who had significant difficulties managing his anger. When he initially engaged with psychology services, he was awaiting sentencing from the courts due to domestic violence and assaulting a police officer. To better understand Dylan's anger, I spent time collecting information on his life history. He grew up with a physically abusive father, had a mother who was an alcoholic, and had been sexually abused by other family members. From a young age, Dylan said he was surrounded by violence within the household, and eventually learnt that fighting was one of few ways for him to defend himself against "beatings" from his father. His first significant issue with anger began when he started school, he was 'stood down' at the age 8-years old for punching a teacher. These problems continued throughout primary and secondary school and escalated as he got older. Working with Dylan highlighted to me the importance of looking 'beyond' a client's anger when it presents within the therapy room and understanding that anger is often 'masking' other emotions such as sadness, hurt, or rejection. For some men anger is one of few emotions which they have learnt to express from a young age. Within the short-term anger can help

males survive abusive and neglectful environments. However, within the long-term, it has a negative impact on relationships and problem solving.

Whilst working within the adult mental health team I observed first-hand the consequences of delayed help-seeking among men. For several months, I worked with a client named Jason, who was referred to psychology for the treatment of panic attacks and major depressive disorder. Prior to being referred to psychology, he spent a considerable amount of time on the psychiatric ward due to concerns for his safety. Whilst on the ward he refused to speak and displayed aggressive behaviour towards hospital staff. He was eventually discharged from the ward and referred to psychology where I learnt more about the events which led up to his psychiatric admission. Dylan said for the past 5-years he had started to notice physical symptoms associated with anxiety, such as heart palpitations, muscle tension, irritability, and dizziness. He eventually went to his GP who ruled out any underlying medical causes and recommended that he see a psychologist to address the anxiety. Dylan said he was very reluctant to talk a psychologist, and felt it was a weakness to have mental health problems. To cope with the anxiety, he distracted himself through exercise, increased his workhours, and began to increase his alcohol intake. Eventually his anxiety increased, and he experienced two significant panic attacks, which were interpreted by Dylan as signs that he was going 'crazy'. This is when he was admitted to the ward due to concerns voiced by his family that he was becoming a danger to himself. In reflecting on this case, it highlighted to me how avoidance among men plays a significant role within the help-seeking process. Not only do men avoid opportunities to talk about mental health issues, but men also attempt to avoid symptoms of mental distress. As a consequence, symptoms become worse overtime, and maladaptive ways of dealing with distress increase.

Throughout my internship year I reflected on my own gender socialisation and adherence to masculine gender roles. In regard to gender socialisation, growing up I had a

good relationship with my Father, but we rarely talked about aspects of mental health, such as stress and emotions. Displaying affection was also a rare occasion, with hugs and comments such as 'I love you' uncommon events within my household. My Father did not display affection towards me because he didn't want to, rather because he didn't know how to, lacking the practice and experience. He was raised within a family where emotions were something that were not spoken about, rather you put your head down and 'boxed on'. As a researcher, now I can see how masculine gender roles are transmitted from one generation to another. In order to 'break' the cycle, I believe it is important greater resources are provided to fathers, in particular education on mental health literacy, and the impact of traditional masculine gender roles on men's help seeking behaviour.

It was not until I personally engaged with a psychologist that I learnt more about the brain and the different types of mental health issues. When I was 21-years old I got diagnosed with cancer and underwent several operations, one of which was a total hip-replacement. Having cancer at such a young age changed the course of my life. Because of the hip-replacement, I could no longer play competitive tennis, which was one of the sole focuses of my life prior to getting cancer. I began to withdraw from my friends and family and started to avoid signs of mental distress. However, overtime the '*cracks*' began to show within my '*armou*r' and I needed help. During this period, I had the mentality that seeking help was a sign of weakness, and that I could solve these problems if I just '*pushed on'*. Once I finally engaged with mental health services, I spent the first two sessions '*testing*' the psychologist, asking more questions than he did, and it was not until the third session that I decided to trust the psychologist, and let my '*guard down'*. I can remember the sense of relief I felt when the psychologist validated and normalised the strong emotions I had been feeling. In reflecting on this process, being a service user of mental health services has been helpful for my own clinical practice. I have learnt that it takes time for some men to '*remove*' the

stoic image which they may have been wearing for such a long time. I have learnt whilst working with men that it's important to be patient and just provide a '*safe*' space for the discussion of sensitive topics.

For male clinicians to successfully work with men within therapy I believe it's important they reflect on their own personal experiences of masculine gender roles. On one occasion, I was working with an older gentleman within therapy, and he become visibly upset and started crying. When this occurred, I can remember feeling a sense of awkwardness within myself. Within this moment I can remember telling myself "*ok Andy, put this feeling aside and provide this gentleman with some support*". Following the session, I spent some time '*unpacking'* this feeling I had experienced during the session. With some reflection, I thought about the few times within my life that I had seen or been with another man that was crying. I had never seen my father, brothers or friends cry as adults. It was also very likely that the gentleman that I was working with had rarely displayed this level of vulnerability with another man. Looking back at this therapy session, it was a very powerful experience for the both of us, and I learnt the importance of noticing my own reactions within therapy to different clients, but at the same time, not letting my own reactions impact the therapeutic process.

Whilst working at CAMHS I worked with a 15-year old client named Tim who was currently living by himself due to a recent suicide attempt from his mother, which had left her hospitalised for the past 6-months. Tim refused to visit his mum within the hospital and talk with anyone about the event. When I initially contacted Tim, he was reluctant to come to the CAMHS offices. To engage Tim into some form of help-seeking, I decided to take a sideways approach towards targeting his mental health needs. Within the men's health literature, a side-ways approach, also known as 'health by stealth' involves engaging boys/men into some form of activity (e.g. sport, exercise) whilst incorporating elements of

mental health. Another key aspect of a side-ways approach toward engagement is that the activity takes place away from the therapist's office, within an environment familiar to the client. Because Tim enjoyed basketball, I suggested that we meet at the park and play some basketball. Tim was open to the idea, and for the initial session we played basketball, and kept the conversation casual, discussing schoolwork and his other hobbies. It was not until the fourth session that Tim began to talk about his mother's suicide attempt, and the sense of guilt he felt for not intervening. Tim said he did not want to seek help from other people because he felt a sense of shame having to rely on other people, and just wanted to "*get on with his life*". Over the course of 6 sessions Tim was able to 'unpack' his feelings surrounding his mother's suicide attempt. I believe if I had not taken a 'sideways' approach towards engaging Tim into some form of help-seeking he would have disengaged from mental health services and developed maladaptive ways of coping with his current situation.

In summary, I believe through my own personal experiences of mental health, research within the construction industry, and my time working at the hospital that I have greater awareness of myself as a male clinician. I also feel less constrained by prescribed masculine gender roles, and take great joy from helping other men recognise the unrealistic expectations associated with some of the stereotypes associated with being a man, such as 'men never cry', 'men have to display strength all the time', and 'men cannot display affectionate behaviour towards other men'

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